Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

2.3: Teaching- Learning Process

2.3.1: Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

INDEX

Sr. No.	Particulars	Page Number
A.	**Experiential learning**	**1-329**
1	A Sample Copy of Daily Assessment During Practical	**2-8**
2	Experimental and hands-on training	**9-16**
3	One-month Industrial Training (A. Y. 2018-19 to 2022-23)	**17-44**
4	Final Y. B. Pharm Practice School and Project Work Activity (w. e. f. A. Y. 2021-22)	**45-65**
5	M. Pharm Research Projects (A. Y. 2018-19 to 2022-23)	**66-84**
6	Industrial/Blood Bank Visit (A. Y. 2018-19 to 2022-23)	**85-119**
6.1	Industrial Visit (A. Y. 2022-23)	**86-93**
6.2	Industrial Visit (A. Y. 2021-22)	**94-98**
6.3	Industrial Visit (A. Y. 2019-20)	**99-111**
6.4	Blood Bank Visit (A. Y. 2019-20)	**112-113**
6.5	Industrial Visit (A. Y. 2018-19)	**114-119**
7	NSS Activities (A. Y. 2018-19 to 2022-23)	**120-121**
8.1	Healthcare Awareness Activities (Celebration of World Pharmacist Day) (A. Y. 2022-23)	**122-143**
8.2	Healthcare Awareness Activities (Celebration of 61St NPW-2022) (A. Y. 2022-23)	**144-148**
8.3	Healthcare Awareness Activities (Celebration of 60th NPW-2021) (A. Y. 2021-22)	**149-160**
8.4	Healthcare Awareness Activities (Celebration of World Pharmacist Day) (A. Y. 2021-22)	**161-167**
8.5	Healthcare Awareness Activities (Online Celebration of World Pharmacist Day) (A. Y. 2020-21)	**168-176**

8.6	Healthcare Awareness Activities (Celebration of World Pharmacist Day) (A. Y. 2019-20)	**177-180**
8.7	Healthcare Awareness Activities (Celebration of World Pharmacist Day) (A. Y. 2018-19)	**181-188**
9	Health Check-up Camps and Seminars (A. Y. 2018-19 to 2022-23)	**189-329**
9.1	Health Check-up Camps (A. Y. 2022-23) {18.10.2022, 20.07.2022, 21.02.2023 }	**190-246**
9.2	Seminars on Immunity and Back Pain (A. Y. 2022-23) {20.07.2022}	**247-281**
9.3	Health Check-up Camps (A. Y. 2019-20) {18.07.2019, 21.01.2020}	**282-304**
9.4	Seminar on Health and Hygiene of Girls (A. Y. 2019-20) {4.03.2020}	**305-307**
9.5	Health Check-up Camps (A. Y. 2018-19) {24.07.2018, 26.10.2018}	**308-329**
B.	**Participatory learning**	**330-511**
1	Students learn software handling	**331-334**
2	Demonstration of various models	**335-337**
3	Instrument Handling	**338-344**
4	Group Activities	**345-353**
5	Participation of students in Seminars/ Workshops/ Conferences organized by the institute (A. Y. 2018-19 to 2022-23)	**354-357**
6	Participation of students in Seminars/ Workshops/ Conferences organized by other institutes	**358-400**
7	Presentations are made by the students	**401-410**
8	Student-made charts, displays, and posters	**411-436**

9	Student involvement in the Wall Magazine/ Pharma Tab Activity	**437-478**
10	Participation of students in University/State/National level competitions (A.Y. 2018-19 to 2022-23)	**479-480**
11	Participation of students in extracurricular events organized by the institute and other institutes (A.Y. 2018-19 to 2022-23)	**481-482**
12	Participation of students in Add-on and Certificate Courses (A.Y. 2018-19 to 2022-23)	**483-486**
13	Memorandum of Understanding (MOU) upto A.Y. 2022-23	**487-511**
C.	**Problem solving methodologies**	**512-851**
1	Organizing Seminars with Complex Topics	**513-525**
2	Question Bank for Day to Day Interaction with students during Practical Classes	**526-577**
3	Laboratory Experiments	**578-594**
4	Assignments	**595-708**
5	Research Activity for UG/PG/Ph. D. students	**709-851**
D.	**Use of ICT Tools**	**852-871**
1	Faculty-prepared e-content	**853**
2	Subscription of Journal/Library Membership	**854-865**
3	Educational Online Platform (Sample Copy)	**866-867**
4	Educational Software	**868-871**

Dr. V. U. Barge
Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

A. Experiential learning

- Student-centric learning is provided in the practical sessions and the students learning process in the laboratories is monitored on daily basis.
- Laboratory Experiments to practically test the concepts which are theoretically learned in the Classroom.
- Students practically perform experiments in the laboratory and the details of those experiments are recorded in the journal.
- One-month industrial training as a part of curriculum.
- Practice school and project work for Final Year B. Pharm students as a part of curriculum.
- M. Pharm students carry out research projects as a part of curriculum in the institute or pharmaceutical industries under the guidance of experienced faculty.
- One-day visit to nearby industries, hospitals and blood banks.
- Students learn through NSS activities, Healthcare awareness activities (Pharmacist day/Aids day/NPW), Health check-up camps etc.

A. Experiential learning

1. A Sample Copy of Daily Assessment During Practical

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE

Near Zensar IT Tower, Kharadi, Tal. : Haveli, Dist. : Pune - 411 014.

Certificate

This is to certify that Mr./ Ms. / Mrs. Simran Kantilal Prajapati

Exam Seat No. 13139

has satisfactorily carried out the Practical Work Prescribed by the University of Pune for First Year M. pharm *Course under Faculty of Pharmaceutical Sciences in*

Pharmaceutical Quality Assurance Practical-I

(Subject)

and this Journal represents his / her work within four walls of this college.

Sign. of Subject Incharge

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's And Research Centre
Kharadi, Pune- 411014.

Principal

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE

Name : Simran kantilal prajapati Class : First Yr M.Pharm

Roll No. : 31 Exam Seat No. :

Year : 2022 - 2023

INDEX

Sr. No..	Date of Experiment	TITLE	Page No.	Remarks & Sign. of Teacher
1	5/1/23	Estimation of paracetamol as per official monograph by using UV spectrophotometric method.	1-3	
2.	6/1/23	To perform simultaneous equation method of the paracetamol and Diclofenac by using UV spectrophotometer	4-7	
3.	12/1/23	To estimate quinine sulphate by fluorimentry	8-11	
4.	13/1/23	To determine the sodium concentration by flame photometry	12-13	
5.	19/1/23	Introduction of gas chromatography	14-15	

INDEX

Sr. No..	Date of Experiment	TITLE	Page No.	Remarks & Sign. of Teacher
6.	20/1/23	To determine concentration of Renitidine HCl of given formulation by Reverse phase HPLC.	16-19	
7.	27/1/23	Estimation of process capability.	20-21	
8.	2/2/23	Case Study	22-41	
		a) Six Sigma		
		b) Total quality management		
		c) out of specification		
		d) out of Trend		
		e) corrective & preventive action		
		f) Deviation.		
9.	3/2/23	Development of stability study protocol.	42-44	
10.	9/2/23	To perform IPQC Test for Tablet, capsule, ointment, suspension	45-59	

Certified that Mr. / Ms. / Mrs. Simran kantilal prajapati Exam Seat No. 13139

of F.Y. M.Pharm Class has satisfactorily completed the above term work within the four walls of this institute.

Subject Incharge

Head of the Department

INDEX

Sr. No..	Date of Experiment	TITLE	Page No.	Remarks & Sign. of Teacher
11.	10/2/23	Assay of raw material as per official monograph	60-61	
12.	16/2/23	Testing of related & foreign substance in drug and raw material.	62-65	
13.	17/2/23	To carry out preformulation Study of tablet.	66-68	
14.	09/3/23	To study effect of pH on Solubility of drugs.	69-70	
15.	09/3/23	To perform quality control test for primary and secondary packaging material.	71-73	
16.	10/3/23	Accelerated stability Studies.	74-75	
17.	16/3/23	To improve solubility of salicylic acid by using cosolvency method.	76-77	

INDEX

Sr. No..	Date of Experiment	TITLE	Page No.	Remarks & Sign. of Teacher
18.	23/3/23	Improved solubility of drugs by using substance.	78-80	
19.	31/3/23	Determination of pka and log P of drugs.	81-85	

Completed

Certified that Mr. / Ms. / Mrs. Simran kantilal prajapati Exam Seat No. 13139

of F.Y. M. Pharm Class has satisfactorily completed the above term work within the four walls of this institute.

Subject Incharge

Head of the Department

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF
PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE

Day-to-Day Evaluation Report

Practical No.	Date of experiment	Attendance (2)	Practical Performance (4)	Viva (2)	Journal Completion (2)	Total (10)	Signature of Teacher
1	5/1/23	2	3	2	2	9	
2	6/1/23	2	2	2	2	8	
3	12/1/23	2	3	2	2	9	
4	13/1/23	2	2	2	2	8	
5	19/1/23	2	3	2	2	9	
6	20/1/23	2	3	2	2	9	
7	27/1/23	2	2	2	2	8	
8	2/2/23	2	3	2	2	9	
9	3/2/23	2	3	2	2	9	
10	9/2/23	2	2	2	2	8	
11	10/2/23	2	3	2	2	9	
12	16/2/23	2	2	2	2	8	
13	17/2/23	2	3	2	2	9	
14	9/3/23	2	3	2	2	9	
15	9/3/23	2	2	2	2	8	
16	10/3/23	2	3	2	2	9	
17	16/3/23	2	3	2	2	9	
18	23/3/23	2	3	2	2	9	
19	31/3/23	2	2	2	2	8	
					=	164	
						164/19 = 8.63	

Teacher's Signature

A. Experiential learning

2. Experimental and hands-on training

A Sample Copy: Academic Year 2021-22

Class: First Year M. Pharm. (Semester-II, 2019 P)
Subject: Quality Assurance Practical- II (MQA 205P)
Academic Year: 2021-22

Aim: To Perform qualification of Dissolution testing apparatus.

Principle: Dissolution is defined as the process by which a known amount of drug substance goes into solution per unit of time under standardized conditions.

The primary goal of dissolution testing is to be used as a qualitative tool to provide measurements of the bioavailability of a drug as well as to demonstrate bioequivalence from batch-to-batch. The bioavailability and bioequivalence data obtained as a result of dissolution testing can be used to guide the development of a new formulation and product development processes toward product optimization as well as to ensure continuing product quality and performance of the manufacturing process. Dissolution testing is conducted using a dissolution apparatus that conforms to the specifications outlined in the United States Pharmacopeia. In order to have a high degree of assurance that the dissolution apparatus is consistent and accurate in its performance, validation is required. Validation is defined as documented evidence that provides a high degree of assurance that a specific instrument performs according to manufacturer's specification and user requirements. Validation is achieved by performing a series of validation activities; for a dissolution apparatus, validation is obtained through installation qualification and operational qualification.



M. Pharm. students performing qualification of Dissolution Test Apparatus (Date: 14.05.2022)

Name and signature of subject teacher: Dr. Vijaya Uday Barge

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

Class: S.Y.B. Pharm**,** Sem- IV (2019 Pattern)

Subject: Medicinal Chemistry-I (BP406P)

Academic Year: 2021-22

Aim: To Perform the synthesis of Benztriazole from OPD.

Principle: Benzotriazole can be prepared by treating o-phenylenediamine with nitrous acid (liberated during the reaction between sodium nitrite and acetic acid) to form mono-diazonium salt that follows spontaneous intramolecular cyclization reaction to produce benzotriazole.



Students of Second Year B. Pharm performing synthesis of Benztriazole (17/01/2022)

Name of subject Teacher: Mrs. K. R. Ghule

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: T. Y. B. Pharm (Sem-V, 2019 P)
Subject: Formulative Pharmacy I (BP506P)
Academic Year: 2021-22

Aim: Preparation and evaluation of Paracetamol tablets.

Principle: Paracetamol tablets are commonly used as analgesic and antipyretics. Starch paste is used as binding agent and the talc is used as glidant. The dose (bulk) of Paracetamol is sufficiently high to compress in the die hence diluent is not required. Paracetamol is not susceptible to moisture and temperature degradation and thus wet granulation is suitable method for its granulation.





Preparation and evaluation of Paracetamol tablets (6/09/2021)

Name of subject teacher: Mrs. B. J. Shelar

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: Third Y. B. Pharm
Subject: Pharmacognosy and Phytochemistry -II (BP 504T)
Semester: VI (Pattern 2019)
Year of the study: 2021 -2022

Aim: To Study the Evaluation of Alcohol Containing Herbal Formulations (Draksha Asava)

Principle: *Asava* and *Arista's* are Ayurvedic preparations made by soaking the drugs, either in coarse powder or in the form of decoction (*Kashaya*), in a solution of sugar or jaggery, as the case may be, for a specified period of time, during which it undergoes a process of fermentation generating alcohol, thus facilitating the extraction of the active principles contained in the drugs. Alcohol, so generated, also serves as a preservative. Formulations were studied for quality control parameters like physiochemical properties, Alcohol content by specific gravity.



Demonstration of evaluation of alcohol-containing herbal formulations

Name of subject teacher: Dr. R. Y. Patil

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: T.Y.B. Pharm

Subject: Pharmacology-II

Semester: V (2019 Pattern)

Academic Year: 2021-22

Aim: DRC of acetylcholine using frog rectus abdominis muscle.

Principle: Dose response curves (DRC) demonstrate graded responses to drugs or agonists where an increase in response is recorded with a subsequent increase in the dose or the drug concentration. The DRC is sigmoid or S-shaped. The first portion (25% of graph) of that curve has poor discrimination between the doses whereas the middle part of the curve shows greater sensitivity to different concentrations, and the responses of increasing drug concentrations are linearly differentiated. The last portion of the curve (plateau) shows the ceiling effect where no more increase in the response is seen with further increase in the dose.



Students are learning to use Sharrington Rotating Drum for the determination of DRC

Name and Signature of subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,

Kharadi, Pune- 411014.

Class: F.Y.B. Pharm (Sem-I, 2019 Pattern)

Subject: Pharmaceutical Organic Chemistry [BP208P]

Academic Year: 2021-22

Aim: To perform the synthesis of *p*-Nitro acetanilide from Acetanilide and report its % yield

Principle: Synthesis of *p*-Nitro acetanilide from Acetanilide is based on nitration reaction. Nitrating mixture consisting of conc. nitric acid and conc. nitric acid is added under cold condition in mixure of Acetanilide dissolved in glacial acetic acid. Nitro group attaches to para position rather than ortho and meta position due to steric effect.



Explanation of principle, reaction and mechanism involved in the synthesis of *p*-Nitro acetanilide from Acetanilide to the students

Name of subject teacher: Mr. V. S. Veer

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

- **Class: T. Y. B. Pharm, Sem V**
- **Subject: Pharmacognosy and Phytochemistry II**
- **Academic Year: 2021-2022**
- **Aim:** To isolate volatile oil from crude drug
- **Principle:** In the Clevenger apparatus, the hydrated sample is heated to vaporize volatile constituents, while in the steam distillation approach; steam is passed through a bed of the sample. In both methodologies, two layers (aqueous and oil-rich) are achieved and oil can be further separated via separating funnels.



Student handling Clevenger extraction apparatus for volatile oil components.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Name: Prof. Vipul Dhasade
Department of Pharmacognosy

A. Experiential learning

3. One-month Industrial Training

(A. Y. 2018-19 to 2022-23)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

Report of Industrial Training of Final Year B. Pharm (Sem. VIII) students Academic Year 2021-2022

Roll No.	Name of the Student	Name of the Organisation.
1.	Ahiraao Chaiitanyaa Deepak	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
2.	Awhale Harshada Sukhdev	Akriti Pharmaceuticals Pvt.Ltd. Jejuri.
3.	Barate Rahul Nilkant	Akriti Pharmaceuticals Pvt.Ltd. Jejuri.
4.	Barde Neha Amol	Salunkhe Multispeciality Hospital Pune.
5.	Bhagat Preeti Shahaji	Avirat Clinic Wadgoansheri Pune
6.	Bhange Aishwarya Jotiram	Maulinath Multispeciality Hospital Shikrapur
7.	Birgad Sachin Baalaj	Chopde Accident and Paediatric Hospital Malkapur Buldana.
8.	Chaudhari Mukesh Shivlal	Pawar Hospital Hadapsar Pune.
9.	Chaudhary Karan Vajaram	Gaikwad Hospital Hadapsar Pune.
10.	Chavan Pranita Prabhakar	Govt. hospital Barsi
11.	Daundkar Anuradha Shashikant	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
12.	Dhumal Rutuja Ravindra	Rising Medicare Hospital Kharadi, Pune.
13.	Gaikwad Shubham Ramdas	Maulinath Multispeciality Hospital Shikrapur Pune.
14.	Galande Dnyanesh Anil	Maulinath Multispeciality Hospital Shikrapur Pune.
15.	Garad Nilesh Bhalchandra	Deodhar Nurshing Home Hadapsar, Pune.
16.	Garud Shweta Balkrushna	Serum Institute Of India .Ltd Hadapsar, Pune.
17.	Gote Sima	Avirat Clinic Wadgoansheri Pune
18.	Hajare Tanaji R	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
19.	Hingmire Prasad	Medi point Pharmacy Manjri Pune.
20.	JadhavV Manasi	Vighanharta Hospital Pune .
21.	Jagtap Darshana	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
22.	Jagtap Dhiraj Dattatray	Aster Analytics Research Institute Pune.
23.	Jagtap Rutuja Shantaram	Aster Analytics Research Institute Pune

24.	Janawale Abhishek Vishwambhar	Chopde Accident and Paediatric Hospital Malkapur Buldana
25.	Kakade Prachi Manohar	Akriti Pharmaceuticals Pvt.Ltd. Jejuri.
26.	Kakade Suchita Prakash	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
27.	Kamble Vijay Sanjay	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
28.	Khade Utkarsha	Aster Analytics Research Institute Pune
29.	Khirsagar Snehal	Serum Institute Of India .Ltd Hadapasar Pune
30.	Kodre Rutuja	Akriti Pharmaceuticals Pvt.Ltd. Jejuri.
31.	Landage Vishwajeet	Medipoint Pharmacy. Osmanabad
32.	Mahajan Varsha	Shree Sainath Multispeciality Hospital Thane
33.	Makhwana Chandan	Kalyanni Hospital and Aadarsh Medicals Pune
34.	Mungade Maruti	Sahayadri Multispeciality Hospital Vasai
35.	Naikwadi Sidhesh	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
36.	Napte Omkar	Kale hospital Shikrapur, Dist Pune
37.	Nawale Prajakta	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
38.	Nemade Kiran	Siddhi Hospital Bhosari Pune.
39.	Nikhade Vaibhav	Chopde Accident and Paediatric Hospital Malkapur Buldana
40.	Nimbalkar Tejal	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
41.	Papal Raj	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
42.	Pardeshi Rupesh	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
43.	Pawar Prashant	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
44.	Poul Pratiksha	Akriti Pharmaceuticals Pvt.Ltd. Jejuri
45.	Prajapati Ashotosh	M4U Pharmacy Chandannagar Pune
46.	Prajapati Simran	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
47.	Pratiksha A. Jadhav	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
48.	Raikar Mansi	Called 15 November
49.	Rajpurohit Ranusingh	Kalyanni Hospital and Aadarsh Medicals Pune
50.	Salunke Priyanka	Aster Analytics Research Institute Pune
51.	Satkar Atharwa	Adisan Laboratories Pvt.Ltd. Mulsi. Pu
52.	Sharma Tushar	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
53.	Shinde Anupama Anil	Gaikwad Hospital Solapur Road Hadapasar Pune
54.	Shinde Shreya Dnyaneshwar	Aster Analytics Research Institute Pune.
55.	Shinde Yogita	K.K.Hospital Clinic Kharadi Bipass Pune.
56.	Shitole Pooja Balasaheb	Aster Analytics Research Institute Pune.

57.	Tekale Satish Vitthalrao	Kale hospital Shikrapur, Dist Pune
58.	Tekawade Prasad Amit	Gaikwad Hospital Hadapsar Pune.
59.	Thorat Mayureshwar Bhagwan	Sangam Hospital Undri Pune.
60.	Thorat Supriya Sanjay	Silver Birch Multispecialty Hospital Pune
61.	Thorat Tejas Vilas	Sangam Hospital Undri Pune.
62.	Tripathi Apoorva Krishnram	Lotus Multispeciality Hospital and Laproscopy centre Manjiri Pune.
63.	Varpe Aishwarya Ramesh	Gaikwad Hospital Hadapsar, Pune
64.	Vibhute Prajakta Bapu	Avirat Clinic Wadgoansheri Pune
65.	Waghmare Vaibhav Madukar	Sangam Hospital Undri Pune.
66.	Walke Rutuja Dilip	K.K.Hospital Clinic Kharadi Bipass Pune
67.	Yadav Tejaswini Avinash	Avirat Clinic Wadgoansheri Pune
68.	Yamgar Amit Subhash	Sai Sanjivaini Hospital Murbad.

Dr. R. Y. Patil.
TPC Coordinator

Dr Ashok V. Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and

Research Center, Kharadi, Pune-14.

DECLARATION

I affirm that I have completed my internship training at **Serum Institute of India.Ltd. Hadapsar –Pune** during **21 March 2022 to 19 April 2022.** The report of internship training being submitted in fulfilment of the academic condition laid down by Savitribai Phule Pune University for award of bachelor of pharmacy, for the academic year 2021-2022. I assure that any part of this report has not been submitted elsewhere for award of any degree or diploma, in any other university.

Name – Shweta Balkrushn Garud

Place- Kharadi, Pune 14.

Date: 20/9/2022

Sign

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE
2009

SERUM INSTITUTE OF INDIA PVT. LTD.

CYRUS POONAWALLA GROUP

April 29, 2022

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Ms. Garud Shweta Balkrushn** has successfully completed her Industrial Training from **March 21, 2022 to April 19, 2022**

Her conduct has been excellent during this period and we found her sincere and hardworking.

We wish her all the best for her future endeavors.

For Serum Institute of India Pvt. Ltd.

Mahendra Inge
Head – Human Resources

Pune district Education association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune.

A

Report On

Industrial training in

Serum Institute of India.Ltd
Hadapsar- Pune

Submitted to

Savitribai Phule Pune University, Pune.

For the fulfillment of the

B Pharmacy course

Submitted by

Ms. Shweta Balkrushn Garud

Final year B pharm

P.D.E.A's SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCE AND REASERCH CENTRE KHARADI PUNE-14

Academic Year 2021-2022



Rising Medicare Hospital

Your Health Your Right

DATE: 02/09/2022

To whom it may concern

This is certify that Miss Rutuja Ravindra Dhumal was working at Rising Medicare Hospital as pharmacist from 10/12/2021 to 08/01/2022

During her work tenure she found to be completely reliable and professional and has been a great part of team. We have never found any complaint against her during completing any task or handling any customer. During this period, her services were found to be satisfactory in carrying out the job duties.

- Review and process electronic prescriptions for accuracy quality.

Consult with physicians and nursing staff via telephone regarding order, interactions and patient reaction to medications.

Answer questions from customer service representatives technicians.

Observes pharmacy personnel at work develop quality assurance techniques to make sure safe, legal and also ethical practices.

- Manage drug inventory assist with drug file maintenance. Assist with quality improvement initiatives.

RISING MEDICARE HOSPITAL

KHARADI,PUNE

HR EXECUTIVE

VAISHNAVI SANDBHOR

02/09/22



Add.: Rising Medicare Hospital, S. No. 4/1, Off Kharadi Bypass Road, Behind Hotel Radisson Blu, Kharadi, Pune 14.
Ph. No.: 9119589191 / 9119587272 Email : risingmedicare@gmail.com Website: www.therisingmedicare.com

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE
2009

Pune District Education Association's

Shankarrao Ursal College Of Pharmaceutical

Sciences And Research Centre Kharadi Pune 14.

A Report On

Hospital Pharmacy training at Rising Medicare Hospital

Submitted To

Savitribai Phule Pune University,Pune In

partialfulfillment of the B. Pharm course

Submitted by

Ms. Rutuja Ravindra Dhumal

FINAL YEAR B.PHARM

Academic Year 2021-2022

Pune district Education association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.

DECLARATION

I affirm that I have completed my intership training at **Akriti Pharmaceuticals pvt ltd. Jejuri** during **06 April 2022 to 06 May 2022.** The report of intership training being submitted in fulfilment of the academic condition laid down by Savitribai Phule Pune University for award of bachelor of pharmacy, for the academic year 2021-2022. I assure that any part of this report has not been submitted for award of any degree or diploma, in any other university.

Name: Mr. Rupesh Shivacharan Pardeshi Sign

Place: Kharadi, Pune 14.

Date: 11/9/2022

Akriti Pharmaceuticals Pvt. Ltd.

Corporate Office :
205, "Thane MINT", Indiabulls,
Behind Hiranandani Meadows,
Near Hyde Park, Off B.N. Pai Road,
Thane (W) – 400 610. Maharashtra. INDIA.
Tel. No. : +91 022 21730204/960. **Mob. No.** : 07506360961/2
E-mail : info@akritipharma.com / admin@akritipharma.com

Factory :
D-10 & D-11, M.I.D.C., Jejuri,
Purandhar (Saswad),
Pune - 412 303,
Maharashtra, INDIA.
Tel. : 02115-254811/10
E-mail : admin.hrfactory@akritipharma.com

Date – 11.05.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Rupesh Shivacharan Pardeshi** has successfully completed his Industrial Training Program of one month period from **06 April 2022 to 06 May 2022.**

During his training period he has been introduced and provided with all technical knowledge of various departments Production, Packing, QC, QA, Engineering, Warehouse department.

We found that he has excellent ability of learning.

Wish you all the best for bright future.

For Akriti Pharmaceuticals Pvt. Ltd.

Authorised Signatory

Pune district Education association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.

Certificate

This is certify that the Report entitled, —Industrial Training at **Akriti Pharmaceuticals pvt ltd. Jejuri** from **06 April 2022 to 06 May 2022** has been submitted by **Mr. Rupesh Shivacharan Pardeshi** from **Final year B. Pharm** at the Department of Training and Placement, towards partial fulfillment of the requirement for the award of Bachelor degree in Pharmacy.

Training & Placement Officer

Principal
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical Science's And Research Centre
Kharadi, Pune- 411014.

Date:- 13/09/2022

Industrial Training Report Details of Final Year B. Pharm (Sem VIII)

Academic Year 2020-2021

Roll No	Name of the Student	M/F	Name of Organization
01	Abhale Shivani Vijay	F	Sai Medical, Pune
02	Anandkar Sudarshan Baban	M	Unicare Pharma, Pune
03	Bande Kiran Shivaji	M	Sai Pharma, Pune
04	Bankar Shubhakti Ajit	F	Kohakade Multispeciality Hospital, Pune
05	Beldar Aditi Rameshwar	F	Sai Shradhha Nursing Home, Kalyan
06	Bhadale Prashant Sunil	M	Bhavna Hospital, Pune
07	Bhairavkar Chaitrali Prabhakar	F	Nulife Pharmaceuticals, Pune
08	Bhalerao Ruchita Arvind	F	Shivshambho Medicals, Pune
09	Bhondve Atish Shyam	M	Rahul Pharma, Pune
10	Bhondve Riya Rahul	F	Sagar Nursing Home, Pune
11	Bhosale Supriya Sharad	F	Jeevandhara Multispeciality Hospital, Pune
12	Borade Sayali Ashok	F	Sancheti Hospital Pharmacy, Pune
13	Bramhane Jayshri Annasaheb	F	Sanjivani Hospital, Nashik
14	Chavan Nitesh Arjun	M	Rajmata Medical, Buldhana
15	Chavan Rajgouri Harichandra	F	Bhuleshwar Medical, Malshiras
16	Choudhary Mahendra Aasaram	M	Pavan Medico, Pune
17	Choudhary Bharat Ghisaram	M	New Vaibhav Pharma, Pune
18	Choudhary Nareshkumar Mohanlal	M	New Vaibhav Pharma, Pune
19	Dolas Siddhant Manohar	M	Arogya Medical, Pune
20	Dombe Suvarna Sanjay	F	Dr. Gavali's Clinic, Pune
21	Dudhwade Prasad Sahebrao	M	Matoshree Pharma Generic and Surgical Distributors, Chakan
22	Gaikwad Rajratna Deepak	M	Suraj Hospital, Pune
23	Galave Shital Tanaji	F	Galave Hospital, Pune
24	Ganjkar Mayuri Ramesh	F	K.K. Pharma, Pune
25	Ghavate Tejas Dipak	M	Sai Care Mulitispeciality Hospital, Pune
26	Gholap Aarti Sunil	F	K.K. Pharma, Pune
27	Jadhav Kajal Sandip	F	Devkate Hospital Pharmacy, Baramati
28	Jadhav Ketaki Ashok	F	Samai Healthcare Pvt Ltd, Pune
29	Jadhav Rohit Parmeshwar	M	Shree Sai Enterprises, Pune
30	Jadhav Rutuja Pravinkumar	F	Shree Gajanan Distributors, Sangli

1/3

31	Joshi Onkar Sadanand	M	Trimurti Pharma, Pune
32	Kadam Ankita Mohan	F	Wellness Forever Medicare, Pune
33	Kalbhor Prajakta Pandurang	F	Vaishnavi Nursing Home Pharmacy, Pune
34	Kamble Rohit Harshad	M	Swanand Pharma, Pune
35	Katake Pranali Sadashiv	F	Shree Ganraj Hospital, Pune
36	Kaygude Sachin Dattatray	M	Shree Sai Enterprises, Pune
37	Khabiya Darshana Vijay	F	Bhansali Medisales, Pune
38	Khandave Akshada Hanumant	F	Nulife Pharmaceuticals, Pune
39	Khandave Shreya Dnyanoba	F	Nulife Pharmaceuticals, Pune
40	Khandve Sayali Tanaji	F	Shree Kalyani Nursing Home, Pune
41	Khilare Amey Chandrakant	M	Medcity Pharma, Pune
42	Kiratwad Balaji Tukaram	M	Seveillar Clinical Supplier Services Pvt. Ltd. Shirur
43	Kokate Rutuja Vijay	F	Care and Cure Multispeciality Hospital, Pune
44	Kokate Suraj Rajabhau	M	Wagheshwar Distributors, Pune
45	Kolpe Rushikesh Uttam	M	K.K. Hospital, Pune
46	Kunte Nandesh Ashok	M	Ram Medical, Pune
47	Langhe Snehal Sanjay	F	Rawal Genomics Lab, Pune
48	LekurwaleYogita Sopan	F	Care Pharma, Pune
49	Mane Hanuman Keshav	M	Krushna Hospital Pharmacy, Parbhani
50	Mhaiskar Mahesh Rajendra	M	Medcity Pharmaceutical Distributor, Pune
51	Mhetre Akshay Namdev	M	Rawal Genomics Lab, Pune
52	More Gayatri Raju	F	Meditune Pharma, Pune
53	More Mayuri Chandrakant	F	Care Pharma, Pune
54	More Mrunalini Sanjiv	F	Vinayak Hospital, Pune
55	More Vaishnavi Pradeep	F	Unicare Pharma, Pune
56	Munde Sachin Arjun	M	Matoshree Pharma Generic and surgical Distributors, Chakan
57	Nilakhe Akshay Abhinand	M	Health Forever Medico, Pune
58	Pardhe Lalit Genu	M	Matoshree Pharma Generic and Surgical Distributors, Chakan
59	Patil Damini Sanjay	F	Gurukrupa Hospital, Pune
60	Patil Sarika Rajaram	F	Sai Distributors, Pune
61	Pawar Jaya Parmeshwar	F	Vinayak Hospital, Pune
62	Pise Ajay Ashok	M	Matoshree Pharma Generic and Surgical Distributors, Chakan
63	Rao Abhishai Samson	M	Medcity Pharmaceutical Distributor, Pune
64	Raut Sarika Ganesh	F	Kohakade Multispeciality Hospital, Pune
65	Sathe Shrutika Dattatray	F	Samarth Medical, Pune
66	Satkar Mrunal Manik	F	Medipoint Hospital, Pune
67	Shevakar Shantanu Sanjay	M	Matoshree Pharma Generic and Surgical Distributors, Chakan
68	Shinde Harshal Mohan	M	Medcity Pharmaceutical Distributor, Pune
69	Shreebhagat Sonali Baliram	F	Sancheti Hospital Pharmacy, Pune

2/3

70	Sreya Subhash	F	Nulife Pharmaceuticals, Pune
71	Tambe Jayesh Dattatray	M	New Vaibhav Pharma, Pune
72	Tambe Rutuja Jagdish	F	Vighanaharta Hospital, Pune
73	Tarmude Shrikrushna Gautam	M	Matoshree Pharma Generic and Surgical Distributors, Chakan
74	Telgote Prachi Raju	F	Careplus Medical, Pune
75	Thongire Priyanka Pandhurang	F	Mahasangh Medicals, Pune
76	Umrekar Rutuja Mohan	F	Bhansali Medisales, Pune

Mr. Sujit Kakade
Training & Placement Officer

Dr. Ashok Bhosale

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014

3/3

A

REPORT ON

PROFESSIONAL / INDUSTRIAL TRAINING

IN

NULIFE PHARMACEUTICALS

(PUNE)

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

FOR THE FULFILMENT OF

B PHARMACY DEGREE

SUBMITTED BY

Ms. CHAITRALI PRABHAKAR BHAIRAVKAR

PDEA's SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE-14

2020-21

Scanned by CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE,

KHARADI, PUNE 411 014.

CERTIFICATE

This is to certify that the **Professional / Indusrial Training** has been completed for the partial fulfilment of degree of Bachelors of Pharmacy, by **Ms.CHAITRALI BHAIRAVKAR**, a student of B. Pharmacy 8th Semester duringacademic year 2020-2021. She has carried out her **Professional / Industrial training** satisfactorily in **NULIFE PHARMACEUTICALS (PUNE)**

Date: 23/10/2021

Place: Kharadi

Dr. Ashok Bhosale

Principal

PDEA's S.U.C.O.P.S & R.C

KHARADI

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

NuLife PHARMACEUTICALS

PLOT NO. 63, F - 2 BLOCK, M.I.D.C.,
PIMPRI INDUSTRIAL AREA,
PIMPRI, PUNE 411 018 (M.S.) INDIA
TEL. : +91 20 27130348, 27130746
FAX : +91 20 27130620
Email : contactus@nulifepharma.com
Website : www.nulifepharma.com

To,

The Principal,

Shankarao Ursal College of Pharmaceutical,

Sciences And Research Centre.

Kharadi,

Pune-411014.

Date-15/7/2019

CERTIFICATE

This is to certify that Miss. Chitrali Prabhakar Bhairavkar student of B.Pharm Third year Shankarao Ursal College of Pharmaceutical Sciences And Research Centre , Kharadi, Pune. has successfully completed her one month In-plant training during during 10 June to 10 July in Nulife Pharmaceuticals Pimpri, Pune.

Her attendance was regular and conduct was satisfactory.

Best wishes for her future.

For Nulife Pharmaceuticals

NULIFE PHARMACEUTICALS PUNE

Mr.Amar Shelke

(Training officer)

Scanned by CamScanner

A

REPORT ON

PROFESSIONAL / INDUSTRIAL TRAINING

IN

CARE & CURE MULTI SPECIALITY HOSPITAL

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

FOR THE FULFILMENT OF

B PHARMACY DEGREE

SUBMITTED BY

MS. RUTUJA VIJAY KOKATE

P.D.E.A.'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE-14

2020-21

Scanned by CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE-411014

CERTIFICATE

This is to certify that the **Professional \ Indusral Training** has been completed for the partial fulfilment of degree of Bachelors of Pharmacy, by **Ms. Rutuja Vijay Kokate**, a student of B. Pharm-VIII Semester during academic year 2020-2021. She has carried out her **Professional \ Indusrial training** satisfactorily in **Care & Cure multi speciality hospital**, Pune.

Date: 04/08/2021

Place: Kharadi

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

P.D.E.A.'s S.U.C.O.P.S. & R.C.
Kharadi

Scanned by CamScanner

2/3

CARE & CURE
MULTI SPECIALITY HOSPITAL

CARE & CURE
MULTI SPECIALITY HOSPITAL

S. No. 115, Ansari Phata, Behind Amanora Park Town,
Near Sade Satra Nali Bus Stop, Manjari BK, Pune - 412307.
Mob: 9823 03 9099, 9322 11 7667. Email: careandcurehospital123@gmail.com

INTERNSHIP CERTIFICATE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. RUTUJA VIJAY KOKATE was working at CARE & CURE MULTI SPECIALITY HOSPITAL as Pharmacist

from 05/01/2021 to 05/02/2021.

During this period, her service was found to be satisfactory in carrying out the following duties:

- Direct as well as coordinate through subordinates' supervisory personnel, activities function of hospital pharmacy.
- Confers with computer personnel to develop computer programs for pharmacy information management system, patient department charge system and also inventory control.
- Analyzes record to indicate prescribing trends excessive uses.
- Prepares pharmacy budget department reports required by hospital administrators.
- Observes pharmacy personnel at work develops quality assurance techniques to make sure, safe, legal and also ethical practices.
- Oversees preparation dispensation of experimental drugs.

CARE AND CURE HOSPITAL Reg No. 851

Authorized Signatory
(Medical In Charge)

Scanned by CamScanner

A

REPORT ON

PROFESSIONAL / INDUSTRIAL TRAINING

IN

NULIFE PHARMACEUTICALS

(PUNE)

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

FOR THE FULFILMENT OF

B PHARMACY DEGREE

SUBMITTED BY

Ms. SHREYA DNYANOBA KHANDVE

PDEA's SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE-14

2020-21

Scanned by CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE,

KHARADI, PUNE 411 014.

CERTIFICATE

This is to certify that the **Professional / Indusrial Training** has been completed for the partial fulfilment of degree of Bachelors of Pharmacy, by **Ms.SHREYA KHANDVE**, a student of B. Pharmacy 8th Semester duringacademic year 2020-2021. She has carried out her **Professional / Industrial training** satisfactorily in **NULIFE PHARMACEUTICALS (PUNE)**

Date: 23/10/21

Place: Kharadi

Dr. Ashok Bhosale

Principal

PDEA's S.U.C.O.P.S & R.C

KHARADI

Principal
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

NuLife PHARMACEUTICALS

PLOT NO. 63, F - 2 BLOCK, M.I.D.C.,
PIMPRI INDUSTRIAL AREA,
PIMPRI, PUNE 411 018 (M.S.) INDIA
TEL. : +91 20 27130346, 27130746
FAX : +91 20 27130620
Email : contactus@nulifepharma.com
Website : www.nulifepharma.com

To,

The Principal,

Shankarao Ursal College of Pharmaceutical,

Sciences And Research Centre.

Kharadi,

Pune-411014.

Date-15/7/2019

CERTIFICATE

This is to certify that Miss. Shreya Dnyanoba Khandave student of B.Pharm Third year Shankarao Ursal College of Pharmaceutical Sciences And Research Centre , Kharadi, Pune. has successfully completed her one month In-plant training during during 10 June to 10 July in Nulife Pharmaceuticals Pimpri, Pune.

Her attendance was regular and conduct was satisfactory.

Best wishes for her future.

For Nulife Pharmaceuticals

Mr.Amar Shelke

(Training officer)

NULIFE PHARMACEUTICALS PUNE

REGD. OFFICE : 203, PLEASANT APARTMENTS, 15 TH LANE, PRABHAT ROAD, PUNE 411 004 (MAHARASHTRA) INDIA
TEL. : +91 20 25678473, 25678942 FAX : +91 20 25678872 Email : contactus@nulifepharma.com Website : www.nulifepharma.com

Scanned by CamScanner

Industrial Training Report Details of Final Year B. Pharm (Sem. VIII)

Academic Year 2019-2020

Roll No	Name of the Student	M/F	Name of Organization
01	Bankar Snehal Popat	F	Inducare Pharma Private Limited, Pune
02	Barure Sandesh Sunil	M	Chapsi Sales Depot, Latur
03	Bhosale Shivani Pravin	F	Nulife Pharmaceutical Private Limited, Pune
04	Bhujbal Srushti Rajesh	F	Chaitanya Medisales, Yawat
05	Chappe Anjali Balwant	F	Arogya Medical, Pune
06	Choudhary Lalit Mangilal	M	Cure Medicines Private Limited, Pune
07	Deshmukh Harshad Pandharinath	M	Nulife Pharmaceutical Private Limited, Pune
08	Deshmukh Kunal Kakasaheb	M	Cure Medicines Private Limited, Pune
09	Dhawale Srushti Deepak	F	Arogya Medical, Pune
10	Gaike Shubham Suresh	M	Chaitanya Medisales, Yawat
11	Galgunde Sudarshan Dnyandev	M	Inducare Pharma Private Limited, Pune
12	Gavhane Akshada Rajaram	F	Lifeline Medical, Pune
13	Gaware Annasaheb Shivaji	M	Sigma Enterprises, Pune
14	Gaysamudre Priyanka Balasaheb	F	Serum Institute of India Private Limited, Pune
15	Ghatule Swapnil Prabhakar	M	Unity Medicare, Daund
16	Harihar Anuradha Rajkumar	F	Nulife Pharmaceutical Private Limited, Pune
17	Hinge Rishikesh Subhash	M	Anicare Pharmaceuticals Private Limited, Navi Mumbai
18	Jadhav Mansi Mahadev	F	Chaitanya Medisales, Yawat
19	Jadhav Rushikesh Parshuram	M	Unity Medicare, Daund
20	Jadhav Shivani Vaijanathrao	F	Nulife Pharmaceutical Private Limited, Pune
21	Jadhav Snehal Anil	F	Prarambh Medical, Badlapur
22	Jagtap Digvijay Laxman	M	Chapsi Sales Depot, Pune
23	Kadam Amrapali Jagannath	F	Om Medicals, Satara
24	Kadam Pragati Shrimant	F	Lifeline Medical, Pune
25	Kadlag Tejaswini Chandrakant	F	Nulife Pharmaceutical Private Limited, Pune
26	Kamble Ashlesha Tukaram	F	PGM's Wellness Enterprises, Pune
27	Karkhile Shubhangi Nandu	F	IMAX Multispeciality Pharmacy, Pune
28	Kedari Abhishek Nitin	M	Noble Hospital, Pune
29	Khade Swapnil Dattatray	M	Arogya Medical, Pune
30	Khape Priya Shivaji	F	Shree Vinayak Pharma, Pune

1/2

31	Kudale Prajakta Ashok	F	Nulife Pharmaceutical Private Limited, Pune
32	Kulal Mokshada Manik	F	Nulife Pharmaceutical Private Limited, Pune
33	Ladkat Shweta Dattatray	F	Noble Hospital, Pune
34	Mali Mahesh Somnath	M	Arogya Medical, Pune
35	Nale Ganesh Lalasaheb	M	Anicare Pharmaceuticals Private Limited, Navi Mumbai
36	Nale Puja Sanjay	F	Sahyadri Pharma, Pune
37	Patel Sagar Praveenbhai	M	Chapsi Sales Depot, Latur
38	Pathare Rutuja Balasheb	F	Noble Hospital, Pune
39	Patil Vishwajit Suryakant	M	Arogya Medical, Pune
40	Pawar Onkar Anil	M	Nidhi Marketing, Pune
41	Pawar Siddhant Sunil	M	Sigma Enterprises, Pune
42	Sable Pratiksha Manohar	F	Murali Krishna Pharma Private Limited, Pune
43	Sakpal Bhavana Ramesh	F	City Care Pharmacy, Pune
44	Sandage Ashwini Manohar	F	Sigma Enterprises, Pune
45	Shishupal Pratiksha Jankoba	F	Sigma Enterprises, Pune
46	Sonawane Tejashree Ankush	F	Sai Medical, Pune
47	Tambe Kalyani Sitaram	F	Sigma Enterprises, Pune
48	Taware Akash Prakash	M	Nulife Pharmaceutical Private Limited, Pune
49	Unde Jayesh Sunil	M	Sigma Enterprises, Pune
50	Veer Sayali Sunil	F	Tejas Nursing Home Pharmacy, Pune
51	Waghmare Aishwarya Sanjay	F	Sigma Enterprises, Pune
52	Waghmare Avinash Gopal	M	Sigma Enterprises, Pune
53	Dhavale Saurabh Suresh	M	Nulife Pharmaceutical Private Limited, Pune
54	Shelke Dhanashri vasant	F	Serum Institute of India Private Limited, Pune
55	Jagtap Yogesh Suresh	M	Noble Hospital, Pune

Mr. Sujit Kakade
Training & Placement Officer

Dr. Ashok Bhosale

PRINCIPAL
P D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

2/2

Industrial Training Report Details of Final Year B. Pharm (Sem. VIII)

Academic Year 2018-2019

Roll No	Name of the Student	M/F	Name of Organization
01	Baravkar Swapnil S.	M	Sunrise Pharmaceuticals, Sangli
02	Bhadale Mangesh S.	M	Inducare Pharma Private Limited, Pune
03	Bhandare Susmita P.	F	Serum Institute of India Private Limited, Pune
04	Bhosale Pratish P.	M	Nulife Pharmaceutical Private Limited, Pune
05	Biranje Sangram B.	M	Inducare Pharma Private Limited, Pune
06	Bodke Akshay A.	M	Aarti Industries limited, Palghar
07	Dhakane Anand B.	M	Johnson and Johnson, Aurangabad
08	Dhakane Sushen Y.	M	Nulife Pharmaceutical Private Limited, Pune
09	Dharmadhikari Sanket	M	Serum Institute of India Private Limited, Pune
10	Gaikawad Pooja P.	F	Serum Institute of India Private Limited, Pune
11	Gavhane Kiran M.	M	Aarti Industries limited, Palghar
12	Gavhane Utkarsha R.	F	Nulife Pharmaceutical Private Limited, Pune
13	Ghule Pratiksha R.	F	Synapse Labs Private Limited, Pune
14	Ghule Rohini D.	F	Inducare Pharma Private Limited, Pune
15	Giri Shreelaxmi H.	F	Vishwachaitnya Ayurvediya Rasashala, Pune
16	Gulawe Komal G.	F	Inducare Pharma Private Limited, Pune
17	Gund Dhairyasheel S.	M	Nulife Pharmaceutical Private Limited, Pune
18	Holkar Archana R.	F	Serum Institute of India Private Limited, Pune
19	Humbe Komal A.	F	Trimurti Chemical Industries, Pune
20	Humbe Tushar R.	M	Serum Institute of India Private Limited, Pune
21	Jadhav Kishor M.	M	Nulife Pharmaceutical Private Limited, Pune
22	Jagtap Suraj D.	M	Nulife Pharmaceutical Private Limited, Pune
23	Jangam Akshada	F	Vipra Pharmaceuticals, Pune
24	Kale Tushar R.	M	Serum Institute of India Private Limited, Pune
25	Kamble Kajal M.	F	Vishwachaitnya Ayurvediya Rasashala, Pune
26	Kamthe Anisha R.	F	Vishwachaitnya Ayurvediya Rasashala, Pune
27	Kamthe Kiran A.	M	Serum Institute of India Private Limited, Pune
28	Khade Snehal M.	F	Nulife Pharmaceutical Private Limited, Pune
29	Khaladkar Kalyani D.	F	Serum Institute of India Private Limited, Pune
30	Khandve Harshada D.	F	Serum Institute of India Private Limited, Pune
31	Khedkar Trupti D.	F	Serum Institute of India Private Limited, Pune
32	Kor Sayali B.	F	Serum Institute of India Private Limited, Pune

33	Kumar Lalit R.	M	Aurum Pharamcon Private Limited, Pune
34	Maurya Pooja	F	Vipra Pharmaceuticals, Pune
35	More Akshata M.	F	Inducare Pharma Private Limited, Pune
36	More Tilakraj S.	M	Inducare Pharma Private Limited, Pune
37	Nagawade Rupesh H.	M	Serum Institute of India Private Limited, Pune
38	Nangare Aarti C.	F	Inducare Pharma Private Limited, Pune
39	Pandule Rutuja B.	F	Serum Institute of India Private Limited, Pune
40	Pandule Snehal T.	F	Serum Institute of India Private Limited, Pune
41	Pansare Yogita G.	F	Vipra Pharmaceuticals, Pune
42	Patale Pallavi P.	F	Shri Krishna Agency Private Limited, Akluj
43	Patole Tejaswini A.	F	Inducare Pharma Private Limited, Pune
44	Pawar Shweta V.	F	Vishwachaitnya Ayurvediya Rasashala, Pune
45	Ranaware Chirag H.	M	Nulife Pharmaceutical Private Limited, Pune
46	Ransing Monika S.	F	Serum Institute of India Private Limited, Pune
47	Raskar Deepali U.	F	Serum Institute of India Private Limited, Pune
48	Rathod Indarsingh I.	M	Vishwachaitnya Ayurvediya Rasashala, Pune
49	Rathod Pawan S.	M	Nulife Pharmaceutical Private Limited, Pune
50	Raut Neena A.	F	Nulife Pharmaceutical Private Limited, Pune
51	Sable Rutuja R.	F	Vipra Pharmaceuticals, Pune
52	Shinde Akash B.	M	Serum Institute of India Private Limited, Pune
53	Shingade Vaishali A.	F	Wisdom Healthcare Solution, Navi Mumbai
54	Shitole Mukund E.	M	Cipla Limited, Kurkumbh
55	Shitole Omkar S.	M	Nulife Pharmaceutical Private Limited, Pune
56	Shitole Prachi P.	F	Nulife Pharmaceutical Private Limited, Pune
57	Sodanwar Kartikeya V.	M	Nulife Pharmaceutical Private Limited, Pune
58	Sonawane Rakshanda S.	F	Serum Institute of India Private Limited, Pune
59	Sonkawade Deepali D.	F	Bidwai Chemical Private Limited, Nanded
60	Temgire Shriram S.	M	Nulife Pharmaceutical Private Limited, Pune
61	Thakur Divya	F	Nulife Pharmaceutical Private Limited, Pune
62	Valvi Devising M.	M	Vipra Pharmaceuticals, Pune
63	Vasave Ravindra V.	M	Serum Institute of India Private Limited, Pune
64	Yede Rahul P.	M	Nulife Pharmaceutical Private Limited, Pune
65	Mutkule Vitthal S.	M	Herzen Healthcare Private Limited, Washim

Mr. Sujit Kakade
Training & Placement Officer

Dr. Ashok Bhosale
PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

A. Experiential learning

4. Final Y. B. Pharm Practice School and Project Work Activity

(w. e. f. A. Y. 2021-22)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14. -

Guide and Topic Allotment for Practice School Academic Year - 2022-2023

Class: Final Year B. Pharm (Sem VII)

Sr. No.	Name of the Guide	Roll. No	Name of the Student	Name of the Topic
01	Mrs. N.M. Sayyad.	1.	Akhade Akshay Balkrishna	Formulation & Evaluation of Sustained Release Tablet.
		2.	Aranya Atharva Ravindra	
		3.	Bhamare Mansi Dipak	
02	Mrs. K.R.Ghule .	4.	Bhapsekar Nikhil Deepak	Analytical Method Development and Validation of Pioglitazone Using UV Spectrophotometer.
		5.	Bhosure Nikita Kaluram	
		6.	Bhujbal Nandini Dashrath	
03	Mrs. B.G Shelar.	7.	Bichukale Snehal Janardan	Formulation and Evaluation of Tablet.
		8.	Choudhary Snehal Shantaram	
		9.	Dake Raj Atul	
04	Mrs. T R Khande	10	Damale Pallavi Suresh	Analytical Method Development and Validation of Some Drugs Using UV-Spectrophotometer and Detection of Some Samples by Using Auto Colorimeter.
		11.	Dhainje Rinku Bhimrao	
		12.	Dhanle Varsha Gautam	
05	Mr. N.S. Neharkar.	13.	Dhavale Sahil Satish	Formulation and Evaluation of Bilayer Tablet Using Some Drugs.
		14.	Gaikwad Pranjal Pramod	
		15.	Galgunde Soham Dnyandev	
06	Prof.Dr V.U. Barge.	16.	Gaware Sonali Ravindra	UV Spectrophotometric Method Development and Validation for Determination of Glimepiride in Marketed Formulation.
		17.	Gund Omkar Dattatray	UV Spectrophotometric Method Development and Validation for Determination of Capecitabine in Marketed Formulation.
		18.	Hake Neha Ashok	UV Spectrophotometric Method Development and Validation for Determination of Hydrochlorothiazide in Marketed Formulation
		19.	Jadhav Santosh Baliram	UV Spectrophotometric Method Development and Validation for



				Determination of Lisinopril in Marketed Formulation.
07	Prof.Dr R.Y Patil	20.	Jagtap Vaishnavi Chandrashekhar	Formulation and Evaluation of Herbal Emulgel of *Lanatana camara* Linn Leaf.
		21.	Jamdade Gayatri Santosh	
		22.	Kabire Dinesh Pandharinath	Formulation and Evaluation of Herbal Emulgel of *Agave tequilana* Trel
		23.	Kalsheitt Aishwarya Revanappa	
		24.	Kamthe Aishwarya Vijay	Studies on the Development of Promising Herbal Emulgel of *Coccinia grandis* Linn Fruit Extract for Dermatological Complications.
		25.	Khaladkar Vaibhav Bhauso	
		26.	Khandve Gauri Vasant	
08	Dr A.J. Kasbe	27.	Khiratkar Shweta Janardan	Formulation and evaluation of Nanogel
		28.	Khobare Abhishek Suresh	
		29.	Khote Shruti Gorakh	Formulation and evaluation of Buccal Patch
		30.	Kokani Deepak Bapu	
09	Mr.V.V.Veer	31.	Kudale Suvarna Gautam	U V. Spectrophotometer Handling and Determination of some Drugs
		32.	Kumbharkar Harshada Shankar	
		33.	Lawande Rutuja Vikas	U V. Spectrophotometer Handling and Determination of some Marketed Formulations.
		34.	Londhe Minakshi Raosaheb	
10	Mr. K. G Kanase	35.	Madure Vaishnavi Sachin	Electrolyte Therapy Using Herbal Extract of Ginger as Antidiarrheal Treatment.
		36.	Mahamavar Shankar Shivaji	
		37.	Mokashi Mansi Mohan	
		38.	Mulla Anisa Imam	
		39.	Nikalje Kiran Balu	Role of Clinical Trials in Pharmaceutical Industry.
		40.	Paigude Shradha Rajendra	
		41.	Pansare Akshay	
11	Mrs. T.P. Sangrapawar.	42.	Pathak Chaitanya Dashrath	Solubility Enhancement of Poorly Water Soluble Drug.
		43.	Patil Anuja Datta	
		44.	Pawar Prajakta Jyotishya	Study of Super-disintegrants.
		45.	Pharate Abhijit Kailas	
12	Mr. S.S. Kakade	46.	Pote Priti Bharat	Solubility Enhancement of Poorly Soluble Drug.
		47.	Puri Ravi Kailas	
		48.	Raghatwan Akshada Uttam	
		49.	Raipure Prachi Nitin	
13	Mr. P.K.Khade	50.	Rajpurohit Rajvirsing	Transdermal Drug Delivery
		51.	Sagar Deepali Rajendra	
		52.	Sarode Pratiksha Balasaheb	Microemulsion and its Evaluation
		53.	Sarode Ravikiran Dattatray	
14	V. B. Ingale	54.	Shaikh Afiya Ramjan	Preparation and Evaluation of Herbal Tooth powder.
		55.	Shelake Komal Kisan	
		56.	Shinde Mayuri Baburao	
		57.	Shinde Sagar Jaysing	
		58.	Shinde Saurabh Shivaji	

2/3

				Preparation and Evaluation of Herbal Hair Gel.
		59.	Shinde Vishal Namdeo	To study and Evaluation of *Psidium guajava* Linn Leaves For Antifungal Activities.
		60.	Shitole Tejas Eknath	
15	Mr. V.V.Dhasade	61.	Surve Sakshi Anil	Herbal skincare cosmetics
		62.	Thorat Rutuja Bapusaheb	
		63.	Ubale Rohan Suresh	
		64.	Ugale Snehal Sunil	Extraction of perfume from flowers
		65.	Undre Darshana Sanjay	
		66.	Waghmare Diksha Mahendra	
		67.	Wakchaure Ajay Balasaheb	Ancient Ayurvedic and Siddha therapies for treatment of various diseases.
		68.	Walanj Sejal Santosh	
		69.	Warghade Rushita Bappu	

Dr R.Y. Patil
Coordinator

Dr Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

3/3

Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical Sciences and Research Centre.
Kharadi Pune- 14.

Practice School Report On

Studies on The Development of Promising Herbal Emulgel of *Coccinia grandis* Linn Fruit Extract for Dermatological Infection By Fungus.

Submitted To

Savitribai Phule Pune University , Pune.
In partial fulfilment of the B. Pharm course.

Submitted By

Ms. Aishwarya Vijay Kamthe.
Mr. Vaibhav Bhauso Khaladkar.
Ms. Gauri Vasant Khandve.

Guided By

Dr. R Y Patil H.O.D.
(Pharmacognosy Department)

Academic Year 2022-2023

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre

Kharadi Pune-14.

Certificate of the Guide

This is to certify that the Practice school report entitled Studies On The Development Of Promising Herbal Emulgel Of *Coccinia Grandis* Linn Fruit Extract For Dermatological Infection By Fungus has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University Pune by Ms.Aishwarya Vijay Kamthe, Mr.Vaibhav Bhauso Khaladkar. and Ms.Gauri Vasant Khandve. students of B.Pharm VII semester during year of 2022-2023 they have carried out their Practice school project under my guidance at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Kharadi ,Pune.

Date: 6/12/2022

Place:- Kharadi

Dr.R.Y.Patil

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14.

Guides and topics Allotment for Practice School Academic Year 2021-2022

Class: Final Year B. Pharm (Sem VII)

Sr. No.	Name of the guide	Roll. No.	Name of the Student	Name of School
01	Prof. Dr V.U.Barge.	1	Ahiraao Chaiitanyaa Deepak	UV Spectrophotometric Assay of Medicinal Substances.
		2	Awhale Harshada Sukhdev	
		3	Barate Rahul Nilkant	
		4	Barde Neha Amoi	Visible Spectrophotometric Assay of Medicinal Substances.
		5	Bhagat Preeti Shahaji	
		6	Bhange Aishwarya Jotiram	
02	Prof. Dr.R.Y.Patil.	7	Birgad Sachin Baalaj	Evaluation of Medicinal Plants (*Caraca Papaya*)
		8	Chaudhari Mukesh Shivlal	
		9	Chaudhary Karan Vajaram	
		10	Chavan Pranita Prabhakar	Screening Of Medicinal Potential In Plant *(Ricinus Cummunis)*
		11	Daundkar Anuradha Shashikant	
		12	Dhumal Rutuja Ravindra	
		13	Gaikwad Shubham Ramdas	
		14	Galande Dnyanesh Anil	Phytochemical Evaluation of (Ficus *Bengalensis)*
		15	Garad Nilesh Bhalchandra	
		16	Garud Shweta Balkrushna	
03	Mr. Vikram Veer.	17	Gote Sima Datta	Analytical Chemistry
		18	Hajare Tanaji Ram	
		19	Hingmire Prasad Tulsidas	
		20	Jadhav Mansi Vijay	Synthetic Organic Chemistry
		21	Jadhav Pratiksha Ajinath	
		22	Jagtap Darshana Balasaheb	
04	Mr. Sujit Kakade.	23	Jagtap Dhiraj Dattatray	Cosmetic Science
		24	Jagtap Rutuja Shantaram	
		25	Janawale Abhishek Vishwambhar	
		26	Kakade Prachi Manohar	Formulation Development
		27	Kakade Suchita Prakash	
		28	Kamble Vijay Sanjay	
05	Mr.Krunal Kanase.	29	Khade Utkarsha Balasaheb	Clinical Research
		30	Kodre Rutuja Khushal	
		31	Kshirsagar Snehal Vishnu	
		32	Kumar Ashutosh	Overview of Pharmacovigilance

		33	Landage Vishwajeet Vikram	
		34	Mahajan Varsha Sahebrao	
		35	Makwana Chandan Sagar	Assessment and Regulatory in Pharmacovigilance
		36	Mungade Maruti Shivaji	
		37	Naikodi Siddhesh Sanjay	
		38	Napte Omkar Lahu	
06	Mr. Prashant Khade	39	Nawale Prajakta Rajesh	Pre-formulation Studies
		40	Nemade Kiran Subhash	
		41	Nikhade Vaibhav Ramesh	
		42	Nimbalkar Tejal Mohan	Formulation Science
		43	Papal Raj Dilip	
		44	Pardeshi Rupesh Shivcharan	
07	Mr. Vivek Ingale.	45	Patil Anmol Basawantarao	Pre-Clinical Trials
		46	Pawar Prashant Balasaheb	
		47	Poul Pratiksha Gopinath	
		48	Prajapati Simran Kantilal	Statistical Analysis
		49	Raikar Manasi Vikas	
		50	Rajpurohit Ranusingh Suresh	
		51	Salunke Priyanka Rajendra	Pharmacological Screening
		52	Satkar Atharwa Tukaram	
		53	Sharma Tushar Kishor	
		54	Shinde Yogita Baban	
08	Dr Amit Kasbe.	55	Shinde Anupama Anil	Analytical Chemistry
		56	Shinde Shreya Dnyaneshwar	
		57	Shitole Pooja Balasaheb	
		58	Tekale Satish Vitthalrao	Organic Chemistry
		59	Tekawade Prasad Amit	
		60	Thorat Mayureshwar Bhagwan	
09	Mr. Vipul Dhasade.	61	Thorat Supriya Sanjay.	Evaluation of Herbal Cosmetics
		62	Thorat Tejas Vilas.	
		63	Tripathi Apoorva Krishnram.	
		64	Varpe Aishwarya Ramesh.	Qualitative And Quantitative Analysis Of Herbs
		65	Vibhute Prajakta Bapu.	
		66	Walke Rutuja Dilip.	
		67	Yadav Tejaswini Avinash.	Isolation of Metabolites from Plant
		68	Yamgar Amit Subhash.	
		69	Waghmare Vaibhav Madukar.	

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

2/2

PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences
And Research Centre

Kharadi Pune 14

A Practice School Report On

TO STUDY PHARMACOGNOSTIC PARAMATER OF RICINUS COMMUNIS LEAF

Submitted To

Savitribai Phule Pune University,Pune

In partial fulfillment of the B Pharm course

Submitted by

Mr.Dnyanesh Anil Galande

Mr.Nilesh Bhalchandra Garad

Ms.Shweta Balkrushn Garud

Guided By

Dr. R Y Patil

H.O.D.

(Pharmacognosy Departement)

Academic Year 2021-2022

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.





PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre

Kharadi Pune 14



CERTIFICATE OF THE GUIDE

This is to certify that the practice school project entitled TO STUDY PHARMACOGNOSTIC PARAMATER OF *RICINUS COMMUNIS LEAF* has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University,Pune by **Mr.Dnyanesh Galande, Mr.Nilesh Garad, Ms.Shweta Garud** a student of B.Pharm VII th semester during the academic year 2021-2022. They have carried out Practice school project under my guidance at **Pune district education Association's Shankarrao Ursal college of Pharmaceutical Sciences and Research Centre,Kharadi,Pune.**

Place:-KHARADI

Guide:-Dr.R.Y Patil

Examined & Evaluated
V.V. Dhakda
9108/21

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14. -

Guide and Topic Allotment for Project Work. Academic Year-2022-2023.

Class Final Year B. Pharm (Sem VIII)

Sr. No.	Name of the Guide	Roll No.	Name of the Student	Name of the Topic
01	Mrs. N.M. Sayyad.	1.	Akhade Akshay Balkrishna	Formulation & Evaluation of Sustained Release Tablet.
		2.	Aranya Atharva Ravindra	
		3.	Bhamare Mansi Dipak	
02	Mrs. K.R.Ghule .	4.	Bhapsekar Nikhil Deepak	Method Development and Validation for Simultaneous Estimation of Drugs Using UV-Spectroscopy.
		5.	Bhosure Nikita Kaluram	
		6.	Bhujbal Nandini Dashrath	
03	Mrs. B.G Shelar.	7.	Bichukale Snehal Janardan	Formulation and Evaluation of sublingual tablet of Meclizine hydrochloride.
		8.	Choudhary Snehal Shantaram	
		9.	Dake Raj Atul	
04	Mrs. T.R Kande .	10.	Damale Pallavi Suresh	Analytical method development and validation of Ezetimibe using uv-spectrophotometer
		11.	Dhainje Rinku Bhimrao	
		12.	Dhanle Varsha Gautam	
05	Mr. N.S. Neharkar.	13.	Dhavale Sahil Satish	Formulation and Evaluation of Bilayer Tablet Using Some Drugs.
		14.	Gaikwad Pranjal Pramod	
		15.	Galgunde Soham Dnyandev	
06	Prof.Dr V.U. Barge.	16.	Gaware Sonali Ravindra	Formulation and evaluation of Herbal Shampoo
		17.	Gund Omkar Dattatray	
		18.	Hake Neha Ashok	Formulation and evaluation of Herbal Hair Oil.
		19.	Jadhav Santosh Baliram	
07	Prof.Dr R.Y Patil	20.	Jagtap Vaishnavi Chandrashekhar	Screening of Polyherbal Extract and its Formulation for Anti Arthritic Potential
		21.	Jamdade Gayatri Santosh	
		22.	Kabire Dinesh Pandharinath	Pharmacological Evaluation Of Decoction and Oil prepared from
		23.	Kalsheitt Aishwarya Revanappa	

1/3

				Nyctanthes Arbor-tristis for Anti Arthritic Activity
		24.	Kamthe Aishwarya Vijay	Evaluation of Decoction and formulation prepared from Different Medicinal Plants for its Anti-Arthritic Activity
		25.	Khaladkar Vaibhav Bhauso	
		26.	Khandve Gauri Vasant	
08	Dr A.J. Kasbe	27.	Khiratkar Shweta Janardan	Analytical Method development and validation of diclofenac sodium in marketed formulation by UV spectroscopy
		28.	Khobare Abhishek Suresh	
		29.	Khote Shruti Gorakh	Analytical Method development and validation of pure lamivudine by UV spectroscopy
		30.	Kokani Deepak Bapu	
09	Mr.V.V.Veer	31.	Kudale Suvarna Gautam	Analytical method development and validation of Glibenclamide in marketed formulation by UV spectroscopy
		32.	Kumbharkar Harshada Shankar	
		33.	Lawande Rutuja Vikas	Analytical method development and validation of Nifedipine in marketed formulation by UV spectroscopy
		34.	Londhe Minakshi Raosaheb	
10	Mr. K. G Kanase	35.	Madure Vaishnavi Sachin	A Report On: Antibacterial Activity of Angle Marmelos (Bael)
		36.	Maharnavar Shankar Shivaji	
		37.	Mokashi Mansi Mohan	
		38.	Mulla Anisa Imam	
		39.	Nikalje Kiran Balu	Formulation and Evaluation of Aloe Vera Soap
		40.	Paigude Shradha Rajendra	
		41.	Pansare Akshay	
11	Mrs. T.P. Sangrapawar.	42.	Pathak Chaitanya Dashrath	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Diclofenac Sodium
		43.	Patil Anuja Datta	
		44.	Pawar Prajakta Jyotishya	Formulation and Evaluation of Mouth Dissolving Tablet of Losartan potassium
		45.	Pharate Abhijit Kailas	
12	Mr. S.S. Kakade	46.	Pote Priti Bharat	Solubility Enhancement of Poorly Soluble Drug
		47.	Puri Ravi Kailas	
		48.	Raghatwan Akshada Uttam	
		49.	Raipure Prachi Nitin	
13	Mr. P.K.Khade	50.	Rajpurohit Rajvirsing	Transdermal Drug Delivery
		51.	Sagar Deepali Rajendra	
		52.	Sarode Pratiksha Balasaheb	Microemulsion and its Evaluation
		53.	Sarode Ravikiran Dattatray	
14	V. B. Ingale	54.	Shaikh Afiya Ramjan	Evaluation of Herbal Tooth powder.
		55.	Shelake Komal Kisan	
		56.	Shinde Mayuri Baburao	

2/3

		57.	Shinde Sagar Jaysing	Evaluation of Herbal Hair Gel.
		58.	Shinde Saurabh Shivaji	Evaluation of *Psidium guajava* Linn Leaves For Antifungal Activities.
		59.	Shinde Vishal Namdeo	
		60.	Shitole Tejas Eknath	
15	Mr. V.V.Dhasade	61.	Surve Sakshi Anil	Formulation and evaluation of Antibacterial Herbal Gel
		62.	Thorat Rutuja Bapusaheb	
		63.	Ubale Rohan Suresh	
		64.	Ugale Snehal Sunil	Formulation and evaluation of Herbal Solid Perfume
		65.	Undre Darshana Sanjay	
		66.	Waghmare Diksha Mahendra	
		67.	Wakchaure Ajay Balasaheb	Formulation and Evaluation of Natural Anti- Acne Cream.
		68.	Walanj Sejal Santosh	
		69.	Warghade Rushita Bappu	

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

3/3

Project report on

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical

Sciences and Research Centre.

Kharadi Pune-14.

Project Report On

Pharmacological Evaluation of Decotion and oil prepared from *Nyctanthes arbor-tristis* L. for Anti arthritic activity.

Submitted To

Savitribai Phule Pune University, Pune.
In partial fulfillment of the B.Pharm course.

Submitted by

Mr. Dinesh Pandharinath Kabire.
Ms. Aishwarya Revanappa Kalshetti

Guided By

Dr. R Y Patil

H.O.D.

(Pharmacognosy Department)

Academic Year 2022-2023.

PDEAs SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE KHARADI PUNE-14

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre.
Kharadi, Pune-411014.

Project report on

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical

Sciences and Research Centre.

Kharadi Pune-14.

Certificate

This is to certify that the Project report entitled Pharmacological Evaluation of Decotion and oil prepared from *Nyctanthes arbor-tristis* L. for Anti arthritic activity. has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University Pune by Mr. Dinesh Pandharinath Kabire, Ms Aishwarya Revanappa Kalshetti, students of B.Pharm V IIIth semester during the academic year 2022 - 2023 has carried out their Project report satisfactorily under the guidance of Dr. R Y Patil at **Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.**

Date :- 31-05-23
Place :- Kharadi

Principal

Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's And Research Centre
Kharadi, Pune-411014

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014,

Project report on

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical

Sciences and Research Centre.

Kharadi Pune-14.

CERTIFICATE OF THE GUIDE

This is to certify that the project report of Pharmacological Evaluation of Decotion and oil prepared from *Nyctanthes arbor-tristis* L. for Anti arthritic activity. has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University,Pune by Mr. Dinesh Pandharinath Kabire, Ms. Aishwarya Revanappa Kalshetty, students of B.Pharm VIII semester during the academic year 2022-2023. They have carried out Project report under my guidance at **Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,Kharadi,Pune.**

Dr.R.Y.Patil

Date:- 31-05-23

Place :- Kharadi

V.V.Dhumale 04.06.2023

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14.

Guides and topics Allotted for Project work Academic Year 2021-2022

Class: Final Year B. Pharm (Sem VIII)

Sr. No.	Name of the Guide	Roll No.	Name of the Student	Name of the Topic
1	Dr R.Y Patil	1	Mr.Birgad Sachin Baalaj	Pharmacognostical Evaluation of *Caraca Papaya* leaves
		2	Mr.Chaudhari Mukesh Shivlal	
		3	Mr.Chaudhary Karan Vajaram	
		4	Ms.Chavan Pranita Prabhakar	Phytochemical Screening Of *Ricinus Cummunis* leaves
		5	Ms.Daundkar Anuradha Shashikant	
		6	Ms.Dhumal Rutuja Ravindra	
		7	Mr.Gaikwad Shubham Ramdas	Phytochemical Evaluation of *Ficus Bengalensis* leaves
		8	Mr.Galande Dnyanesh Anil	
		9	Mr.Garad Nilesh Bhalchandra	
		10	Mr.Garud Shweta Balkrushna	
2)	Dr V.U Barge	11	Mr.Ahiraao Chaiitanyaa Deepak	UV spectrophotometric Assay of medicinal substances
		12	Ms Awhale Harshada Sukhdev	
		13	Mr.Barate Rahul Nilkant	
		14	Ms Barde Neha Amol	Visible spectrophotometric Assay of medicinal substances
		15	Ms Bhagat Preeti Shahaji	
		16	Ms Bhange Aishwarya Jotiram	
3)	Dr. Amit Kasabe	17	Ms Shinde Anupama Anil	To perform assay of diclofenac sodium containing marketed formulations..
		18	Ms Shinde Shreya Dnyaneshwar	
		19	Ms Shitole Pooja Balasaheb	
		20	Mr.Tekale Satish Vitthalrao	To perform assay of Ibuprofen containing marketed formulations.
		21	Mr.Tekawade Prasad Amit	
		22	Mr.Thorat Mayureshwar Bhagwan	
4)	Mr. Vikram Veer	23	Ms. Sima D. Gote	Development and validation of the UV-spectrophotometric method for determination of some APIs in bulk and in the formulation.
		24	Mr. Tanaji R. Hajare	
		25	Mr. Prasad T. Hingmire	
		26	Ms. Manasi V. Jadhav	

1/3

		27	Ms. Pratiksha A. Jadhav	Synthesis and characterization of some substituted Benzimidazole derivatives.
		28	Ms. Darshana B. Jagtap	
5)	Mr. Sujit Kakade	29	Mr.Jagtap Dhiraj Dattatray	"Formulation and Evaluation of Natural Sunscreen Cream"
		30	Ms Kakade Suchita Prakash	
		31	Ms Jagtap Rutuja Shantaram	
		32	Mr.Janawale Abhishek Vishwambhar	Formulation & Evaluation Fast Disintegrating Tablet of Aceclofenac
		33	Ms Kakade Prachi Manohar	
		34	Mr.Kamble Vijay Sanjay	
6)	Mr.Krunal kanse	35	Ms. Utkarsha Khade	Clinical Trial in Covid Vaccine"
		36	Ms. Rutuja Kodre	
		37	Ms. Snehal Khirsagar	
		38	Mr. Sidharth Naikwadi	Data entry in Pharmacovigilance"
		39	Mr. Maruti Mungade	
		40	Mr. Chandan Makhwana	
		41	Mr. Omkar Napte	
		42	Ms. Varsha Mahajan	"OTC Drug- Overuse, Side effect and awareness"
		43	Mr Ashotosh Prajapati	
		44	Mr.Vishwajeet Lande	
7)	Mr. P H Khade	45	Ms Nawale Prajakta	Formulation and Evaluation of fast dissolution tablet of solid dispersion.
		46	Ms Nemade Kiran	
		47	Ms.Nikhade Vaibhav	
		48	Mr.Nimbalkar Tejal	Formulation and Evaluation of controlled release tablet.
		49	Mr.Papal Raj	
		50	Mr.Pardeshi Rupesh	
8)	Mr.Vivek Ingale	51	Ms.Salunke Priyanka	Screening of pharmacological activity of polyherbal formulation.
		52	Ms Satkar Atharva	
		53	Ms Paul Pratiksha	
		54	Mr.Sharma Tusha	
		55	Ms Prajapati Simran	
		56	Mr.Pawar Prashant	Screening of pharmacological activity of polyhedral formulation
		57	Mr.Rajpurohit Ranusingh	
		58	Raikar Mansi	Screening of pharmacological activity of polyherbal formulation
		59	Shinde Yogita	
9)	Mr. Vipul Dhasade	60	Ms Tripathi Apoorva Krishnram	Hair care Formulation development and its evaluation.
		61	Ms Thorat Supriya Sanjay	Qualitative and Quantitative estimation of Medicinal Plants.
		62	Mr.Thorat Tejas Vilas	
		63	Ms Varpe Aishwarya Ramesh	
		64	Ms Vibhute Prajakta Bapu	
		65	Ms Walke Rutuja Dilip	
		66	Ms Yadav Tejaswini Avinash	

2/3

		67	Mr.Yamgar Amit Subhash	To perform Assay for determination of curcumin in some marketed herbal formulation .
		68	Mr.Waghmare Vaibhav Madukar	

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

3/3

PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences
And Research Centre

Kharadi Pune 14

A Project Report on

TO STUDY PHYTOCHEMICAL EVALUATION OF AERIAL ROOTS OF FICIUS BENGHALENSIS LINN

Submitted To

Savitribai Phule Pune University, Pune

In partial fulfillment of the B Pharm course

Submitted by

Mr.DNYANESH ANIL GALANDE

Final Year B.Pharm (SEM VIII)

Guided By

Dr. R Y Patil

H.O.D.

(Pharmacognosy Department)

Academic Year 2021-2022

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre

Kharadi Pune 14

CERTIFICATE OF THE GUIDE

This is to certify that the project Report on entitled TO STUDY PHYTOCHEMICAL EVALUATION OF AERIAL ROOTS OF FICUS BENGHALENSIS LINN has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University,Pune by Mr.DNYANESH ANIL GALANDE student of B.Pharm VIIIth semester during the academic year 2021-2022. He has carried out project work under my guidance At Pune District Education Association's Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre, Kharadi, Pune.

Place:-KHARADI

V.V. Dhekade
30/05/2022

Guide:-Dr.R.Y Patil
30/5/2022

3

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

A. Experiential learning

5. M. Pharm Research Projects

(A. Y. 2018-19 to 2022-23)

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune 14.

List of Dissertation topics guided for M. Pharm. Students

Specialization: Pharmaceutics

Academic Year: 2018-19 to 2022-23

Sr. No.	Name of Students	Guide Name	Title of Dissertation	Year of Passing
Academic Year: 2018-19				
1.	Ms. Adsul Ketakee Rajendra	Dr. Ashok Bhosale; Co-guide: Mr. Sujit Kakade	Solubility Enhancement, Formulation and evaluation of Mouth Dissolving Tablet of Meloxicam.	2018-19
2.	Mr. Dugad Ankit Rajendra	Mr. Sujit Kakade	Formulation and development of sustained released oral drug delivery system using Caffeine as a model drug	2018-19
3.	Ms. Pokale Pratima Hanumant	Mr. Prashant Khade	Formulation and development of Fast Dissolving Buccal Film of Norethisterone.	2018-19
4.	Mr. Wable Somnath Pralhad	Mrs. T.P.Shangrapawar	Formulation, Development and Evaluation of Gastroretentive Bilayer Tablet of Losartan Potassium.	2018-19
Academic Year: 2019-20				
5.	Mr. Aphale Kiran Balasaheb	Dr. Ashok Bhosale; Co-guide: Mr. Sujit Kakade	Development, Formulation and Evaluation of Ethambutol and Isoniazid Combination Tablet for Anti-TB Kit.	2019-20
6.	Ms. Bhandari Dipali Subhash	Dr. Ashok Bhosale; Co-guide: Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Fast Dissolving Tablets of Solid Dispersion of Lamotrigine	2019-20
7.	Mr. Ghube Kundan Dattatray	Guide: Dr. Ashok Bhosale Co-guide: Mr. Prashant Khade	Formulation and Evaluation of Gymnema Sylvestre Extract Enteric Coated Tablet	2019-20
8.	Ms. Kale Anjali Rajendra	Mr. Sujit Kakade	Solubility Enhancement of Domperidone and Development of it's Mouth Dissolving Tablet	2019-20

9.	Ms. Lalage Monali Bharatkumar	Mr. Sujit Kakade	Formulation, Development and Evaluation of Mouth Dissolving Tablet of Lansoprazole by Natural and Synthetic Superdisintegrant	2019-20
10.	Ms. Lokhande Priyanka Sunil	Mr. Sujit Kakade	Formulation Development and *in vitro* Evaluation of Extended Release Tablet of Antianginal Drug	2019-20
11.	Ms. Magar Prajakta	Mr. Prashant Khade	Formulation, Development and Evaluation of Mouth Dissolving Tablet Using Solid Dispersion of Clopidogrel Bisulphate.	2019-20
12.	Mr. Pawar Indrajit	Mr. Prashant Khade	Stability Analysis of Formulated Monoclonal Antibody Against *Streptococcus Pneumoniae*	2019-20
13.	Ms. Sable Ashwini Ramdas	Mrs. T.P.Shangrapawar	Formulation and Characterization of Nanostructured Lipid Carriers Based Nanogel for Topical Delivery of Clarithromycin	2019-20
14.	Ms. Satav Komal Ramesh	Mrs. T.P.Shangrapawar	Process Optimization and Validation of Colorimetric Serum Bactericidal Assay for *Neisseria meningitidis.*	2019-20
15.	Mr. Tanawade Omkar Gorakh	Mrs. T.P.Shangrapawar	Formulation and Evaluation of Sustained Release Matrix Tablets of Valsartan.	2019-20
Academic Year: 2020-21				
16.	Biranje Sangram Balasaheb	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Effervescent Tablet of Glucosamine Sulphate and Diclofenac sodium for the Treatment of Osteoarthritis.	2020-21
17.	Gavhane Utkarsha Rajendra	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Fast Disintegrating Tablets of Solid Dispersions of Loratadine.	2020-21
18.	Humbe Tushar Rajendra	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Bilayer Tablet of Mefenamic Acid.	2020-21
19.	Kale Tushar Ramesh	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Dispersible Antacid Tablet of Aluminum Hydroxide for Geriatric Patients	2020-21
20.	Kalugade Darshan Raghunath	Dr. Ashok Bhosale	Preparation, characterization of self micro emulsifying drug delivery system of Nifedipine	2020-21

21.	Kamthe Kiran Ananda	Dr. Ashok Bhosale	Design, Development & Evaluation of Solid Self Micro-Emulsifying Drug Delvery System of Amlodipine Besilate	2020-21
22.	Ketaki Vivek Thorat	Dr. Ashok Bhosale	Formulation and Evaluation of Fast Dissolving Oral Film of Domperidone by Solvent Casting Method	2020-21
23.	More Akshata Manoj	Mr. Sujit Kakade	Formulation and Evaluation of Microwave Generated Nanocomposites for Solubility Enhancement of Rosuvastatin Calcium	2020-21
24.	Nangare Aarti Chandrakant	Mr. Sujit Kakade	Formulation and Evaluation of Fast Disintegrating tablet containing Griseofulvin Solid Dispersion.	2020-21
25.	Patil Basavanita Surykant	Mr. Sujit Kakade	Development and evaluation of Sublingual tablet of amlodipine besylate by direct compression method.	2020-21
26.	Pawar Sweta Vilas	Mr. Sujit Kakade	Formulate and Evaluate of Microwave Generated Nanocomposites for Solubility Enhancement of Poorly Water Soluble Drug.	2020-21
27.	Raje Onkar Sunil	Mr. Prashant Khade	Formulation and Evaluation of Fast Dissolving Oral Film of Venlafaxine Hydrochloride by Solvent Casting Method	2020-21
28.	Raut Neena Ashok	Mr. Prashant Khade	Design development and evulation of microsponge based topical drug delivery system by using Ciclopirox Olamine.	2020-21
29.	Suryawanshi Amar Chandrakant	Mr. Prashant Khade	Formulation and evaluation of floating tablet based gastroretentive drug delivery system by using ciprofloxacin Hydrochloride	2020-21
30.	Thongire Ashwini Dattatray	Mr. Prashant Khade	Solubility enhancement of Azilsartan medoxomil by self emusifying drug delivery system	2020-21
Academic Year: 2021-22				
31.	Gaike Shubham Suresh	Mr. Prasahnt Khade	Formulation and Evaluation of Rosuvastatin Calcium Micro-Emulsion for Transdermal Drug Delivery	2021-22

32.	Gavhane Akshada Rajaram	Mr. Prashant Khade	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Carvedilol	2021-22
33.	Jadhav Jaydeep Prabhakar	Mr. Prashant Khade	Formulation and Evaluation of Mouth Dissolving Film of Ziprasidone	2021-22
34.	Jadhav Neeta Vijay	Mr. Prashant Khade	Formulation and Evaluation of Floating Tablets Metoprolol Succinate	2021-22
35.	Kale Monika Haribhau	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Irbesartan	2021-22
36.	Kale Saroj Gangadharrao	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Floating Tablet of Metformin hydrochloride	2021-22
37.	Kamble Shrutika Shaileshkumar	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Colon Targeted Suppository of Mesalazine	2021-22
38.	Khade Swapnil Dattatray	Dr. Ashok Bhosale;	Formulation and Evaluation Mouth Dissolving Tablet of Losartan Potassium	2021-22
39.	Korde Sujeet Anil	Dr. Ashok Bhosale;	Formulation and Evaluation of Mouth Dissolving Tablet of Thiocolchicoside	2021-22
40.	Mane Pankaj Sanjay	Dr. Ashok Bhosale;	Formulation and Evaluation of Bilayer Tablets of Sustained Release Nifedipine and Immediate Release Pioglitazone	2021-22
41.	Narawade Shweta Keshav	Mr. Sujit Kakade	Formulation and Evaluation of Mouth Dissolving Tablet of Pitavastatin by Solid Dispersion Method	2021-22
42.	Ramasane Gajanan Ram	Mr. Sujit Kakade	Formulation and Evaluation of Gliclazide Immediate Release Metformin Sustain Release Bilayer Tablet	2021-22
43.	Rodge Vikram Madhukar	Mr. Sujit Kakade	Formulation and Evaluation of Bilayer Antidiabetic Tablet	2021-22
44.	Yennuwar Dhiresh Pramod	Mr. Sujit Kakade	Formulation and Development of Fast Disintegrating Tablet of Piroxicam by Solid Dispersion Technique	2021-22
Academic Year: 2022-23				
45.	Beldar Aditi Rameshwar	Mr. Sujit Kakade	Formulation and Evaluation of Solid Self Micro Emulsifying Drug Delivery System of Valsartan	2022-23

46.	Bhalerao Ruchita Arvind	Mr. Sujit Kakade	Formulation and Evaluation of Mouth Dissolving Tablets of Solid Dispersion of Fenofibrate	2022-23
73	Bhondve Riya Rahul	Mr. Sujit Kakade	Formulation and Evaluation of Solid Self Microemulsifying Drug Delivery System of Olmesartan Medoxomil.	2022-23
74	Biradar Pramod Sanjay	Mr. Sujit Kakade	Formulation and Evaluation of Bilayer Tablet of Enalapril Maleate and Metformin HCl	2022-23
75	Brahmne Jayashree Annasaheb	Mr. Prashant Khade	Formulation and Evaluation of Mouth Dissolving Tablet of Solid Dispersion of Pioglitazone HCl	2022-23
76	Gaysamudare Priyanka Balasaheb	Mr. Prashant Khade	Formulation and Evaluation of Sustained Release Matrix Tablet of Azathioprine	2022-23
77	Jadhav Shraddha Kiran	Mr. Prashant Khade	Formulation and Evaluation of Bilayer Tablet of Sustain Release Glibenclamide and Immediate Release Enalapril Maleate	2022-23
78	Joshi Shubhangi Rajeshwarrao	Mr. Prashant Khade	Formulation and Evaluation of Sustained Release Matrix Tablet of Lamivudine.	2022-23
79	Mahajan Vishal Bhimashankar	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Sublingual Tablet of Lansoprazole.	2022-23
80	Nagargoje Sandesh Balasaheb	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Orodispersible Tablets of Meclizine Hydrochloride.	2022-23
81	Patil Damini Sanjay	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Piroxicam.	2022-23
82	Pawar Ajay Shivaji	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Sustained Release Tablet of Glipizide	2022-23
83	Rokade Amol Bhausaheb	Dr. Ashok Bhosale; Co-guide: Mr. Sujit Kakade	Formulation and Evaluation of Antidiabetic Bilayer Tablet of Pioglitazone HCl and Glimepiride.	2022-23
84	Shinde Harshal Mohan	Dr. Ashok Bhosale; Co-guide: Mr. Prashant Khade	Preparation, Evaluation and Optimization of Nanosuspension of Poorly Water-soluble Rosuvastatin Calcium.	2022-23
85	Thorat Tanvi Vivek	Dr. Ashok Bhosale; Co-guide: Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Mouth Dissolving Tablet of Ketorolac Tromethamine	2022-23

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

A Research Report

On

"FORMULATION AND EVALUATION OF GLICLAZIDE IMMEDIATE RELEASE AND METFORMIN SUSTAIN RELEASE BILAYER TABLET"

Submitted to

SAVITRIBAI PHULE PUNE UNIVERSITY

In partial fulfilment for the degree of Master of Pharmacy in Pharmaceutics

Submitted By

Mr. Gajanan R. Ramasane

(M.Pharm. IVth Semester)

Guided By

Mr. Sujit Kakade

(Head of Pharmaceutics Department)

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE-411014

2021-2022

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER,

KHARADI, PUNE-411014

CERTIFICATE

This is to certify that the research work entitled "Formulation & Evaluation of Gliclazide Immediate Release and Metformin Sustain Release Bilayer Tablet" has been completed for the partial fulfilment of degree of Master of Pharmacy in Pharmaceutics by Mr. Gajanan Ram Ramasane, a student of M. Pharm IV^th^ Semester during academic year 2021-2022. He has carried out his project satisfactorily under the guidance of Mr. Sujit Kakade at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune -411014.

Date: 30-05-22

Place: Kharadi

B. K.
Mr. K. R. Bobe

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
(Principal)
P.D.E. A's S.U.C.O.P.S. & R.C.

Kharadi.

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER,

KHARADI, PUNE-411014

CERTIFICATE OF THE GUIDE

This is to certify that the research work entitled "Formulation & Evaluation of Gliclazide Immediate Release and Metformin Sustain Release Bilayer Tablet" has been completed for the partial fulfilment of degree of Master of Pharmacy in Pharmaceutics by Mr. Gajanan R. Ramasane, a student of M. Pharm IVth Semester during academic year 2021-2022. He has carried out his project satisfactorily under my guidance at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune -411014.

Date: 30-05-22

Mr. Sujit Kakade

Research Guide

Place: Kharadi

P.D.E.A's S.U.C.O.P.S. & R.C.

Kharadi

List of Dissertation topics guided for M. Pharm Students
Specialization: Pharmaceutical Quality Assurance
(Academic Year: 2018-19 to 2022-23)

Sr. No.	Name of Students	Guide Name	Title of Dissertation	Year of Passing
1	Ms. Supriya Kangude	Mr. Vikram Veer	Developement And Validation of RP-HPLC Method For Estimation of 2PE In IPV(Inactivated Poliomyelitis Vaccine)	2018-19
2	Ms. Nayna Khedekar	Mr. Vikram Veer	Development And Validation Of RP-HPLC Method For Estimation Of Formaldehyde In IPV	2018-19
3	Ms. Akshada Khaladkar	Mr. Vikram Veer	Development And Validation Of RP-HPLC Method For Estimation Of Human Serum Albumin In Rabbies Vaccine	2018-19
4	Ms. Kiran Ghule	Dr. Vijaya Barge	The use of UPLC in the biological comparison of candidate Biosimilar with innovator MAB	2018-19
5	Ms.Priyanka Kamthe	Dr. Vijaya Barge	Physicochemical characterization of Monoclonal Antibody	2018-19
6	Ms. Dipali Kolekar	Dr. Amit Kasbe	RP-HPLC Method development and validation of Amlodipine and Celecoxib in bulk and Pharmaceutical Dosage Form.	2018-19
7	Ms. Poonam Kailas Bramhadandi	Dr. Ashok Bhosale	Formulation, characterization & optimization of dissolution on containing celecoxib solid dispersion	2019-20
8	Mr. Vinayak Uttam Madane	Dr. Amit Kasbe	Formulation, Development & evaluation of sustained release bilayer tablet containing Pioglitazone & Glucosum in management of hypoglycemic diabetes	2019-20

9	Ms. Shruti Chandrakant Sonawane	Dr. Amit Kasbe	Formulation, Development & evaluation of sustained release tablet containing Tamoxifen Citrate & Ibuprofen in treatment of Metastatic Breast Cancer.	2019-20
10	Mr. Sandeep Markad	Dr. Amit Kasbe	Analytical method development and validation for Estimation OF Valsartan bulk and Pharmaceutical Formulation by QBD Approach	2019-20
11	Ms. Poonam Ashok Ingalwad	Mr. Vikram Veer	Development, production, purification and characterization of monoclonal antibody against Poliomyelitis	2019-20
12	Mr. Kanifnath Gawali	Mr. Vikram Veer	Analytical method development and validation of Antipsychotic drug Trifluoperazine	2019-20
13	Ms. Ankita Kasabe	Mrs. Archana Yadav	Development and Validation of HPLC method for determination of Clotrimazol in dosage form	2019-20
14	Ms. Kanchan Jambhale	Mrs. Archana Yadav	Formulation and evaluation of oral in-situ gel system for treatment of mouth ulcer	2019-20
15	Mr. Sagar Lohot	Mrs. Archana Yadav	Triamcinolone acetonide microsponges embedded biocompatible gels for controlled and effective antipsoriasis activity	2019-20
16	Mr. Abhilash Bhosale	Dr. Vijaya Barge	Upscaling , production , purification and characterization of monoclonal antibody against Streptococcus Pneumoniae	2019-20
17	Ms. Shubhang Darekar	Dr. Vijaya Barge	Formulation and evaluation of nanoparticulate matrix tablet of Eprosartan Mesylate	2019-20
18	Ms. Shubhangi Ramesh Darade	Dr. Amit Kasabe	Analytical method development & validation for estimation of Amlodipine in bulk and pharmaceutical formulation by QbD approach	**2020-21**
19	Mr. Rohidas Gurunath Dede	Dr. Amit Kasabe	Formulation, Development & evaluation of transdermal drug delivery system	2020-21

20	Ms. Jyoti Bahiru Darkunde	Dr. Amit Kasabe	Formulation and evaluation of sustain release matrix tablets of Dicofenac sodium and Chlorzoxazone	2020-21
21	Mr. Shyam D. Dhamane	Dr. Amit Kasabe	Analytical method development & validation of simultenous estimation for Ibuprofen and Camylofin dihydrochloride by using RP-HPLC	2020-21
22	Ms. Ashwini Nandkumar Gadage	Dr. Vijaya Barge	Formulation and evaluation of mouth dissolving tablet of Azelnidipine by using solvent evaporation technique	2020-21
23	Ms. Madhuri Gadekar	Dr. Vijaya Barge Co-guide : Dr. Amit Kasabe	Busting particles dispersed in compressed tablet to deliver active drug as immediate and sustain release	2020-21
24	Mr. Dhairysheel surykant Gund	Dr. Vijaya Barge Co-guide : Dr. Amit Kasbe	Mouth dissolving sugar free medicated lolitab in treatment of multiple disorders	2020-21
25	Mr. Haribhu Pandurang Raskar	Mr. Vikram Veer	Mouth dissolving medicated chewing gum in the treatment of multiple disorder of Chlorpromazine by direct compression method	2020-21
26	Mr. Pravin Prakash kambale	Dr. Vijaya Barge	Formulation,evaluation and stability testing of ayurvedic tablet for post opertaive anorectal wound healing	2020-21
27	Mr. Shashikant Ganesh Mhasade	Mr. Vikram Veer	Method development and validation of RP-HPLC method for simultaneous estimation of Nebivolvol and Cilndipine in combined tablet dosage form	2020-21
28	Mr. Nitin Sheshrao Neharkar	Mr. Vikram Veer Co-guide- Dr. Amit Kasbe	Formulation and evaluation of coated tablet with waiting solution containing active pharmaceutical ingredient for the treatment of multiple disorders	2020-21
29	Mr. Yadnesh Gajan Shende	Mr. Vikram Veer	Method development and validation of RP-HPLC method for simultaneous estimation of Dapagliflozin and Saxagliptin	2020-21
30	Ms. Vaishali Anna Shingade	Mr. Vikram Veer	A validated stability indicationg HPLC method for Cephalexin tablet formulation in the presence of degradation products and its process related impurity	2020-21
31	Ms. Snehal Mahadeo Khade	Dr. Vijaya Barge	Formulation and evaluation of buccoadhesive tablet of Acyclovir	2020-21

32	Pate Abhijit Nagnath	Dr. Vijaya Barge	Analytical method development and validation for estimation of Dolutegravir in tablet dosage form.	**2021-22**
33	Sakpal Bhavana Ramesh	Dr. Vijaya Barge	Formulation development and analytical method development of gel formulation containing antibiotic and antihistaminic agents.	2021-22
34	Shinde Trupti Shrirang	Dr. Vijaya Barge	Formulation development and analytical method development of microemulsion containing Griseofulvin.	2021-22
35	Sukre Manisha Ankush	Dr. Vijaya Barge	Formulation development and analytical method development of microemulsion containing Econazole nitrate.	2021-22
36	Suryawanshi Parijat Sunil	Dr. Vijaya Barge	Formulation development and analytical method development for drugs used in treatment of severe burn.	2021-22
37	Awatade Prajkata Raosaheb	Mr. Vikram Veer	Analytical method development and validation of Rivaroxaban in bulk & pharmaceutical dosage form by using RP-HPLC	2021-22
38	Burte Gayatri Bhagwant	Mr. Vikram Veer	Formulation development and analytical method development of Ibuprofen containing combinational tablets for rheumatoid arthritis.	2021-22
39	Dhepe Sayali Dattu	Mr. Vikram Veer	Formulation development and analytical method development of microemulsion containing ketoprofen	2021-22
40	Jadhav Snehal Anil	Dr. Ravindra Patil	Formulation of Rifampicin tablet by using ricinus communis oil as a binder & its evaluation & method development	2021-22
41	Madde Kiran Madhukar	Dr. Ravindra Patil	Formulation and evaluation of mouth dissolving tablet of Glicazide by using natural superdisintegrant	2021-22
42	Kandge Manasi Gorakh	Dr. Amit Kasbe	Formulation , evaluation, & method development of microemulsion containing Miconazole	2021-22
43	Karkhile Shubhangi	Dr. Amit Kasbe	Formulation development & analytical method development of tablet formulation containing antibiotic and antihistaminic agents.	2021-22
44	Kulkarni Onkar Shamrao	Dr. Amit Kasbe	Formulation development & analytical method development of oral dispersible tablet containing Sarratiopeptidase and salbutamol	2021-22

45	Kerle Vikram Namdev	Dr. Amit Kasbe	Formulation development & analytical method development of tablet containing Dapsone and Actazolamide	2021-22
46	Arjun Nakul Ramdas	Mr. Vikram Veer	Method development and validation of Azilsartan medoxorrin by using RP-HPLC	2021-22
47	Wanave Kiran Gahininath	Dr. Ravindra Patil	Method development and validation of Rosuvastatin calcium by using RP-HPLC	2021-22
48	Pratiksha Bhagwan Avhad	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for sustained release tablet containing Glibenclamide	**2022-23**
49	Pallavi Sarjerao Borase	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for nanogel containing kojic acid	2022-23
50	Kamlesh Ravindra Deshmane	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for mouth dissolving tablet containing Bromelin	2022-23
51	Rajratna Deepak Gaikwad	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for transdermal patch containing Glibenclamide	2022-23
52	Ghawate Dipti Popat	Dr. Amit J. Kasbe	Analytical Method Development and Validation of Verapamil Hydrochloride by Using RPHPLC.	2022-23
53	Jadhav Purva Suresh	Dr. Amit J. Kasbe	Analytical method development and validation of Eberconazole by HPLC method	2022-23
54	Jadhav Rutuja Pravinkumar	Dr. Amit J. Kasbe	Analytical Method Development and Validation of Rivaroxabane in Bulk and its Dosage Form by Using RPHPLC.	2022-23
55	Kalamkar Tanmayi Dattatray	Mr. Vikram S. Veer	Formulation Development and Analytical Method Development for Nanofibrous tablet of Glibenclamide	2022-23
56	Kendre Komal Anand	Mr. Vikram S. Veer	Analytical Method Development And Validation of Allopurinol In Bulk And It's Dosage Form By Using RP- HPLC	2022-23
57	Patil Dipti Sambhaji	Mr. Vikram S. Veer	Formulation development and analytical method development of nanofibrous gel containing Ketoconazole and Clotrimazole	2022-23
58	Gavhane Mayuri Vaibhav	Dr. Ravindra Y. Patil Co-guide: Mr. Vikram S. Veer	Analytical Method Development and Validation of Lamivudine by using RP-HPLC	2022-23
59	Pawal Suvarna pradip	Mr. Krunal G. Kanase Co-guide : Dr. Amit J. Kasbe	Analytical Method Development and validation of Sparfloxacin by using RP-HPLC	2022-23

60	Pinjari Pranali vasant	Mr. Krunal G. Kanase Co-guide: Dr. Vijaya U. Barge	Analytical method Development and validation of Econazole Nitrate by using RP-HPLC	2022-23
61	Rode Mangesh Mohan	Mr. Vivek B. Ingale Co-guide: Dr. Vijaya U. Barge	Formulation development and MTT assay of herbal Vitamin C powder and its HPLC method development	2022-23
62	Shaikh Almisba Faruk	Mr. Vivek B. Ingale Co-guide: Mr. Vikram S. Veer	Analytical Method Development And Validation of marketed formulation of Nefopam HCl	2022-23

Prof. Vikram Veer
Coordinator

Dr. V. U. Barge
Vice-Principal

VICE - PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune - 411014

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

A THESIS REPORT
ON

"FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACETAZOLAMIDE FOR TRETMENT OF SEVERE BURN"

SUBMITTED TO
SAVITRIBAI PHULE PUNE UNIVERSITY
IN PARTIAL FULFILLMENT FOR THE DEGREE OF MASTERS OF PHARMACY IN PHARMACEUTICAL QUALITY ASSURANCE

SUBMITTED BY
SURYAWANSHI PARIJAT SUNIL
(M. PHARM. SEMESTER-IV)

GUIDED BY
DR. V. U. BARGE
(VICE PRINCIPAL & PROFESSOR,
PHARMACEUTICAL CHEMISTRY)

PUNE DISTRICT EDUCATION ASSOCIATION'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
KHARADI, PUNE-411014
2021-2022

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL
SCIENCES AND RESEARCH CENTRE
KHARADI, PUNE-411014
2021-2022

A Thesis Report

On

"FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACETAZOLAMIDE FOR TRETMENT OF SEVERE BURN"

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

In partial fulfillment for the degree of masters of

Pharmacy in Pharmaceutical Quality Assurance

SUBMITTED BY

SURYAWANSHI PARIJAT SUNIL

(M. Pharm. Semester-IV)

GUIDED BY

Dr. V. U. Barge

(Vice Principal & Professor, Pharmaceutical Chemistry)

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL
SCIENCES & RESEARCH CENTRE, KHARADI,
PUNE-411014

CERTIFICATE

This is to certify that the thesis work presented entitled "FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACETAZOLAMIDE FOR TRETMENT OF SEVERE BURN" has been completed for the partial fulfillment of degree of **Master of Pharmacy in Pharmaceutical Quality Assurance** by **Mr. Suryawanshi Parijat Sunil** , a student of **M. Pharm Sem-IV** during academic year 2021-22. He has carried out his project satisfactory under the guidance of **Dr. Mrs. V. U. Barge** at **Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune- 411014.**

Date: 03/07/2022

Place: Kharadi

Dr. Ashok Bhosale
PRINCIPAL
Principal
P.D.E.A'S S.U.C.O.P.S & R.C Kharadi, Pune

P.D.E.A'S S.U.C.O.P.S & R.C Kharadi, Pune
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL
SCIENCES & RESEARCH CENTRE, KHARADI,
PUNE-411014

CERTIFICATE OF THE GUIDE

This is to certify that the thesis work presented entitled "FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACEAZOLAMIDE FOR TRETMENT OF SEVERE BURN" has been completed for the partial fulfillment of degree of **Master of Pharmacy in Pharmaceutical Quality Assurance** by **Mr. Suryawanshi Parijat Sunil**, a student of **M. Pharm Sem-IV** during academic year 2021-22. He has carried out his project satisfactory under my guidance **at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune- 411014.**

Date:03/05/2022

Place: Kharadi

Dr. V. U. Barge
(Vice- Principal & Professor,
Pharmaceutical Chemistry)
P.D.E.A'S S.U.C.O.P.S & R.C Kharadi, Pune

A. Experiential learning

6. Industrial/Blood Bank Visit

(A. Y. 2018-19 to 2022-23)

6. Industrial Visit

(A. Y. 2022-23)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

Educational Industrial Visit Report

29th May 2023

Educational Industrial Visit was organized for our Final Year B. Pharm students at Medispray Laboratories, L-2, MIDC, Satara, Maharashtra 415004. This is an initiative by our institute to bring awareness and pharma industrial knowledge about basic processing as well as innovative technology to benefit the budding pharmacist. Visit divided in to four session. First session keynote address and details of industry organization was delivered by Plant head Dr. Vishal Mandke. In second session Dr. Shailendra Jagtap, Quality Control Head, explained about sampling, production, laboratory condition, product management, raw material, product movement process, packaging, labelling, coding and storage condition in details. Mr. Sachin Gosavi, Production incharge, explained details of manufacturing and quality control department. In third session Mr. Prasad Kulkarni, Engineering department head, explained details of water, electrical, air control in all section, waste product management, major roles, objectives, daily functioning and equipment control system in all unit.

At last interactive session covered by Mr. Pravin Ghadge, General Manager and Head of HR Department.

Total 50 students and 2 faculty members participated in visit. This visit was coordinated by Student Representative Prachi Raipure (CR), Vaibhav Khaladkar, Faculty members Prof. Bhagyaashree Shelar and Prof. Vipul Dhasade.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.

Some moments during visit……



Dr. Vishal Mandke. Plant Head introduce company organization



Dr. Shailendra Jagtap, highlighted on details of Quality control department

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Mr. Prasad Kulkarni, explained about details of major roles of laboratory control system and waste management



Mr. Sachin Gosavi, express about system of manufacturing

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.



Group photo Industry Officials, Faculty members and all students

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI, PUNE

Academic Year: 2022-2023

Industry Visit Student List - Final Year B. Pharm

Date: Monday 29-05-2023

Roll No.	Candidate Name	Sign	Roll No.	Candidate Name	Sign
1.	Akhade Akshay Balkrishna		28.	Kumbharkar Harshada Shankar	
2.	Aranya Atharva Ravindra		29.	Lawande Rutuja Vikas	
3.	Bhamare Mansi Dipak		30.	Londhe Minakshi Raosaheb	
4.	Bhapsekar Nikhil Deepak		31.	Madure Vaishnavi Sachin	
5.	Bhosure Nikita Kaluram		32.	Maharnavar Shankar Shivaji	
6.	Bhujbal Nandini Dashrath		33.	Mulla Anisa Imam	
7.	Bichukale Snehal Janardan		34.	Nikalje Kiran Balu	
8.	Choudhary Snehal Shantaram		35.	Paigude Shradha Rajendra	
9.	Dake Raj Atul		36.	Pansare Akshay	
10.	Dhainje Rinku Bhimrao		37.	Raipure Prachi Nitin	
11.	Dhavale Sahil Satish		38.	Rajpurohit Rajvirsing	
12.	Gaikwad Pranjal Pramod		39.	Sagar Deepali Rajendra	
13.	Galgunde Soham Dnyandev		40.	Shaikh Afiya Ramjan	
14.	Gaware Sonali Ravindra		41.	Shelake Komal Kisan	
15.	Gund Omkar Dattatray		42.	Shinde Mayuri Baburao	
16.	Hake Neha Ashok		43.	Shinde Sagar Jaysing	
17.	Jagtap Vaishnavi Chandrashekhar		44.	Shinde Saurabh Shivaji	
18.	Jamdade Gayatri Santosh		45.	Shitole Tejas Eknath	
19.	Kabire Dinesh Pandharinath		46.	Thorat Rutuja Bapusaheb	
20.	Kalsheitt Aishwarya Revanappa		47.	Ubale Rohan Suresh	
21.	Kamthe Aishwarya Vijay		48.	Waghmare Diksha Mahendra	
22.	Khaladkar Vaibhav Bhauso		49.	Wakchaure Ajay Balasaheb	
23.	Khandve Gauri Vasant		50.	Walanj Sejal Santosh	
24.	Khiratkar Shweta Janardan				
25.	Khobare Abhishek Suresh			-	
26.	Khote Shruti Gorakh			-	
27.	Kudale Suvarna Gautam			-	

Total Number of Student Participated in Education Industry Visit- 50

Staff Member: Prof. Bhagyshree Shelar

Prof. Vipul Dhasade

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE

Kharadi, Tal. Haveli, Dist. Pune - 411014

Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 12 / 12 / 2022 Ref. No.: SUCOPSRC / 670 / 2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Human Resources Department,

Medispray, Satara

Subject: Regarding Educational visit at your Pharma Industry

Respected Sir,

Our college was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm. course, M. Pharm. course with specializations in Pharmaceutics and Quality Assurance Techniques. The college has recognized as research center for Ph.D. in Pharmacy under the faculty of Science and Technology, Savitribai Phule Pune University, Pune.

Every year college organized educational visit, to upgrade the students with current updates about the pharma industrial profession. Sir your Industry is well established, which will help to upgrade knowledge of our students. There would be 68 Final Year B. Pharm students and 02 faculty members included in visit.

Kindly grant us permission for the industry visit. We look forward to a positive reply for the same.

Thanking You,

Yours Faithfully,

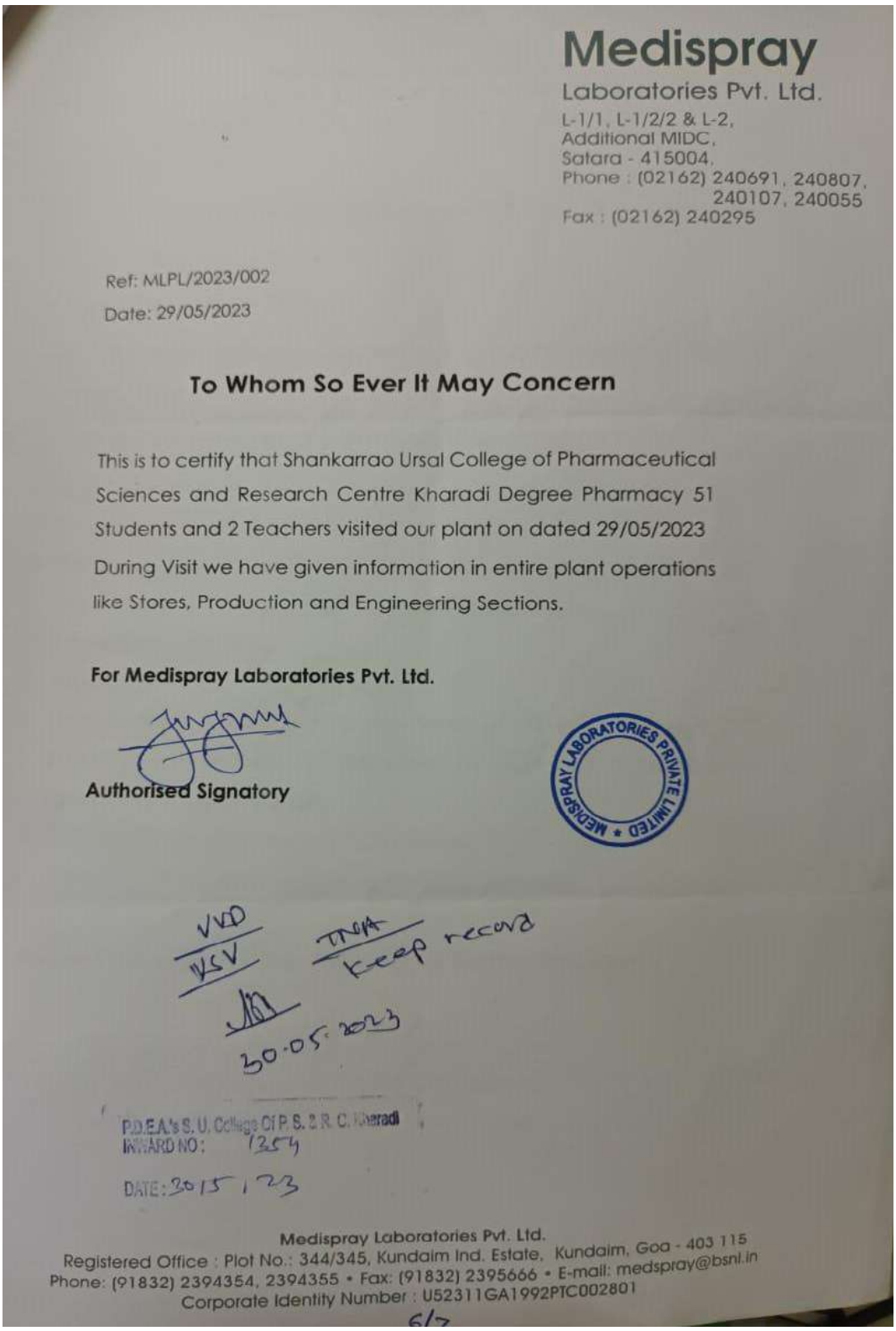
Dr. Ashok Bhosale
PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Received
Dhadge
23.05.2023
Institute Copy

4/7

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Medispray
Laboratories Pvt. Ltd.
L-1/1, L-1/2/2 & L-2,
Additional MIDC,
Satara - 415004.
Phone : (02162) 240691, 240807,
240107, 240055
Fax : (02162) 240295

Ref: MLPL/2023/002
Date: 29/05/2023

To Whom So Ever It May Concern

This is to certify that Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre Kharadi Degree Pharmacy 51 Students and 2 Teachers visited our plant on dated 29/05/2023 During Visit we have given information in entire plant operations like Stores, Production and Engineering Sections.

For Medispray Laboratories Pvt. Ltd.

Authorised Signatory

MEDISPRAY LABORATORIES PRIVATE LIMITED

VKD
VSV

TNA
Keep record

30.05.2023

P.D.E.A's S.U. College Of P.S. & R.C. Kharadi
INWARD NO: 1354
DATE: 30/5/23

Medispray Laboratories Pvt. Ltd.
Registered Office : Plot No.: 344/345, Kundaim Ind. Estate, Kundaim, Goa - 403 115
Phone: (91832) 2394354, 2394355 • Fax: (91832) 2395666 • E-mail: medspray@bsnl.in
Corporate Identity Number : U52311GA1992PTC002801

6/7

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

6. Industrial Visit

(A. Y. 2021-22)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

A report on….

Virtual Industrial Visit (2021-2022)

13th May 2022

Virtual Industrial visit was organized for our Final Year B. Pharm students by Associated Capsules Group (ACG), Mumbai. Associated Capsules Group has organise virtual training on "INSIDE IN ACGS ORAL DOSAGE TECHNOLOGY" This is an initiative by our institute to bring awareness about ACG innovative technology to benefit the budding pharmacist and formulation experts through such a knowledge sharing sessions. During presentation Mr Khetan Parmar, Dr. Jnanadeva Bhat, Ms. Ankita Solanki, Mr. Nadir Mohammed present information and videos to all students. They highlighted on following topics,

- A journey in Capsule Manufacturing
- New applications and Technology in hard capsule
- Overview of Packaging Films and Foils
- Track and Trace in Pharmaceutical Industry and Insight of Vision Inspection
- Important Equipment in Manufacture of Capsule and Tablets
- Industry Internet of Things – ACG's Road map into the future

During session head of every department introduce their department details, overview, major roles, objectives and daily functioning to students. Also the students were shown demonstration of different practical applications using various sophisticated equipment's available in research laboratory, manufacturing and quality control department. Total 68 students and 3 faculty members present for virtual Industrial visit. This visit was coordinated by Mr. Vipul V. Dhasade.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

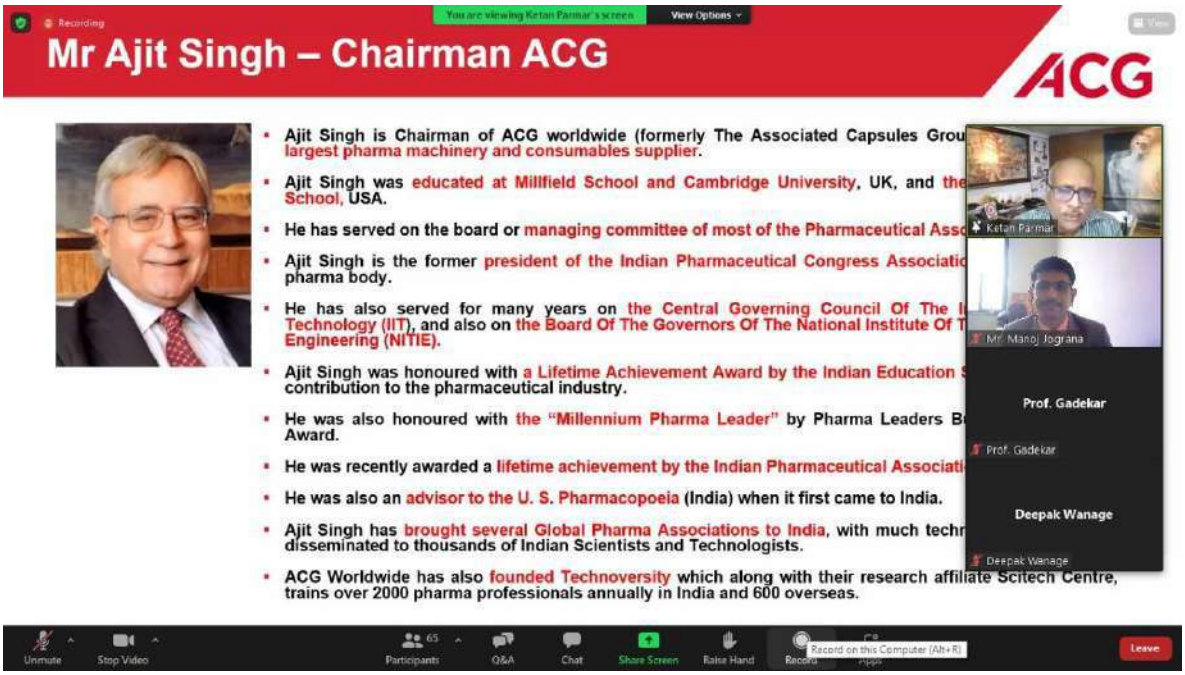




Students and Staff members during Virtual Industrial Visit

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.





Dr. Ketan Parmar highlighted on packaging films during Virtual Session

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Students during Virtual Session

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

6. Industrial Visit

(A. Y. 2019-20)

Report on

Industrial Visit

7th March 2020

One-day Industrial Visit was organized for Second Year B. Pharm students at Nulife Pharmaceutical, MIDC Bhosari Industrial Estate, Pimpri-Chinchwad-411018, Maharashtra. During the visit the head of every department in industry explained the overview, major role and functioning of the department. Also the students were shown demonstration of different practical applications using various sophisticated equipment's available in laboratory. Total 69 students and 3 faculty visited Nulife Pharmaceutical. This visit was organised by Mr. Prashant Khade.



Visit at Nulife Pharmaceutical, Pune

Mr. Prashant Khade
Coordinatot

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

NuLife PHARMACEUTICALS

PLOT NO.63, F-2 BLOCK, M.I.D.C.,
PIMPRI INDUSTRIAL AREA,
PIMPRI, PUNE 411 018 (M.S.) INDIA
TEL. : +91 20 27130346, 27130746
FAX : +91 20 27130620
Email : contactus@nulifepharma.com
website : www.nulifepharma.com

To,

The Principal.

Shankarrao Ursal College of Pharmaceutical,

Sciences Research Centre,

Kharadi, Tal: Haveli,

Pune: 411014.

Ref: 166/2020-2021 Date-7/3/2020

CERTIFICATE

This is to certify that 62 students of B.Pharm 2nd Year along with 3 faculty members. They have visited various departments of our factory premises on Saturday 7.3.2020.

They visited Section like tablet, capsule, cream, ointment, lotion, ear drops, oral liquid, store, packing and quality control.

For Nulife Pharmaceuticals

Mr. Sudhir Devale

(Hr Manager)

NULIFE PHARMACEUTICALS PUNE

PHK - PNA
13032020

P.D.E.A.'s S. U. College Of P. S. & R. C. Kharadi
INWARD NO: 1683
DATE: 13/3/2020

Scanned by CamScanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E. Institute Code : PH 6385 ▪ Website : www.pdea-sucopsrc.org ▪ E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835

Date : 06/03/2020 Ref. No.: SUCOPSRC/ 654 /2019-2020

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

To,
H. R. Manager,
Nulife Pharmaceuticals
Plot No 63, F2 Block,
MIDC Bhosari Industrial Estate,
Pimpri-Chinchwad-411018,
Maharashtra.

Respected Sir,

On behalf of Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14, I wish to extend my sincere thanks for your kind co-operation & valuable guidance by giving the information of formulation, packaging and storage of dosage forms to our Second Year B. Pharmacy students during the visit to your industry which held on 7th March 2020. The knowledge gained by our students will really boost them for their bright future in pharmacy profession.

I thank you once again for sparing your valuable time and making it convenient for us, looking forward for the same co-operation and guidance in future.

With warm regards.

Thanking you with warm regards
Yours Faithfully

NULIFE PHARMACEUTICALS PUNE

Mr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014.

Institute Copy

Scanned by CamScanner

पुणे जिल्हा शिक्षण मंडळाचे
शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस ॲन्ड रिसर्च सेंटर
खराडी, ता.हवेली, जि.पुणे-411014. महाराष्ट्र, भारत.
मान्यताप्राप्त : अखिल भारतीय तंत्रशिक्षण परिषद व भारतीय औषधनिर्माणशास्त्र परिषद, नवी दिल्ली
महाराष्ट्र शासन व तंत्रशिक्षण संचलनालय, मुंबई (डि.टी.ई.कोड नं.6385)
संलग्न : सावित्रीबाई फुले पुणे विद्यापीठ, पुणे (आयडी नं. पीयु/पीएन/फार्मा/384/2009 कोड नं.1235)
फोन नं. : 020-27011106 ई-मेल : sucopsrc_2009@yahoo.co.in वेबसाईट : www.pdea-sucopsrc.org

Date : 11/02/2020 Ref. No. : SUCOPK/582/2019-2020

अध्यक्ष
अजित पवार

उपाध्यक्ष
राजेंद्र घाडगे

मानद सचिव
ॲड.संदीप कदम
अधिसभा सदस्य, सा.फु.पु.वि., पुणे.

खजिनदार
ॲड. मोहनराव देशमुख

उपसचिव
एल. एम. पवार

प्राचार्य
डॉ. अशोक भोसले

To,
H. R. Manager,
Nulife Pharmaceutical
Plot No 63, F2 Block,
MIDC Bhosari Industrial Estate,
Pimpri-Chinchwad-411018,
Maharashtra.

Subject: Regarding the Industrial Visit.

Sir,

Our college Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm, M. Pharm in Pharmaceutics, M. Pharm in Pharmaceutical Quality Assurance and Ph.D. Research Centre. College is one of the Premier institute in Pune region and is recognized by AICTE, DTE, Govt. of Maharashtra and Pharmacy Council of India. Our institute promotes and encourages the students to undergo Industrial Visit to expose them to practical knowledge of Pharmacy in Industry so as to bridge the gap between Industry and curriculum and upgrade their technical skills.

Our institute wish to organized Industrial visit in your esteemed organization on 7th March 2020. The total numbers of students in S.Y.B. Pharm is 69 along with 3 staff members. So I kindly request you to grant the permission to organize Industry Visit in your Industry.

Hope to have fruitful relations with your Industry in the future.

Thanking you.

Yours Faithfully

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014.

Institute Copy

Scanned by CamScanner

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14

Student List of S. Y. B. Pharm for Industrial visit (A.Y. 2019-20)

Sr. No.	Name of Student	Gender	Date of Birth	Age	Address
1.	Ahiraao Chaitanyaa Deepak	M	08/07/2000	20	4868, Near Tirupati Soc. Behind Balaji H.P. Petrol Pump, Wagholi, Pune
2.	Awhale Harshada Sukhdev	F	14/11/2000	20	Achalwadi, Wagholi Pune 07
3.	Barate Rahul Nilkant	M	03/7/2000	19	Lane No 1, Sr.No. 9, Tukaram Nagar Kharadi Pune 411014
4.	Barde Neha Amol	F	21/04/2000	19	Saimandavan society old mundwa road, Wadg aonsheri Pune-14.
5.	Bhagat Preeti Shahaji	F	25/10/200	19	Rakshak nagar phase-I, B-19, F-11/12, Kharadi, Pune. 14
6.	Birgad Sachin Baalaj	M	29-I-1999	21	Zensar IT Park Kharadi, Pune
7.	Chaudhari Mukesh Shivlal	M	29/10/2000	19	Ashram road, Raj Heights 'A' wing Flat no:- 304, Uruli Kanchan, Pune Pin :- 412202
8.	Chaudhary Karan Vajaram	M	18/10/2000	19	A1, Sayash height, Hanuman mandir lane Hadapsar, Gadital, Pune Pin :- 411028
9.	Daundkar Anuradha Shashikant	F	01/08/2001	19	Datta prasad Housing soc. lane NO : 6, ganeshnagar voadgoansheri pune 14
10.	Dhumal Rutuja Ravindra	F	6th April, 2000.	19	Sr.No.39, Shinde Vasti, Opposite to Gaikwad Hospital, Keshavnagar., Mundhwa, Pune-411036.
11.	Gaikwad Shubham Ramdas	M	20/09/2000	19	AT Post Manjari Bk II Gavali vasti, sai corner, Taluka Haveli. Dist Pune

Khade P.H.

1/8

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

12.	Galande Dnyanesh Anil	M	27/7/2000	20	Sr.no 23 Gopalnagar wadgaonsheri Lane 5 Pune 411014
13.	Garud Nilesh Bhalchandra	M	21.02.1999	21	Gajanan nagar (6), kalewadi phata, Rahatani, Pune-17
14.	Garud Shweta Balkrushna	F	23/9/2000	20	Talwadi, Uruli-Kanchan, Tal-Haveli, Dist-Pune-412202.
15.	Gote Sima Datta	F	4-12-2000	19	Padmachaya, Raghvendra Nagar Soc. SE.No.35, Plot No.48 Mai Nivas
16.	Hajare Tanaji Ram	M	01/05/99	21	Sainagari, Near Holy Angel school Manjari Khurd Pune
17.	Jadhav Pratiksha Ajinath	F	10/01/2001	19	shreekunj building flat no-13 Indrayni Colony, Talegaon Dabade, Pune.
18.	Jagtap Darshana Balasaheb	F	08/02/2000	20	Sr.No.211 8/E Vidyavihar Coloney lane No.1 Sai Nivas Banglo. Hadapsar Pune 28
19.	Jagtap Dhiraj Dattatray	M	29/08/2001	18	Malwasti, Shikrapur, Tal-Shirur, Dist-Pune, 412208.
20.	Jagtap Rutuja Shantaram	F	28/3/2000	20	Siddhi Parle Soc. Awhal wadi road, Lane No-4 wagholi, Pune.
21.	Janawale Abhishek Vishwambar	M	26/8/2000	20	At.post.shirur, Tal-Jamkhed Dist-A.nagar 413201
22.	Kamble Vijay Sanjay	M	29/06/2000	20	A/p kamble vasti waghwan tal-sangola dist-solapur 413307
23.	Khade Utkarsha Balasaheb	F	21/10/2000	20	Indraprastha soc. manjri plot no.48 near bajaj showroom.
24.	Kodre Rutuja Khushal	F	20/8/2000	20	S.r NO-3 Gandhi chowk near bhaji market, Mundhwa Pune 36
25.	Kshirsagar Snehal Vishnu	F	1/12/2000	20	Uruli kanchan, Tambe vasti, Tal: Haveli, Dist: Pune 412202

Khade Ph.

2/8

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

26.	Kumar Ashutosh	M	25/9/1999	20	Dattaprasad Society, H no. 6, Ganesh nagar, Vadgaon sheri, Pune-14
27.	Landage Vishwajeet Vikram	M	01/06/2000	19	Kolte, Building, Bankar colony, lane no. 1, Near, Akashwani, Hadapsar, Pune.
28.	Makwana Chandan Sagar	M	14/05/1999		377, Balaji Mandir, Bharat Bhavani Peth, Pune-411042
29.	Mungade Maruti Shivaji	M	17/12/1997	22	Thite nagar, near zensar kharadi Pune
30.	Naikodi Siddhesh Sanjay	M	13/12/2000	19	Charan Nagar Chandannagara, Pune Kharadi.
31.	Nemade Kiran Subhash	M	12/6/2001	19	M.M. Landmark, Flat no. 304, near Gangotri park, dighi road, bhosari, pune-39
32.	Nenavath Shivani Rupalal Rathod	F	———	X	———
33.	Nikhade Vaibhav Ramesh	M	29/09/1999	21	At. post. Hanuman Nagar, Mallkapur, Buldhana
34.	Nimbalkar Tejal Mohan	F	13/2/2001	19	Ostaald appartment, Boisar, mumbai.
35.	Papal Raj Dilip	M	07/08/1999	20	73/2 Vitthal soc., saswad. tal. Purandar. dist: Pune
36.	Pardeshi Rupesh Shivcharan	M	19/10/1999	20	A1-402, Somphma Homes Shewalwadi road, manjri Bk.
37.	Patil Anmol Vasantrao	M	06/12/99	20	Gr. no 33/1 Sai krupa niwas, kharadi, Pune-14
38.	Prajapati Simran Kantilal	F	11/05/2000	19	Sejwal park lane No-6, chandan nagar pune-14
39.	Raikar Manasi Vikas	F	12/10/2000	19	Sr.No. 156, Shri Ram Niwas, Opp. Vilo Ponawalla Hospital, Hadapsar, Pune-28

Khade P.H. 3/8

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

40.	Rajpurohit Ranusingh Suresh	M	2-9-2000		Sr.no 48/2 Near Sonai Park, Kharadi Pune-14
41.	Salunkhe Priyanka Rajendra	F	29-7-2001	19	195/2 Near Shriram mandir mundhwa Pune-36.
42.	Satkar Atharwa Tukaram	F	29-6-2000	19	Krish Ambience, Preetnagar, Kharadi, Pune-14
43.	Sharma Tushar Kishor	M	25/06/1999	20	Geeta Complex, Vishrantwadi, Pune-15
44.	Shinde Anupama	F	22/01/1999	20	Sr No-54/6 Om society Dalvi Nagar, Bt Kawade Rd, Ghorpadi pune-4110049.
45.	Shinde Shreya Dnyaneshwar	F	1-2-2000	20	Navyug colony Bhekrainagar, Phursungi Pune-412308.
46.	Shinde Yogita Baban	F	25/10/1999	20	Mauli nagar, nagar road Beed.
47.	Shitole Pooja Balasaheb	F	31-12-1999	20	Supreme angan E-201 Baif Road wagholi Pune-412207.
48.	Tekawade Prasad Amit	M	26/4/2000	20	Ohcue Bunglow manjri Bhudruk 412307
49.	Thorat Mayureshwar Bhagwan	M	05/05/2000	20	Parth Pride. M.I.D.C. Bhigwan Road Baramati-413133
50.	Thorat Tejas Vilas	M	26/2/2000	20	At p. Patas. Yogendranagar
51.	Tripathi Apoorva Krishnram	F	23/8/1999	20	Sr.No. 53/58 Sainath nagar near Shivaji chowk vadgaonshree pune-14.
52.	Varpe Aishwarya Ramesh	F	23/02/2001	19	Wadia bungloco No-8 kalyaninagar Near Nagswala school Pune-6
53.	Vibhute Prajakta Bapu	F	30/06/2000	19	Shivshankar mangalkaryaly Near by old phursungi road Bhekrainagar, Pune 412308

Khade P.A.

4/8

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

54.	Walke Rutuja Dilip	F	9/05/01	18	Kharadi-bypass, pune-14 cell 014
55.	Yadav Tejawini Avinash	F	13/10/1999	20	Somnath nagar wadgaon Sheri Pune 14 Sr. no - 44.
56.	Yamgar Amit Subhash	M	13/01/2000	20	At-Sonarpada Tal Murbad Dist Thane. 421401
57.	Bhange Aishwarya Jotiram	F	14/7/1999	20	At/post, Turodgaon, Hingangaon, Tal. Indapur, Dis. Pune.
58.	Chavan Pranita Prabhakar	F	20/6/1999	20	At. Post. Gadegaon Road, ITI Clg Near, Mahadaha Colony, Barshi, Pin-413411
59.	Hingmire Prasad Tulsidas	M	1/2/2000	20	At post, Anand nagar, Plot no 1, priyanka apartment, Sinhgad road Pune
60.	Jadhav Mansi Vijay	F	26/4/2000	19	Sr. no 50/1 Nanai baug, B.T. kawade road. Ghorpadi gao mundhwa Pune-36
61.	Kakade Prachi Manohar	F	04/03/1999	20.	At home kololi, post-supa, tal. baramati, dist Pune-04
62.	Kakade Suchita Prakash	F	03/01/1998	21	Dahivan vasti, wadgaon Shinde Tal. Haveli, Pune-
63.	Napte Omkar Lahu	M	19/04/1999	20	A/P-karandi Tal-shirur. Dist-Pune 412208
64.	Nawale Prajakta Rajesh	F	28/03/2000	19	2/14, Ramnagar, Shiv sena chowk, Yerwada, Pune-06.
65.	Pawar Prashant Balasaheb	M	25-6-2000	20.	C-6, Priyanka residency Near Vaibhav theatre, Hadapsargaon, Pune-28
66.	Poul Pratiksha Gopinath	F	17/09/1999	20	Sr. no 7/3 lane no 4 Anusaya park, Kharadi, Pune-14
67.	Tekale Satish Vitthalrao	M	05/08/1998	21	At. post. Yehlegaon (Gowdi) T.Q. Kalamnuri. Dist. Hingoli 631513

Khade P.H.

5/8

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

68.	Thorat Supriya Sanjay	F	13/01/1999	20	At. Pt. Mungashi, Tal Parner, Dist. Ahmednagar, 414302.
69.	Waghmare Vaibhav Madhukar	M	—	X	—

Details of Staff					
1.	**Mr. Prashant Khade**	M	**16th May 1986**	**33**	**A/P: Pargaon, Tal: Daund, Dist: Pune-412203**
2.	Mrs. Trusha P. Shangrapawar	f	10th sep 1983	36	Ganga Constella Khadaki
3.	Mr. Rajesh Gighe	m	21-01-1978	43	At/P: Dehu, Tal: ~~Mawal~~ Haveli. Dist: Pune

Khatem n. 618

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Khadki, Pune-411014

Scanned by CamScanner

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14

Student List of S. Y. B. Pharm for Industrial visit (A.Y. 2019-20)

Sr. No.	Name of Student	Gender	Contact No. of Student	Contact No. of Parent
1.	Ahiraao Chaiitanyaa Deepak	M	8007061047	9850489703
2.	Awhale Harshada Sukhdev	F	9168156464	9673287373
3.	Barate Rahul Nilkant	M	7083423216	7083559850
4.	Barde Neha Amol	F	9373506797	9822530066
5.	Bhagat Preeti Shahaji	F	8605394915	8788331803
6.	Birgad Sachin Baalaj	M	7385852880	8390186663
7.	Chaudhari Mukesh Shivlal	M	7350520564	9921495637
8.	Chaudhary Karan Vajaram	M	774406875 75	9921973124
9.	Daundkar Anuradha Shashikant	F	9922447687	8390864040
10.	Dhumal Rutuja Ravindra	F	9309114706	9890795086
11.	Gaikwad Shubham Ramdas	M	9172776090	9763191134
12.	Galande Dnyanesh Anil	M	7020518181	9552596353
13.	Garad Nilesh Bhalchandra	M	7420084467	9168486036
14.	Garud Shweta Balkrushna	F	8806620201	9764656549
15.	Gote Sima Datta	F	8080263797	9922433892
16.	Hajare Tanaji Ram	M	7038378242	7498592063
17.	Jadhav Pratiksha Ajinath	F	7219379308	9823653091
18.	Jagtap Darshana Balasaheb	F	9359982021	9665381697
19.	Jagtap Dhiraj Dattatray	M	8888228258	9841476262
20.	Jagtap Rutuja Shantaram	F	9697967878	9823627878
21.	Janawale Abhishek Vishwambar	M	7709751720	9960452737
22.	Kamble Vijay Sanjay	M	7498040992	9049535979
23.	Khade Utkarsha Balasaheb	F	7719962971	9975116831
24.	Kodre Rutuja Khushal	F	9145442799	9552804499
25.	Kshirsagar Snehal Vishnu	F	7038952518	9860772729
26.	Kumar Ashutosh	M	9673650294	7775068047
27.	Landage Vishwajeet Vikram	M	8308783241	9604876762
28.	Makwana Chandan Sagar	M	8999523066	9822312506
29.	Mungade Maruti Shivaji	M	9168846760	8806720654
30.	Naikodi Siddhesh Sanjay	M	9527561715	9763372823
31.	Nemade Kiran Subhash	M	7038630482	9552549279
32.	Nenavath Shivani Rupalal Rathod	F		
33.	Nikhade Vaibhav Ramesh	M	7057374881	7350226441

Khade P.H. 7/8

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

34.	Nimbalkar Tejal Mohan	F	9975665882	9130639600
35.	Papal Raj Dilip	M	7744877976	9011453432
36.	Pardeshi Rupesh Shivcharan	M	9527645732	9527965772366
37.	Patil Anmol Vasantrao	M	8421963705	9595206935
38.	Prajapati Simran Kantilal	F	9730966622	8698192292
39.	Raikar Manasi Vikas	F	9881973708	9881973708
40.	Rajpurohit Ranusingh Suresh	M	—	—
41.	Salunkhe Priyanka Rajendra	F	9623830065	8888774639
42.	Satkar Atharwa Tukaram	F	8788672514	9403962763
43.	Sharma Tushar Kishor	M	95033 49169	9665 886888
44.	Shinde Anupama	F	7387770669	8830645387
45.	Shinde Shreya Dnyaneshwar	F	8669463797	9970392623
46.	Shinde Yogita Baban	F	9420414048	9284366884
47.	Shitole Pooja Balasaheb	F	9370605640	8007911251
48.	Tekawade Prasad Amit	M	8381037878	9373037878
49.	Thorat Mayureshwar Bhagwan	M	8412984545	8412934545
50.	Thorat Tejas Vilas	M	8805253162	9860903132
51.	Tripathi Apoorva Krishnram	F	7558317374	9960779966
52.	Varpe Aishwarya Ramesh	F	9881552789	9764809672
53.	Vibhute Prajakta Bapu	F	9370448574	9850701344
54.	Walke Rutuja Dilip	F	8806052290	8805068830
55.	Yadav Tejawini Avinash	F	9763399007	8087643384
56.	Yamgar Amit Subhash	M	9011673929	9226939013
57.	Bhange Aishwarya Jotiram	F	9767313323	9021802323
58.	Chavan Pranita Prabhakar	F	7218152564	8308977486
59.	Hingmire Prasad Tulsidas	M	9823833333	7588937218
60.	Jadhav Mansi Vijay	F	7875866275	9822621195
61.	Kakade Prachi Manohar	F	8806789521	9637154635
62.	Kakade Suchita Prakash	F	7719005652	9226926103
63.	Napte Omkar Lahu	M	9766128184	7447898282
64.	Nawale Prajakta Rajesh	F	9130255123	7798620530
65.	Pawar Prashant Balasaheb	M	8055599900	7796757555
66.	Poul Pratiksha Gopinath	F	8624021409	9881141629
67.	Tekale Satish Vitthalrao	M	9370593422	7030130156
68.	Thorat Supriya Sanjay	F	9130379911	9130397711
69.	Waghmare Vaibhav Madhukar	M	—	—

Khade A.M. 8/8

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned by CamScanner

6. Blood Bank Visit

(A. Y. 2019-20)

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-14

Blood Bank Visit

(Date: 2/3/2020)

Blood Bank Visit was organized by Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi was held at Jankalyan Blood Bank at Swargate, on 2 nd March 2020. Blood Bank Visit was attended by First Year Students The visit was informative, as a record of 52 students participated in it. Dr. Nandini and her colleagues gave information about storage, equipment's used , RDP , SDP , different blood groups , detail about rare blood group , information about blood , Information about Blood Donation , Procedure about Blood Donation , How Blood Is donated to the person , product packing , separation of blood products , labelling , demotions , colours used of denotations.





P.G. Kanase
(Co-ordinator)

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

6. Industrial Visit

(A. Y. 2018-19)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

A Report on…

Educational Industrial Visit (2018-2019)

2nd November 2018

One-day educational industry visit was organized for Final Year B. Pharm students at Central Forensic Science Laboratory, Pune. The main objective of the educational visit to understand manufacturing, quality evaluation and functioning of large scale laboratories. During the visit of Central Forensic Science Laboratory, Pune the head of every department in laboratory introduce their department details, overview, major roles, objectives and daily functioning to students. Also the students were shown demonstration of different practical applications using various sophisticated equipment's available in laboratory.

During visit student interact with every department heads and learn more about laboratories. Total 65 students from final year B. Pharm and Prof. Supriya Khatal, Prof. Mohan Shitole visited Central Forensic Science Laboratory. Prof. Vipul V. Dhasade coordinated educational industry visit.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.



Interaction during laboratory visit.



Interaction during laboratory visit.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



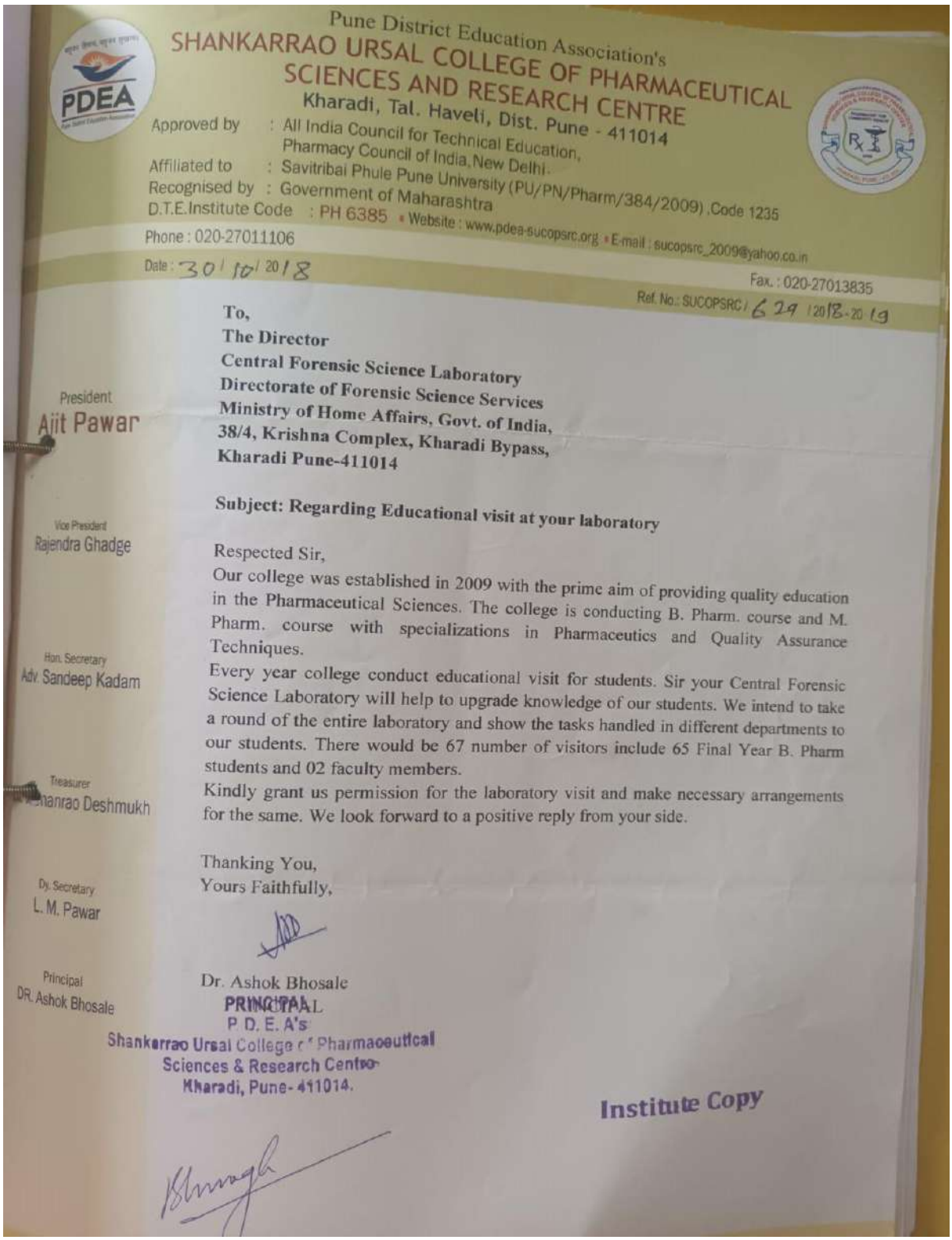
Demonstration of laboratory equipment during visit.



Laboratory officials and student participants

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE

Kharadi, Tal. Haveli, Dist. Pune - 411014

Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.

Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235

Recognised by : Government of Maharashtra

D.T.E. Institute Code : PH 6385 • Website : www.pdea-sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in

Phone : 020-27011106

Fax. : 020-27013835

Date : 30/10/2018

Ref. No.: SUCOPSRC/629/2018-2019

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam

Treasurer
Shanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

To,
The Director
Central Forensic Science Laboratory
Directorate of Forensic Science Services
Ministry of Home Affairs, Govt. of India,
38/4, Krishna Complex, Kharadi Bypass,
Kharadi Pune-411014

Subject: Regarding Educational visit at your laboratory

Respected Sir,

Our college was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm. course and M. Pharm. course with specializations in Pharmaceutics and Quality Assurance Techniques.

Every year college conduct educational visit for students. Sir your Central Forensic Science Laboratory will help to upgrade knowledge of our students. We intend to take a round of the entire laboratory and show the tasks handled in different departments to our students. There would be 67 number of visitors include 65 Final Year B. Pharm students and 02 faculty members.

Kindly grant us permission for the laboratory visit and make necessary arrangements for the same. We look forward to a positive reply from your side.

Thanking You,
Yours Faithfully,

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014.

Institute Copy

CENTRAL FORENSIC SCIENCE LABORATORY

DIRTECTORATE OF FORENSIC SCIENCE SERVICES

MINISTRY OF HOM,E AFFAIRS, GOVT. OF INDIA

38/4, KRISHNA COMPLEX, KHARADI BYPASS, KHARADI, PUNE-411014
(TEL. No. 020-20261695/98, e-mail: cfslpune-dfss@gov.in)

F. No. 1(52)/CFSL/P/Vigilance/2018 dtd 30/10/2018

To
The principal,
Shankarrao Ursal College of Pharmaceutical
Science and Research Centre,
Kharadi, Pune -411014.

Subject:- Permission to visit the CFSL, Kharadi, Pune -regarding.

Sir,

In reference to your letter ID. No SUCOPSRC/629/2018-19 dated 30th October, 2018 regarding visit of 65 students of B. Pharmacy final year along with faculty at CFSL, Pune. You are hereby allowed to take a round of CFSL, Pune on dated 1st November, 2018 at 15.00 hrs and interact with scientists

With regards

Director 30/10/18

VKD 01/11/18

RVA

P.D.E.A.'s S. U. College Of P. S. & R. C. Kharadi
INWARD NO: 1045
DATE: 4/11/18

A. Experiential learning

7. NSS Activities

(A. Y. 2018-19 to 2022-23)

NSS Activities 2022-23 Report Link:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/136/All%20NSS%20Activities%202022-23%20merge%20file%20uploaded%20on%20website.pdf

NSS Activities 2021-22 Report Link:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/130/All%20NSS%20Activities%202021-22%20merge%20file%20uploaded%20on%20website.pdf

NSS Activities 2020-21 Report Link:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/129/All%20NSS%20Activities%202020-21%20merge%20file%20uploaded%20on%20website.pdf

NSS Activities 2019-20 Report Link:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/128/All%20NSS%20Activities%202019-20%20merge%20file%20uploaded%20on%20website.pdf

NSS Activities 2018-19 Report Link:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/127/All%20NSS%20Activities%202018-19%20merge%20file%20uploaded%20on%20website.pdf

8. Healthcare Awareness Activities

(Celebration of World Pharmacist Day)

(A. Y. 2022-23)

A Report on "Pharmacist Orientation Programme"

24th September 2022

The programme organized in college with the main objective to promote and advocate the role of pharmacist in improving health of each corner of the world. To showcase the pharmacist in their positive role on health, this year **"Pharmacy united in action for a healthier world**" is the theme of World Pharmacists Day. The chief guest for programme Shri D. M. Khivsara, Assistant Commissioner, Food & Drug Administration, Pune, expressed in his motivative talk to the pharmacists and students emphasized on the responsibilities and role of pharmacist towards the welfare of society and Ensure Patients' Safety. Pharmacists all over the world are working hard to cease spread of the COVID-19, and to ensure uninterrupted medicine supply to society in need. The chief guest for programme Mr. Sushil Shaha, President, Pune District Chemist Association, Pune., express pharmacist efforts for a healthier world. He also said about promotional activities conducted by association towards pharmacist development. The chief guest Mr. Bachubhai Oswal, President, Western Zone MSPC, Ex. Executive Council Member MSPC and PCI highlighted on how pharmacy professionals are shaping health and well-being around the world. Mrs. Vanita Kokate, conveyed about work of association toward strengthening pharmacy profession.

Principal of college Dr. Ashok Bhosale, enlightened on the mission of pharmacy profession to the service to the society and briefed the gathering about role of pharmacists in the health care system. The Pharmacy Oath was administered to pharmacist and pertinent students by Prof. Naziya Sayyad. Invited pharmacist Mr. Vijay Kalshetti and Mr. Parth Waghole, express thoughts on benefits of pharmacist orientation programme. Total 80 Pharmacist from Pune region are participated in programme. All participated pharmacist was falicited by chief guest. Programme preamble expressed by Prof. Manoj Jograna and anchoring by Prof. Ashwini Bankar. At the end of programme Vote of thank expressed by Principal, Dr. Sachin Kotwal. All students, staff attended programme. Programme coordinated by Prof. Vipul Dhasade.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Some moments during programme



The chief guest for programme Shri D. M. Khivsara, address pharmacists



The chief guest for programme Shri Bachubhai Oswal, address pharmacists and students

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Dr. Ashok Bhosale, Principal of College, address all participants during Programme



Participated pharmacists falicited by Chief guest



Feedback by Pharmacist participant's, Parth Waghole

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Pharmacist Oath given to all Participant's and Final Year B. Pharm students



All participants with chief guests and Principal

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

"Pharmacist Orientation Programme"

On the occasion of

World Pharmacist Day 2022

on

24th September 2022 at 2.00PM

Sponsored by

Vikrant Surgicals & Pharmaceutical Distributors, Hadapsar, Pune

In Collaboration With

Pune District Chemist Association, Pune

Theme: Pharmacy United in Action for Healthier World

-:Chief Guest:-

Shri. D.M. Khivsara
Assistant Commissioner, FDA, Pune.

Shri. Bachubhai Oswal
President, Western Zone MSPC, Ex. Executive Council Member MSPC and PCI

Shri. Sushil Shaha
President Pune District Chemist Association, Pune.

Mrs. Vanita Kokate
Proprietor, Vikrant Surgicals & Pharmaceutical Distributors, Pune.

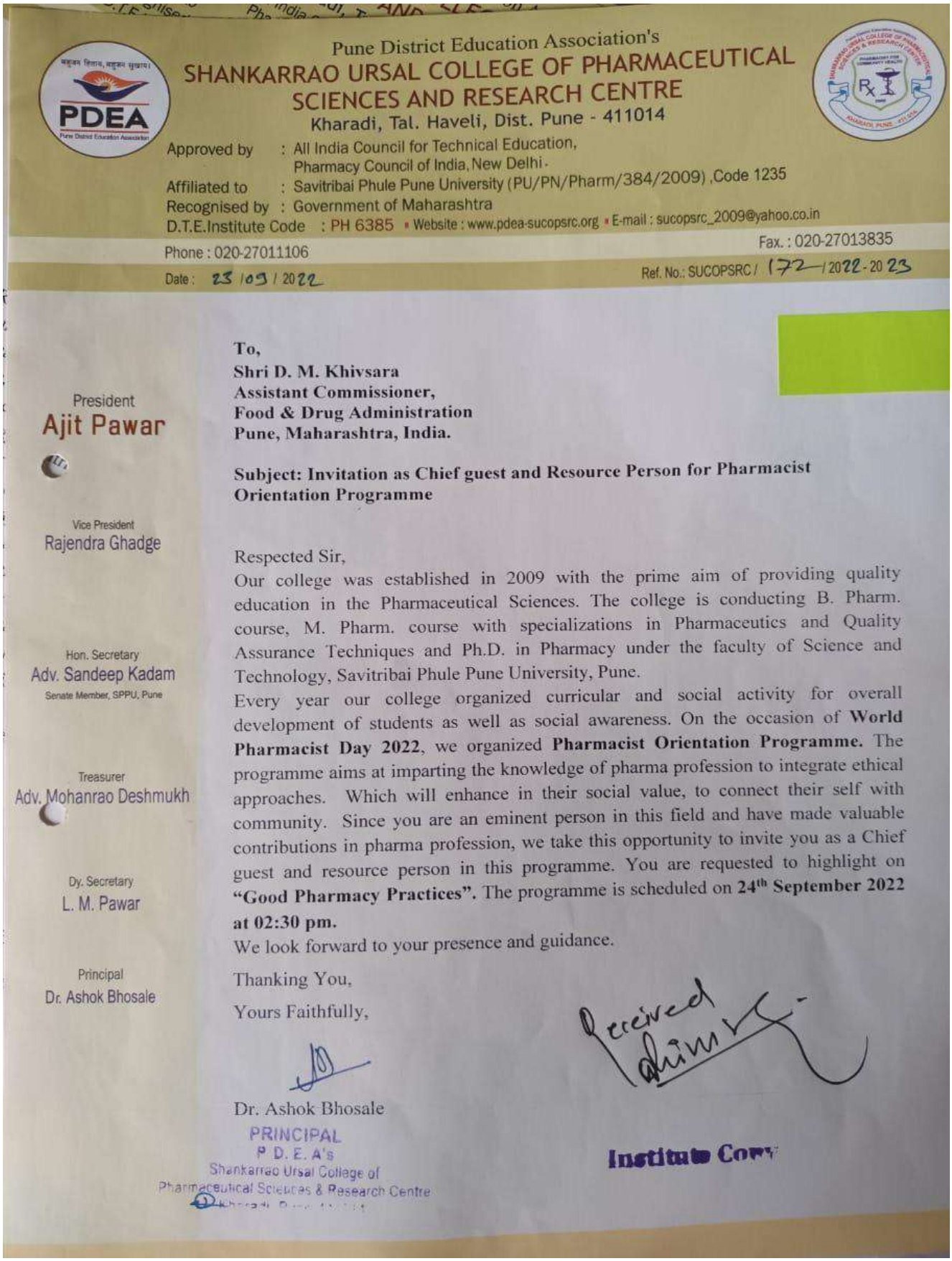
Invited By

Dr. Ashok Bhosale
Principal

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014.

Guest Invitation Letter



Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014

Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 • Website : www.pdea-sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835
Date : 23/09/2022 Ref. No.: SUCOPSRC/ 172 /2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Shri D. M. Khivsara
Assistant Commissioner,
Food & Drug Administration
Pune, Maharashtra, India.

Subject: Invitation as Chief guest and Resource Person for Pharmacist Orientation Programme

Respected Sir,

Our college was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm. course, M. Pharm. course with specializations in Pharmaceutics and Quality Assurance Techniques and Ph.D. in Pharmacy under the faculty of Science and Technology, Savitribai Phule Pune University, Pune.

Every year our college organized curricular and social activity for overall development of students as well as social awareness. On the occasion of **World Pharmacist Day 2022**, we organized **Pharmacist Orientation Programme.** The programme aims at imparting the knowledge of pharma profession to integrate ethical approaches. Which will enhance in their social value, to connect their self with community. Since you are an eminent person in this field and have made valuable contributions in pharma profession, we take this opportunity to invite you as a Chief guest and resource person in this programme. You are requested to highlight on **"Good Pharmacy Practices".** The programme is scheduled on **24th September 2022 at 02:30 pm.**

We look forward to your presence and guidance.

Thanking You,

Yours Faithfully,

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre

Received

Institute Copy

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 • Website : www.pdea-sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835

Date : 13/09/2022 Ref. No.: SUCOPSRC/ 143 /2022-2023

CHEMIST ASSOCIATION OF PUNE DISTRICT
INWARD No. 111 2022

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Shri Sushil Shaha
President,
Pune District Chemist Association
Pune, Maharashtra, India.

Subject: Invitation as Chief guest and Resource Person for Pharmacist Orientation Programme

Respected Sir,

Our college was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm. course, M. Pharm. course with specializations in Pharmaceutics and Quality Assurance Techniques and Ph.D. in Pharmacy under the faculty of Science and Technology, Savitribai Phule Pune University, Pune.

Every year our college organized curricular and social activity for overall development of students as well as social awareness. On the occasion of **World Pharmacist Day 2022**, we organized **Pharmacist Orientation Programme.** The programme aims at imparting the knowledge of pharma profession to integrate ethical approaches. Which will enhance in their social value, to connect their self with community. Since you are an eminent person in this field and have made valuable contributions in pharma profession, we take this opportunity to invite you as a Chief guest and resource person in this programme. You are requested to highlight on **"Community Pharmacy".** The programme is scheduled on **24th September 2022 at 02:30 pm.**

We look forward to your presence and guidance.

Thanking You,

Yours Faithfully,

Dr. Ashok Bhosale
PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

केमिस्टस् असोसिएशन ऑफ पुणे डिस्ट्रीक्ट 13/9/22 सी.ए.पी.डि. पुणे

Institute Copy

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009) ,Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 • Website : www.pdea-sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835
Date : 13/09/2022 Ref. No.: SUCOPSRC/ 145 /2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To

Pune District Chemist Association,
Pune, Maharashtra, India.

CHEMIST ASSOCIATION OF PUNE DISTRICT
INWARD No. 10/2022

Subject: Invitation for Pharmacist Orientation Programme

Respected Sir/Madam,

Our college was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm. course, M. Pharm. course with specializations in Pharmaceutics and Quality Assurance Techniques and Ph.D. in Pharmacy under the faculty of Science and Technology, Savitribai Phule Pune University, Pune.

Every year our college organized curricular and social activity for overall development of students as well as social awareness. On the occasion of World **Pharmacist Day 2022**, we organized **Pharmacist Orientation Programme.** The programme aims at imparting the knowledge of pharma profession to integrate ethical approaches. Which will enhance in their social value, to connect their self with community. Since you all are engage in pharmacy practices and have made valuable contributions in pharma profession, we take this opportunity to invite you all as delegates in this programme. The programme is scheduled on **24th September 2022 at 02:30 pm.**

We look forward to your presence and guidance.

Thanking You,

Yours Faithfully,

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

केमिस्टस् असोसिएशन ऑफ पुणे डिस्ट्रिक्ट
13/9/22
सी.ए.पी.डि.
पुणे

Institute Copy

Guest Thanking Letter

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 24/09/2022 Ref. No.: SUCOPSRC/ 174 /2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Shri D. M. Khivsara
Assistant Commissioner,
Food & Drug Administration
Pune, Maharashtra, India.

Respected Sir,

At the outset, we wish to convey our sincere gratitude towards you for your valuable presence as Chief guest and Resource Person for **Pharmacist Orientation Programme** on the occasion of occasion of **World Pharmacist Day 2022 on 24th September 20221 at 2.30 pm.**

Your kind presence in the program encouraged us a lot and made us more confident in organization of such event for pharmacist. Your suggestions have provided us a guideline to proceed more precisely for betterment of this programme. We are looking forward to have such more interaction with you in the future.

Thanking you.

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre

Received

Institute Copy

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 Website : www.pdeasubpharm.edu.in E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 24/09/2022 Ref. No.: SUCOPSRC/ 175/2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Shri Sushil Shaha
President,
Pune District Chemist Association
Pune, Maharashtra, India.

Respected Sir,

At the outset, we wish to convey our sincere gratitude towards you for your valuable presence as Chief guest and Resource Person for **Pharmacist Orientation Programme** on the occasion of occasion of **World Pharmacist Day 2022 on 24th September 20221 at 2.30 pm.**

Your kind presence in the program encouraged us a lot and made us more confident in organization of such event for pharmacist. Your suggestions have provided us a guideline to proceed more precisely for betterment of this programme. We are looking forward to have such more interaction with you in the future.

Thanking you.

Dr. Ashok Bhosale
PRINCIPAL
P D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Received copy

Institute Copy

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE

"Pharmacist Orientation Programme"

24th September 2022

Theme: Pharmacy united in action for a healthier world

PROTOCOL

Sr. No.	Name of Event	Responsible Person	Time
1.	Welcome guest and Anchoring	Prof. Ashwini Bankar	03.00 pm to 03.05 pm
2.	Saraswati Pujan	All Dignitaries	03.05 pm to 03.10 pm
3.	Preamble	Prof. Manoj Jograna	03.10 pm to 03.15 pm
4.	Felicitation of Guest	Principal	03.15 pm to 03.20 pm
5.	Address by Principal (Diploma)	Dr. Sachin Kotwal	03.20 pm to 03.30 pm
6.	Address by Principal	Dr. Ashok Bhosale	03.30 pm to 03.40 pm
7.	Pharmacist Oath	Prof. Naziya Sayyad	03.40 pm to 03.45 pm
8.	Address by Speaker/ Chief guest	**1.Mrs. Vanita Kokate** Vikrant Surgicals, Hadapsar, Pune.	03.45 pm to 04.55 pm
		2.Bachubhai Oswal President, Western Zone MSPC, Ex. Executive Council Member MSPC and PCI.	03.55 pm to 04.05 pm
		3. Mr. Sushil Shaha President Pune District Chemist Association, Pune.	04.05 pm to 04.15 pm
		4.Shri D. M. Khivsara Assistant Commissioner, Food & Drug Administration, Pune	04.15 pm to 04.25 pm
9.	Vote of Thanks	Prof. Vipul Dhasade	4.25 pm to 04.30 pm
10.	Vande Mataram	Dr. Amit Kasabe	4.30 pm.

Mr. Vipul Dhasade
Staff Coordinator

Dr. Ashok Bhosale
PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences &

Research Centre, Kharadi, Pune-14.

"Pharmacist Orientation Programme"

24th September 2022

Staff Mebers Attendance Sheet

Sr. No.	Name of Staff	Designation	Contact Number	Sign
1	MS Sayyed M.M	Assit. Professor	9561515849	
2	Mrs. T.P Shengepalli	Asst. Prof	9823620854	
3	Ms. T.R. Nande	Asst. Prof	8669062889	T.R Nande
4	P.H Khade	—	8888872264	
5	Amit Kasabe	Asst Prof.	7709366816	
6	Veer N.S.	Asst Prof	9604280831	
7	Nehorkar N.S.	Asst. Prof.	8484900931	Nitin
8	V.V. Bhandare	Assistant Laboratory	9705458154	
9	Kakade S.S.	Asst. Prof.	9975642600	
10	Ghule K.R.	Asst. Prof	7030036061	
11	B.G. Shelar	Asst. Prof.	7744901138	
12	K.G. Pawar	Asst. Prof	9890705873	
13	Ingale V B.	Asst Prof	9011878172	
14	Dr. R.Y. Patil	Professor	9423208099	Patil
15	D.S. Patil	Lab Assistant	7218654586	Patil

Mr. Vipul Dhasade
Co-ordinator

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

"Pharmacist Orientation Programme"

24th September 2022

Student Attendance Sheet

Sr. No.	Name of Student	Class	Sign
01	Shrinath Bachare	T.Y B pharm	
2	Pawar Vikas R.	T.Y B.pharm	
3	Shivjeet A. Jadhav	T.Y.B.Pharm	
4	vaibhav Jadhav	T.Y.B.Pharm	
5	Mansi Mokashi	Final Y B Pharm	
6	Raj pake	Final Y B P	
7	Darshana Undre	Final Y B P	
8	Kiran Nikalje	Final Y B P	
9)	Pranjal Gaikwad	Final Y B Pharm	
10)	Shweta Khisatkar.	Final Y. B pharm	
11)	Rutuja Lawande.	Final Y. B pharm	
12)	Rohan Ubale	Final Y. B P	
13)	Akshay Pansare	Final Y. B P	
14)	Akshay Akhade	-11-	
15)	Nikhil Bhapsekar	-11-	
16)	Atharva Aranya	-11-	
17)	Ramesh Muneshwar	T.Y.D. pharm	
18)	Gaikwad Utkarsh	T.Y.B Pharm	
19)	Abhijeet Choudhary	-11-	
20)	Gosavi Subhash	-11-	
21)	Hole Shubham	-11-	
22)	Kirtane Vaibhav	-11-	
23)	Sakshi Dolare	-11-	
24)	Dipali Naiknaver	-11-	
25)	Akshada bombe	-11-	
26)	Rachana Vidhate	-11-	
27)	Nikita Gaikwad	-11-	
28)	Yash Shegokar	T.Y.B pharm	

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.

Sr. No.	Name of Student	Class	Sign
29	Drushti Gonawane	T.Y. B Pharm	Drushti
30	Vinit · Kale ·	T.Y. B Pharm	Vkale
31	Gaurav Jedhe	T.Y. B. Pharm	Gaurav
32	Sumit Mohite	T.Y. B Pharm	Sumit
33	Shubham Kaspate	T.Y. B Pharm	SK
34	Suyash Thorat	T.Y. B Pharm	Thorat
35	Rutvik Jagtap	T.Y B-pharm	Rutvik
36	Hrishikesh Jagtap	T.Y B. pharm	Jagtap
37	Tejas Khaladkar	T.Y. B. Pharm	Tejas
38	Aditya Mohite	T.Y. B Pharm	Mohite
39	Mahith Kadam	T.Y. B. Pharm	Mkadam
40	Mayur Mate	T.Y B pharm	Mayur
41	Sai lagad	—11—	Sai
42	Saurabh Thopate	—11—	Saurabh
43	Siddhant Dhumal	T.Y.B.Pharm	Siddhant
44	Prathamesh Solanke	—11—	Prathamesh
45	Rohan Thite	T.Y. B.Pharm	Rohan
46	Raskar Saurik.	T.Y.B.Pharm	Saurik
47	Patange Vaibhav Narayangao	T.Y.B. Pharmacy	Patange
48	Gund Rutuja Santosh	T.Y. B pharmacy	Gund
49	Shreya Dorage	T.Y.B pharmacy	Dorage
50	Rohini vijay Mane	T.Y. B Pharmacy	Rohini
51	Utkarsha Hambir	T.Y.B pharmy	Hambir
52	Onkar Zalte	—11—	Onkar
53	Vaibhav Tanabe	—11—	Vaibhav
54	Siddhi Ghavate	—11—	Siddhi
55	Vaibhavi Ghule	—11—	Vaibhavi
56	Sonal Ghule	—11—	Sonal
57	Gauri I. Kolhe	—11—	Gauri
58	Jugruti Dhumbre	—11—	Jugruti
59	Bhdhe Payal	—11—	Payal
60	Bavdhane Nilam	—11—	Nilam
61	Atole Akanksha shivaji	—11—	Akanksha
62	Sakshi thokal	—11—	Sakshi
63	Bharti todmal	—11—	Bharti
64	Mikita holkar	—11—	Mikita
65	Pratiksha Pawar	—11—	Pratiksha

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Sr. No.	Name of Student	Class	Sign
66	Pranali Shewale	T.Y. B-pha.m	Shewale
67	Aarti Sawant	11-11	Aarti
68	Shreya Salunke	11-11	Shreya
69	Srushti Rajpurohit	11-11	Srushti
70	Pallavi Girase	11-11	Pallavi
71	Mrudula Thombare	11-11	Mrudula
72	Khushi Kharabe	-1-1	Kharabe
73	Esha Kamble	11-11	Esha.
74	Mane Sakshi	-11-	Sakshi
75	Bhosale Gitanjali	-11-	Bhosale.
76	Ingole Rajlaxmi	-11-	Ingole
77	Shinde Mayuri	final year	Shinde.
78	Shinde Sagar	11-	S.Shinde
79	Shinde Saurabh	11-	Saurabh
80	Kumbharkar Harshada	11-	Harshada
81	Jagtap Vaishnvi	11-	Jagtap
82	Shitole Tejal	11-	Tejal
83.	Khobare Abhishek	11-	A. Khobare
84	Gund Omkar	11-	Omkar
85	Maharavan Shankar	11	Shankar
86	Khalatkar Vaibhav	11	Vaibhav
87.	Phasate Abhijeet	11	Phasate
88.	Kabire Dinesh pandharinath	-11-	Dinesh
89)	Rutuja thorat	-11-	Rutuja
90)	Nandini Bhujabal	-11-	Nandini
91)	Diksha Waghmare	-11-	Waghmare
92)	Bichukale Snehal J	-11-	Snehal
93)	Kudale Suvarna	-11-	Suvarna
94)	Aishwarya Kalshetty	-11-	Aishwarya
95	Soham D. Galgunde	-11-	Soham
97	Amal B. Munde	11 (T.Y)	Amal
98	Saurabh S. Pabale	11 (T.Y)	Saurabh
99	Saniya R. Pondkar	T.Y	Saniya
100	Paigude Shradha Rajendra	final	Paigude
101	Vaishnavi Madure	final	Madure
102	Gawar sonali	final	SGawar
103	Pragi Raipure.	final	Raipur

Prof. Vipul Dhasade
Staff Coordinator

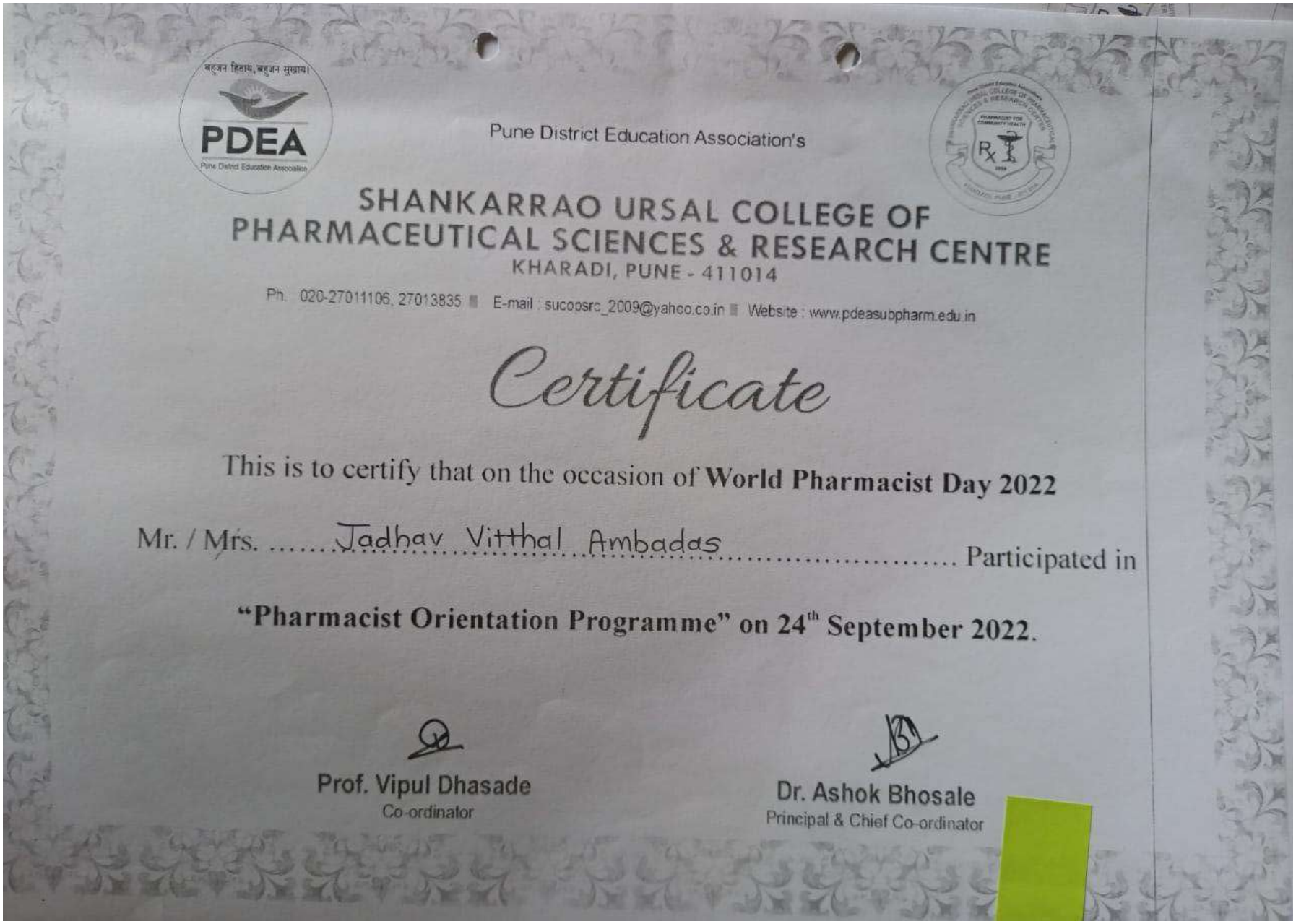
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Sr. No.	Name of Student	Class	Sign
104	Sahil Dhavale	final Year	
105	Minakshi londhe	-"-	
106	Prajakta Pawar	-"-	
107	Akshadha Ragatwan	-"-	
108	Nikita Bhosure	-"-	
109	Mansi · D · Bhamare	final yr B.p.	
110	Shruti G. khote	-"-	
111	Afshawazd kamathe	-"-	
112	Sejal walanj.	-"-	
113	Rinku Dhainje	-"-	
114	Priti pote	-"-	
115	K. diksha waghmare	-"-	
116	Gayatri Jamdade	-"-	

Mr. Vipul Dhasade
Co-ordinator

Dr. Ashok Bhosale
Principal

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014



बहुजन हिताय, बहुजन सुखाय।

PDEA

Pune District Education Association

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE

KHARADI, PUNE - 411014

Ph. 020-27011106, 27013835 ■ E-mail : sucoosrc_2009@yahoo.co.in ■ Website : www.pdeasubpharm.edu.in

Certificate

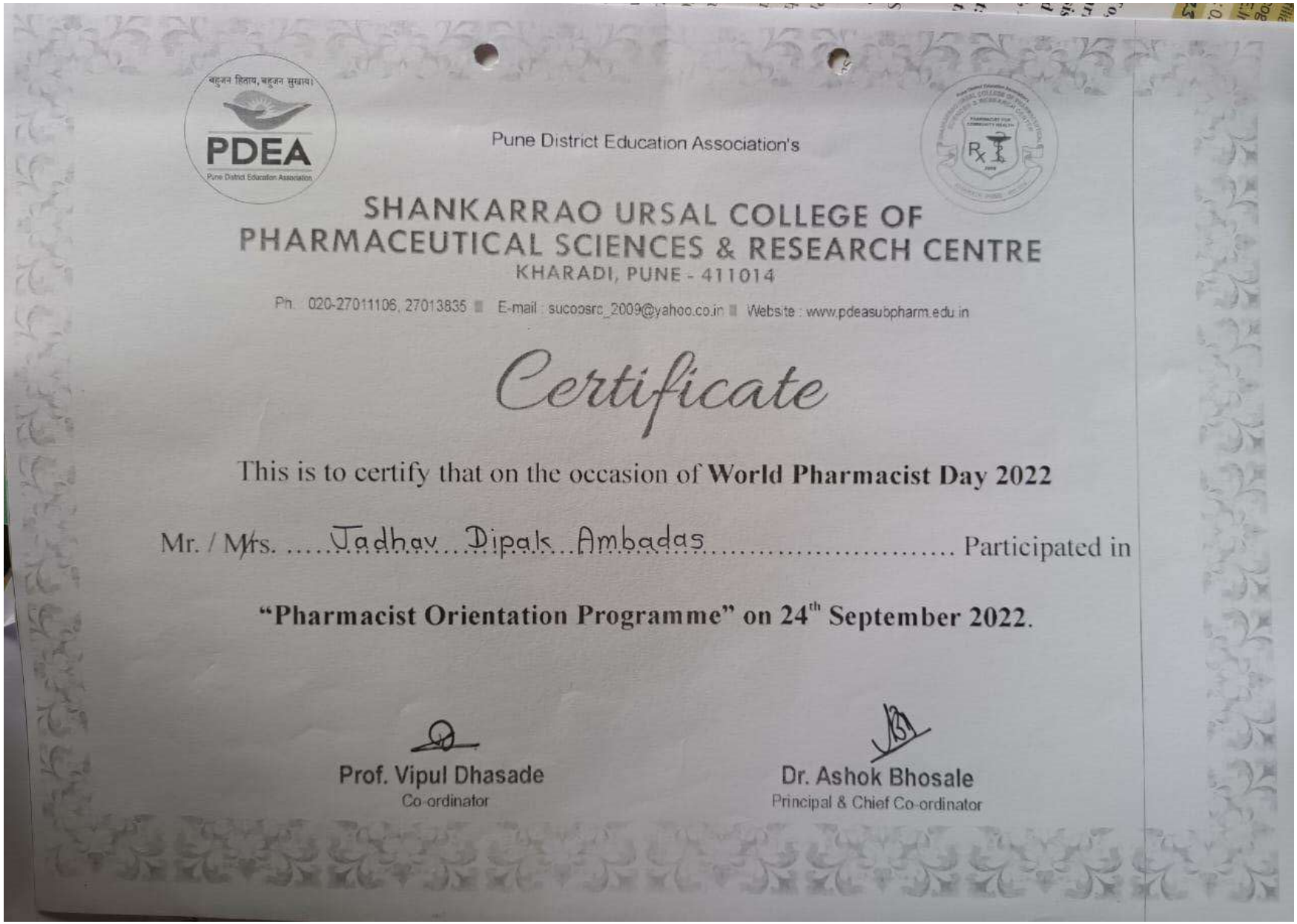
This is to certify that on the occasion of **World Pharmacist Day 2022**

Mr. / Mrs. ..... Jadhav Vitthal Ambadas ..... Participated in

"Pharmacist Orientation Programme" on 24th September 2022.

Prof. Vipul Dhasade
Co-ordinator

Dr. Ashok Bhosale
Principal & Chief Co-ordinator



बहुजन हिताय, बहुजन सुखाय।

PDEA
Pune District Education Association

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF
PHARMACEUTICAL SCIENCES & RESEARCH CENTRE
KHARADI, PUNE - 411014

Ph. 020-27011106, 27013835 ▮ E-mail : sucoosrc_2009@yahoo.co.in ▮ Website : www.pdeasubpharm.edu.in

Certificate

This is to certify that on the occasion of **World Pharmacist Day 2022**

Mr. / Mrs. Jadhav Dipak Ambadas Participated in

"Pharmacist Orientation Programme" on 24th September 2022.

Prof. Vipul Dhasade
Co-ordinator

Dr. Ashok Bhosale
Principal & Chief Co-ordinator

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.

Vision – To be the academic centre for excellence in pharmacy education innovative research health care sector and service to the community of the nation.

Mission – 1) To educate train and provide lifelong learning opportunities for student and faculty.

2) To generate competent and skilled pharmacists with high degree of ethical standards social and environmental concern

3) To encourage students by creating research environment for the betterment of healthcare.

"Pharmacist Orientation Programme"

24th September 2022

Feedback Form

1. Name of Resource person Mr./Ms./Ms. Dinesh Khivsara
2. Designation: Assistant Commissioner FDA, Pune.
3. Name & address of Office/ Institute: Food & Drug Administration Pune.

4.Mobile No: 9822711177

8.E-mail: dmkhivsara@gmail.com

please tick [✓] in appropriate box.

9.Organization of Programme: Excellent [✓] Good [ ]
Satisfactory [ ] Poor [ ]

10. Objective of programme has been achieved Yes [✓] No [ ]

11. Any Suggestion:- Very Nice participation by participant pharmacist

Date 24/9/2022

Sign

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.

Vision – To be the academic centre for excellence in pharmacy education innovative research health care sector and service to the community of the nation.

Mission – 1) To educate train and provide lifelong learning opportunities for student and faculty.

2) To generate competent and skilled pharmacists with high degree of ethical standards social and environmental concern

3) To encourage students by creating research environment for the betterment of healthcare.

"Pharmacist Orientation Programme"

24th September 2022

Feedback Form

1. Name of Resource person Mr./Ms/Mrs. Vanita Kokate
2. Designation: D. Pharmacy - Pharmacist
3. Name & address of Office/ Institute: Vikrant Pharmaceuticals Kadepacha Pune.

4.Mobile No: 9623469572

8.E-mail: vanitak27@gmail.com

please tick [✓] in appropriate box.

9.Organization of Programme: Excellent [✓] Good [ ]
Satisfactory [ ] Poor [ ]

10. Objective of programme has been achieved Yes [✓] No [ ]

11. Any Suggestion---

Date 24/9/2022

Sign

(7)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.

Vision – To be the academic centre for excellence in pharmacy education innovative research health care sector and service to the community of the nation.

Mission – 1) To educate train and provide lifelong learning opportunities for student and faculty.

2) To generate competent and skilled pharmacists with high degree of ethical standards social and environmental concern

3) To encourage students by creating research environment for the betterment of healthcare.

"Pharmacist Orientation Programme"

24th September 2022

Feedback Form

1. Name of Pharmacist Mr./MS/Mrs. Pakhare Shubhangi Keshav
2. Pharmacist Registration Number: 297978
3. Name and address of Firm: Wellness Forever Med. Ltd. Khadi Zensar.

4.Mobile No: 9028830868

5.E-mail: PakhareShubhangi28@gmail.com

please tick ☑ in appropriate box.

6.Organization of Programme: Excellent ☑ Good ☐

Satisfactory ☐ Poor ☐

7. Objective of programme has been achieved Yes ☑ No ☐

8. Any Suggestion---------Excellent Programme & Information

24-09-22
Date

Sign

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

8. Healthcare Awareness Activities

(Celebration of 61St NPW-2022)

(A. Y. 2022-23)

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE

"61st National Pharmacy Week (NPW) -2022"

Report

"61st National Pharmacy Week (NPW) -2021" was celebrated in institute on **25th November, 2022.** Theme for current year is **"PHARMACY OF THE WORLD - INDIA"**. The main objective of this National Pharmacy Week is to make all stakeholders aware of the presence of pharmacists in the society and to know the role played by registered pharmacists with respect to medicines, their usage, handling and dispensing. The college has been organized **Healthcare Awareness Rally** at Kharadi, Pune.

The Healthcare Awareness Rally inaugurated by auspicious hands of Chief Guest Shri. Tanaji Shegar, PSI, Chandannagar Police station, Dr. Ashok Bhosale, Principal and Dr. Sachin Kotwal, Principal (Diploma). Dr. Ashok Bhosale enlightened on the objective of National Pharmacy Week celebration and briefed the gathering about role of pharmacists in the health care system. Dr. Sachin Kotwal focused on significant role of Pharmacy profession in worldwide healthcare system.

College National Service Scheme students actively participated in Street Play and aware society peoples about Self-medication, Right use of antibiotics, precautions and measures during communicable diseases, patient counselling and importance of pharmacist in health care system.

All students and staff actively participated in programme. Above programme coordinated by Dr. Vijaya Barge, Vice Principal, Dr. Ravindra Patil, Prof. Prashant Khade, Prof. Manoj Jograna, Prof. Ashwini Bankar, Prof. Vivek Ingale, Prof. Naziya Sayyad, Prof. Tejaswini Kande, Prof. Kiran Ghule, Prof. Jyoti Darkunde and Prof. Vipul Dhasade.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014



Rally Inauguration by all Chief Guest



Principal, Staff and Student Participated in rally.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.





Students actively participated in Street Play and Health care awareness rally.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014

News Published:

प्रभात पुणे, रविवार, दि. २७ नोव्हेंबर २०२२



खराडी : येथील शंकरराव उरसळ फार्मसी महाविद्यालयात राष्ट्रीय फार्मसी सप्ताह अंतर्गत कार्यक्रमप्रसंगी मान्यवर.

जगात फार्मसी क्षेत्रामध्ये भारत अग्रेसर - भोसले

विश्रांतवाडी, दि.२६(प्रतिनिधी)- संपूर्ण आरोग्य व्यवस्थेमधील फार्मासिस्टचे योगदान अत्यंत प्रभावी आहे, यामुळेच आज संपूर्ण जगामध्ये फार्मसी क्षेत्रामध्ये भारत देश अग्रेसर आहे, असे प्रतिपादन महाविद्यालयाचे प्राचार्य व सावित्रीबाई फुले पुणे विद्यापीठाचे माजी व्यवस्थापन सदस्य डॉ. अशोक भोसले यांनी केले. पुणे जिल्हा शिक्षण मंडळाच्या खराडी येथील शंकरराव उरसळ फार्मसी महाविद्यालयात राष्ट्रीय फार्मसी सप्ताहअंतर्गत आयोजित हेल्थकेअर रॅली उद्घाटनप्रसंगी ते बोलत होते. महाविद्यालयाचे पदविका विभागाचे प्राचार्य डॉ सचिन कोतवाल यांनी मार्गदर्शन केले. रॅलीचे उद्घाटन चंदननगर पोलीस ठाण्याचे पोलीस उपनिरीक्षक तानाजी शेगर, महाविद्यालयाचे प्राचार्य डॉ अशोक भोसले आणि डॉ सचिन कोतवाल यांच्या हस्ते झाले. यावेळी पथनाट्याद्वारे समाजप्रबोधन केले. यावेळी विमानतळ वाहतूक विभागाचे पोलीस निरीक्षक एस. डी. सोनवणे, राजेश नवले, सचिन घोलप, नितीन कांबळे, रवी आहेर, रामदास जाधव उपस्थित होते. रॅलीमध्ये विद्यार्थी. शिक्षक, कर्मचारी सहभागी झाले होते. कार्यक्रमाचे नियोजन प्रा. प्रशांत खाडे, प्रा. मनोज जोगरणा, प्रा. अश्विनी बनकर, प्रा. किरण घुले, प्रा. तेजस्विनी कांदे, प्रा. नाजिया सय्यद, प्रा ज्योती दारकुंडे, प्रा. विपुल धसाडे यांनी केले होते.

सकाळ पुणे, सोमवार, २८ नोव्हेंबर २०२२ | ५

फार्मसी सप्ताहांतर्गत हेल्थकेअर फेरी

मुंढवा, ता. २७ : पुणे जिल्हा शिक्षण मंडळाच्या खराडी येथील शंकरराव उरसळ फार्मसी महाविद्यालयात राष्ट्रीय फार्मसी सप्ताहांतर्गत हेल्थकेअर फेरी काढण्यात आली. रॅलीत फार्मसी महाविद्यालयातील विद्यार्थ्यांनी उत्साहाने सहभाग घेऊन समाजामधील फार्मासिस्टची भूमिका नागरिकांपर्यंत पोहोचविण्याचा प्रयत्न केला.

रॅलीचे उद्घाटन चंदननगर पोलिस स्टेशनचे पोलिस निरीक्षक तानाजी शेगर, महाविद्यालयाचे प्राचार्य डॉ. अशोक भोसले आणि डॉ. सचिन कोतवाल यांच्या हस्ते झाले. फार्मसी महाविद्यालयाचे विद्यार्थी खराडी, रक्षक नगर परिसरातील विविध ठिकाणी आरोग्य व्यवस्थेतील फार्मसी क्षेत्राचे कार्य, अँटिबायोटिक्सचा गैरवापर, रुग्ण समुपदेशनाची काळाची गरज, तसेच समाजातील आरोग्य विषयी निष्काळजीपणा आणि गैरसमज याबाबत पथनाट्याद्वारे समाज प्रबोधन केले.



खराडी : शंकरराव उरसळ फार्मसी महाविद्यालयात राष्ट्रीय फार्मसी सप्ताहांतर्गत काढलेल्या हेल्थकेअर फेरीस झेंडा दाखविताना पोलिस अधिकारी आणि इतर.

फेरीसाठी विमानतळ वाहतूक पोलिस निरीक्षक विभाग संतोष सोनवणे, राजेश नवले, सचिन घोलप, नितीन कांबळे, रवी आहेर, रामदास जाधव, महाविद्यालयाचे विद्यार्थी शिक्षक आणि शिक्षकेतर सहकारी सहभागी झाले होते. कार्यक्रमाचे नियोजन प्रशांत खाडे, मनोज जोगरणा, अश्विनी बनकर, किरण घुले, तेजस्विनी कांदे, नाजिया सय्यद, ज्योती दारकुंडे यांनी केले.

8. Healthcare Awareness Activities

(Celebration of 60th NPW-2021)

(A. Y. 2021-22)

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

"60th National Pharmacy Week (NPW)-2021"

Report

"60th National Pharmacy Week (NPW)-2021" was organized at our college on the **25th and 26th of November, 2021.** Theme for current year is **"Pharmacist – Integral Part of Health Care System".** The main objective of this National Pharmacy Week is to make all stakeholders aware of the presence of pharmacists in the society and to know the role played by registered pharmacists with respect to medicines, their usage, handling and dispensing. The college has been organized Street Play on COVID-19 pandemic on 25th November 2021 at Kharadi, Pune. College National Service Scheme students actively participated in Street Play and aware society peoples about COVID-19 precautions, measures and importance of vaccination. College organized Pharma Drawing Competition on 26th November 2021 at college library. The Drawing competition is about more than just participation and winning prizes; they can play a major role in uncovering and nurturing natural talents of the students. This is especially true of the art competitions where the students find a platform to display their creative and artistic abilities.

Topic for competition are as follows,

i) Pharmacist as a healthcare Provider.

ii) Pharmacist – Integral Part of Health Care System

iii) Precautions and measures for Prevention of Covid-19

iv) Role of pharmacist during the COVID-19 pandemic

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Total 25 B. Pharm and M. Pharm students were actively participated in Pharma Drawing Competition. Relevance to the topic selected, attractiveness colour, methodology, cut outs, material creativity and massage conveyed were the basic criterion for the judgment.

Result for Pharma Drawing Competition as follows,

Group	Rank	Name of Participants	Class
B. Pharm	1	Ingole Rajlaxmi Sanjay	S. Y. B. Pharm
	2	Rathod Bharat Babulal	S. Y. B. Pharm
M. Pharm	1	Autade Prajakta Raosaheb	S. Y. M. Pharm
	2	Karkhile Shubhangi Nandu	S. Y. M. Pharm

Dr. Ashok Bhosale, Principal of the college congratulate all students for their participation and winners for their achievement. All above activities in National Pharmacy Week were coordinated by Prof. Sujit Kakade, Prof. Prashant Khade, Prof. Tejaswini Kande, Prof Kiran Ghule, Prof. Naziya Sayad and Prof. Vipul Dhasade.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014

Streat Play at Kharadi : Awareness about COVID-19 precautions, measures and importance of vaccination.





Students actively participated in Street Play and aware society peoples about COVID-19 precautions, measures and importance of vaccination.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014

Pharma Drawing Competition





Pharma Drawing Competition, Dr. Ashok Bhosale, Principal inspiring students

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

4/11

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14.

"60th National Pharmacy Week (NPW)-2021"

26th November 2021.

Theme "Pharmacist – Integral Part of Health Care System"

Pharma Drawing Competition

Participant Attendance Sheet

Sr. No.	Candidate Name	Class	M/F	Topic Selected for Drawing	Sign
1.	BHARAT. BABULAL. RATHOD	S.Y.BPharm	M	PRECAUTION AND CONTROL OF PREVENTION COVID-19	Bharat
2.	SALUNKE SHREYA PRAVIN	SY.Bhaum	F	PECAUTION AND CONTROL OF PREVENTION COVID-19.	Shalunke
3.	SAWANT AARTI RAMDAS	S.Y.B.Ph	F	Role of Phaemacist dureing Covid-19 Pandamic	Aarti
4.	GAWARE SONALI RAVINDRA	T.Y.B PHARM	F	Precautions and Measures for COVID-19	
5.	KHANDVE GAURI VASANT	T.Y. B-PHARM	F	PHARMACIST AS A HEALTHCARE PROVIDER	Khandve

Sr. No.	Candidate Name	Class	M/F	Topic Selected for Drawing	Sign
6.	RUTUJA KHUSHAL KODRE	Final yr B. pharm.	F	Precautions & Measures for Prevention of covid-19	
7.	UTKARSHA BALASO KHADE	final yr B.Pharm	F	Precautions & Measures for Prevention of Covid 19	
8.	PRAJAKTA RAOSAHEB AWATADE	M.Pharm (2nd year)	F	Pharmacist - Integral Part of Health care system Precautions and Measures for Prevention of Covid -19	
9.	BHAVANA RAMESH SAKPAL	S.Y. M. Pharm	F	Pharmacist As a Healthcare Provider	
10.	SHUBHANGI NANDU KARKHILE	S.Y.M. PHARM	F	PRECAUTIONS & MEASURES FOR PREVENTION OF COVID 19	
11.	RUTUJA DILIP WALKE	Final Yr B. Pharm	F	Pharmacist- Integral Part of healthcare system	
12.	HARSHADA SUKHDEV AWHALE	Final yr B. Pharm	F	Pharmacist - integral part of healthcare system	
13.	MUNGADE MAROTI SHIVAJI	Final year	M	Role of Pharmacist as a healthcare provider	

2/3

Sr. No.	Candidate Name	Class	M/F	Topic Selected for Drawing	Sign
14.	GAIKE SHUBHAM SURESH	SY M.Phm	M	Precautions & measures for Prevention of Covid-19	
15.	KHADE SWAPNIL. D	S.Y. M.PHARM	M	ROLE OF PHARMACIST DURING COVID -19 PANDEMIC	
16.	MANE SAKSHI SAYAJI	S.Y. B. Pharm	F	PRECAUTIONS AND MEASURES FOR PREVENTION OF COVID-19	
17.	INGOLE RAJLAXMI SANJAY	S.Y.B. Pharm	F	Role OF PHARMCIST DURING COVID 19 PANDEMIC	
18.	KOLHE GAURI ISHWAR	S.Y B Pharm	F	PRECAUTIONS AND MEASURES FOR PREVENTION OF COVID-19	
19.	JADHAV MANSI VIJAY	Final ye. B.Pharm	F	PRECAUTIONS AND MESAURES FOR COVID-19	
20.	NAWALE PRAJAKTA RAJESH	Final Yr B.Pharm	F	PRECAUTIONS AND MEASURES FOR COVID-19	

Prof. Vipul Dhasade

Programme Co-ordinator

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Uasal College of Pharmaceutical
Sciences & Research Centre

3/3

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14.

"60th National Pharmacy Week (NPW)-2021"

Theme "Pharmacist – Integral Part of Health Care System"

Pharma Drawing Competition

26th November 2021.

RESULT

College organized Pharma Drawing Competition on 26th November 2021 at college library.

Topic for competition are as follows,

i) Pharmacist as a healthcare Provider.
ii) Pharmacist – Integral Part of Health Care System
iii) Precautions and measures for Prevention of Covid-19
iv) Role of pharmacist during the COVID-19 pandemic

Total 25 B. Pharm and M. Pharm students were actively participated in Pharma Drawing Competition. Relevance to the topic selected, attractiveness colour, methodology, cut outs, material creativity and massage conveyed were the basic criterion for the judgment.

Result for Pharma Drawing Competition as follows,

Group	Rank	Name of Participants	Class
B. Pharm	1	Ingole Rajlaxmi Sanjay	S. Y. B. Pharm
	2	Rathod Bharat Babulal	S. Y. B. Pharm
M. Pharm	1	Autade Prajakta Raosaheb	S. Y. M. Pharm
	2	Karkhile Shubhangi Nandu	S. Y. M. Pharm

Evaluators Details

Prof. Ashwini Bankar
Assistant Professor

Prof. Sujit Kakade
Assistant Professor &
HOD Department of Pharmaceutics

Prof. Vipul Dhasade
(NPW coordinator)

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune- 411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

NOTICE NO.: -145 **Date:18/11/2021**

(Academic Year- 2021-2022)

All the students of **B. Pharm. And M. Pharm** are hereby informed that college has been plan to celebrate **"60th National Pharmacy Week (NPW)-2021"** from **25th to 26th November 2021.** Theme for current year is **"Pharmacist – Integral Part of Health Care System"** The college has been organize following event. All students are instructed to participate actively.

Sr. No.	Event	Date and Time	Coordinator
1.	**Street Play on COVID-19 pandemic** at Kharadi	25/11/2021 Time- 10:30 am.	Prof. Sujit Kakade, Prof Prashant Khade, Prof. Tejaswini Kande
2.	**Pharma Drawing Competition** at college.	26/11/2021 Time- 10:00 am.	Prof. Vipul Dhasade Prof. Kiran Ghule Prof. Naziya Sayyad

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.

60th National Pharmacy Week (NPW)-2021

Dear Members,

The Indian Pharmaceutical Association has been celebrating the National Pharmacy Week every year during the 3rd week of November. The major focus of NPW celebrations is to create awareness amongst the public, other healthcare providers and the authorities, about the NPW theme in particular and about the pharmacy profession and the role of the pharmacist in general.

The 60th National Pharmacy Week (NPW) will be celebrated from

21 to 27 November, 2021

The theme selected for this year is:

"Pharmacist: An integral part of healthcare"



We look forward to receiving your innovative ideas about how the NPW should be celebrated this year as well as about the educational material to be developed to make it most effective and meaningful. Your active participation is most welcome.

Please write your suggestions to ipacentre@ipapharma.org / ipacpdetimes@gmail.com

Keep checking www.ipapharma.org for more updates.

News Published:

पुणे जिल्हा शिक्षण मंडळाच्या शंकरराव उरसळ फार्मसी महाविद्यालय खराडी येथे ६० वा राष्ट्रीय फार्मसी सप्ताह उत्साहात संपन्न

पुणे : दि. २६ (रयतेचा कैवारी, ऑनलाइन वृत्तसेवा) कोरोना संक्रमणाच्या आव्हानात्मक काळात सुद्धा फार्मासिस्ट चे आरोग्य व्यवस्थेमधील योगदान अत्यंत प्रभावी आहे, तसेच फार्मसी क्षेत्राची माहिती व कार्य समाजामध्ये सर्वांपर्यंत पोहोचणे यासाठी विद्यार्थ्यांनी प्रयत्न करणे आवश्यक आहे असे प्रतिपादन महाविद्यालयाचे प्राचार्य व सावित्रीबाई फुले पुणे विद्यापीठाचे मा व्यवस्थापन सदस्य डॉ अशोक भोसले यांनी करून राष्ट्रीय फार्मसी सप्ताहाच्या सर्वांना शुभेच्छा दिल्या. ते पुणे जिल्हा शिक्षण मंडळाच्या खराडी येथील शंकरराव उरसळ फार्मसी महाविद्यालयात राष्ट्रीय फार्मसी सप्ताह अंतर्गत आयोजित फार्मा ड्रॉईंग स्पर्धेच्या उद्घाटन कार्यक्रम प्रसंगी बोलत होते.

फार्मसी महाविद्यालयातील विद्यार्थ्यांनी विविध स्पर्धांमध्ये उत्साहाने सहभाग घेऊन समाजामधील फार्मासिस्टची रुग्ण भूमिका सर्वांपर्यंत पोहोचवणे व समाजाच्या आरोग्याशी निगडित कार्य करणे आवश्यक आहे. या सप्ताहामध्ये फार्मसी महाविद्यालयाचे विद्यार्थी खराडी गावातील विविध ठिकाणी कोरोना संक्रमणामध्ये घ्यावयाची काळजी, त्यावरील उपाय आणि लसीकरणाचे महत्व याबाबत पथनाट्याद्वारे समाज प्रबोधन केले. कोरोना संक्रमणाच्या काळामध्ये फार्मासिस्ट ने अत्यंत महत्त्वपूर्ण जबाबदारी घेऊन समाजामधील आरोग्य व्यवस्थेमध्ये काम केले आहे. तसेच फार्मासिस्ट कार्याबद्दल व त्याच्या आरोग्य व्यवस्थेमधील योगदानाबाबत समाजामधील प्रत्येकाला ही माहिती असणे आवश्यक आहे असे प्रतिपादन पदविका महाविद्यालयाचे प्राचार्य अॅड सचिन कोतवाल यांनी सर्वांना केले.



या कार्यक्रमासाठी महाविद्यालयाचे सर्व विद्यार्थी, महाविद्यालयाच्या उपप्राचार्य डॉ विजया बर्गे, डॉ रवींद्र पाटील आदी मान्यवर उपस्थित होते. या कार्यक्रमांचे नियोजन प्रा सुजित काकडे, प्रा प्रशांत खाडे, प्रा अश्विनी बनकर, प्रा प्रियांका बोरुडे, प्रा किरण घुले, प्रा तेजस्विनी कांदे, प्रा नजिया सय्यद, प्रा तुषार हुंबे, प्रा श्वेता पवार यांनी केले तर आभार प्रा. विपुल धसाडे यांनी मानले.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

8. Healthcare Awareness Activities

(Celebration of World Pharmacist Day)

(A. Y. 2021-22)

A Report on World Pharmacist Day Celebration

25th September 2021

The programme organized in college with the main objective to promote and advocate the role of pharmacist in improving health of each corner of the world. To showcase the pharmacist in their positive role on health, this year **"Pharmacy: Always Trusted for Your health**" is the theme of World Pharmacists Day. The chief guest for programme Adv. Bhaiyasaheb Jadhav, Corporator Pune Municipal Corporation, expressed in his motivative talk to the students emphasized on the responsibilities and role of pharmacist towards the welfare of society. Pharmacists all over the world are working hard to cease spread of the COVID-19, and to ensure uninterrupted medicine supply to society in need. The chief guest for programme Dr. Rekha Jadhav, Medical officer, Pune Municipal Corporation Hospital, Chandanagar, express pharmacist efforts during this COVID-19 difficult time. Dr. Ashok Bhosale enlightened on the mission of pharmacy profession to the service to the society and briefed the gathering about role of pharmacists in the health care system. The Pharmacy Oath was administered to pertinent students by Programme coordinator Prof. Vipul Dhasade. Student representative Ms. Anuradha Daundkar, Ms. Rutuja Dhumal, Mr. Prashant Pawar and Shravani Dalvi Express Thoughts during Programme. Programme organized on hybrid mode by the assistant of Dr. Amit Kasabe, Assistant Professor. All Students attended programme online zoom meeting app.

Zoom Meeting Details-

https://us02web.zoom.us/j/86401553474?pwd=YlFwbWRCenVnL0p2M0E2VXo4aktOZz09

Meeting ID: 864 0155 3474 Passcode: pdeasu

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Some moments during programme



The chief guest for programme Adv. Bhaiyasaheb Jadhav, Corporator Pune Municipal Corporation address students



Dr. Ashok Bhosale, Principal of College, address students during Programme

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Speech by Student representative Ms. Anuradha Daundkar, Final Year B. Pharm



Pharmacist Oath given to all Final Year B. Pharm students

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

World Pharmacist Day Celebration

25th September 2021

Student Attended Programme by Online Mode

Class: S. Y. B. Pharm			
Roll No.	**Candidate Name**	**Roll No.**	**Candidate Name**
1.	Akhade Akshay Balkrishna	**37.**	Pawar Prajakta Jotishya
2.	Aranya Atharva Ravindra	**38.**	Pharate Abhijit Kailas
3.	Bhamare Mansi Dipak	**39.**	Puri Ravi Kailas
4.	Bhapsekar Nikhil Deepak	**40.**	Raghatwan Akshada Uttam
5.	Bhosure Nikita Kaluram	**41.**	Raipure Prachi Nitin
6.	Bhujbal Nandini Dashrath	**42.**	Rajpurohit Rajvirsing Hanumansingh
7.	Bichukale Snehal Janardan	**43.**	Sagar Deepali Rajendra
8.	Choudhary Snehal Shantaram	**44.**	Sarode Pratiksha Balasaheb
9.	Dake Raj Atul	**45.**	Sarode Ravikiran Dattatray
10.	Dhainje Rinku Bhimrao	**46.**	Shaikh Afiya Ramjan
11.	Gaikwad Pranjal Pramod	**47.**	Shelake Komal Kisan
12.	Galgunde Soham Dnyandev	**48.**	Shinde Mahesh
13.	Gaware Sonali Ravindra	**49.**	Shinde Mayuri Baburao
14.	Gund Omkar Dattatray	**50.**	Shinde Sagar Jaysing
15.	Hake Neha Ashok	**51.**	Shinde Saurabh Shivaji
16.	Jagtap Vaishnavi Chandrashekhar	**52.**	Shitole Tejas Eknath
17.	Jamdade Gayatri	**53.**	Surve Sakshi Anil
18.	Kabire Dinesh Pandharinath	**54.**	Thorat Rutuja Bapusaheb
19.	Kalsheitt Aishwarya Revanappa	**55.**	Ubale Rohan Suresh
20.	Kamthe Aishwarya Vijay	**56.**	Waghmare Diksha Mahendra
21.	Khaladkar Vaibhav Bhauso	**57.**	Walanj Sejal Santosh
22.	Khandve Gauri Vasant	**58.**	Warghade Rushita Bappu
23.	Khiratkar Shweta Janardan	**59.**	Dhavale Sahil Satish
24.	Khobare Abhishek Suresh	**60.**	Dalvi Vaibhav Balbhim
25.	Khote Shruti Gorakh	**61.**	Damale Pallavi Suresh
26.	Kokani Deepak Bapu	**62.**	Dhanle Varsha Gautam
27.	Kudale Suvarna Gautam	**63.**	Jadhav Santosh Baliram
28.	Kumbharkar Harshada Shankar	**64.**	Nikalje Kiran Balu
29.	Lawande Rutuja Vikas	**65.**	Paigude Shradha Rajendra
30.	Londhe Minakshi Raosaheb	**66.**	Patil Anuja Datta
31.	Madure Vaishnavi Sachin	**67.**	Pote Priti Bharat
32.	Maharnavar Shankar Shivaji	**68.**	Shinde Vishal Namdeo
33.	Mokashi Mansi Mohan	**69.**	Ugale Snehal Sunil
34.	Mulla Anisa Imam	**70.**	Undre Darshana Sanjay
35.	Pansare Akshay	**71.**	Wakchaure Ajay Balasaheb
36.	Pathak Chaitanya Dashrath	--	--

Class: T. Y. B. Pharm			
Roll No	**Name of Student**	**Roll No**	**Name of Student**
1.	Ahiraao Chaiitanyaa Deepak	**36.**	Naikodi Siddhesh Sanjay
2.	Awhale Harshada Sukhdev	**37.**	Napte Omkar Lahu
3.	Barate Rahul Nilkant	**38.**	Nawale Prajakta Rajesh
4.	Barde Neha Amol	**39.**	Nemade Kiran Subhash
5.	Bhagat Preeti Shahaji	**40.**	Nikhade Vaibhav Ramesh
6.	Bhange Aishwarya Jotiram	**41.**	Nimbalkar Tejal Mohan
7.	Birgad Sachin Baalaj	**42.**	Papal Raj Dilip
8.	Chaudhari Mukesh Shivlal	**43.**	Pardeshi Rupesh Shivcharan
9.	Chaudhary Karan Vajaram	**44.**	Patil Anmol Basawantarao
10.	Chavan Pranita Prabhakar	**45.**	Pawar Prashant Balasaheb
11.	Daundkar Anuradha Shashikant	**46.**	Poul Pratiksha Gopinath
12.	Dhumal Rutuja Ravindra	**47.**	Prajapati Simran Kantilal
13.	Gaikwad Shubham Ramdas	**48.**	Raikar Manasi Vikas
14.	Galande Dnyanesh Anil	**49.**	Rajpurohit Ranusingh Suresh
15.	Garad Nilesh Bhalchandra	**50.**	Salunke Priyanka Rajendra
16.	Garud Shweta Balkrushna	**51.**	Satkar Atharwa Tukaram
17.	Gote Sima Datta	**52.**	Sharma Tushar Kishor
18.	Hajare Tanaji Ram	**53.**	Shinde Yogita Baban
19.	Hingmire Prasad Tulsidas	**54.**	Shinde Anupama Anil
20.	Jadhav Mansi Vijay	**55.**	Shinde Shreya Dnyaneshwar
21.	Jadhav Pratiksha Ajinath	**56.**	Shitole Pooja Balasaheb
22.	Jagtap Darshana Balasaheb	**57.**	Tekale Satish Vitthalrao
23.	Jagtap Dhiraj Dattatray	**58.**	Tekawade Prasad Amit
24.	Jagtap Rutuja Shantaram	**59.**	Thorat Mayureshwar Bhagwan
25.	Janawale Abhishek Vishwambhar	**60.**	Mungade Maruti Shivaji
26.	Kakade Prachi Manohar	**61.**	Thorat Tejas Vilas
27.	Kakade Suchita Prakash	**62.**	Tripathi Apoorva Krishnram
28.	Kamble Vijay Sanjay	**63.**	Varpe Aishwarya Ramesh
29.	Khade Utkarsha Balasaheb	**64.**	Vibhute Prajakta Bapu
30.	Kodre Rutuja Khushal	**65.**	Walke Rutuja Dilip
31.	Kshirsagar Snehal Vishnu	**66.**	Yadav Tejaswini Avinash
32.	Kumar Ashutosh	**67.**	Yamgar Amit Subhash
33.	Landage Vishwajeet Vikram	**69.**	Waghmare Vaibhav Madukar
34.	Mahajan Varsha Sahebrao	--	--
35.	Makwana Chandan Sagar	--	--

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

उरसळ महाविद्यालयात फार्मासिस्ट दिन साजरा

मुंढवा : डॉक्टर व पेशंट यांच्यामधील फार्मासिस्ट हा महत्त्वाचा दुवा आहे, कोरोना संक्रमणाच्या काळात आरोग्य सेवेत फार्मासिस्टचे योगदान अभिमानास्पद असल्याचे प्रतिपादन नगरसेवक ॲड. भय्यासाहेब जाधव यांनी केले. पुणे जिल्हा शिक्षण मंडळाचे खराडी येथील शंकरराव उरसळ फार्मसी महाविद्यालयात जागतिक फार्मासिस्ट दिन व राष्ट्रीय सेवा योजना स्थापना दिनानिमित्ताने आयोजित कार्यक्रमात प्रमुख पाहुणे म्हणून जाधव बोलत होते. या प्रसंगी वैद्यकीय अधिकारी डॉ. रेखा जाधव, महाविद्यालयाचे प्राचार्य डॉ. अशोक भोसले, उपप्राचार्य डॉ. विजया बर्गे, ॲड. सचिन कोतवाल, डॉ. रवींद्र पाटील, प्रा. कुणाल कणसे, प्रा प्रशांत खाडे, प्रा. अश्विनी बनकर, सविता सोनवणे आदी उपस्थित होते. या कार्यक्रमासाठी तांत्रिक साह्य डॉ. अमित कसबे यांनी दिले. प्रास्ताविक प्रा. मनोज जोगराणा, तर आभार प्रा. सीमा केंजळे यांनी मानले.



खराडी : शंकरराव उरसळ फार्मसी महाविद्यालयातील कार्यक्रमात मार्गदर्शन करताना नगरसेवक ॲड. भैय्यसाहेब जाधव.

फार्मासिस्ट 'करोना योद्धा' म्हणून कार्यरत : ॲड. जाधव

विश्रांतवाडी, दि. २७ (प्रतिनिधी) - करोना संक्रमणाच्या काळात आरोग्य सेवेत सर्वच फार्मासिस्ट 'करोना योद्धा' म्हणून कार्यरत आहेत. फार्मासिस्ट हा औषध संशोधन ते रुग्णापर्यंत योग्य वेळी, योग्य पद्धतीने औषध पोहोचावे या प्रक्रियेतील महत्त्वाचा दुवा आहे, असे प्रतिपादन नगरसेवक ॲड. भैय्यासाहेब जाधव यांनी केले.

खराडी येथील शंकरराव उरसळ फार्मसी महाविद्यालय येथे जागतिक फार्मासिस्ट दिनाच्या व राष्ट्रीय सेवा योजना स्थापना दिनानिमित्त आयोजित कार्यक्रमात जाधव बोलत होते.

करोनाकाळातही महाविद्यालयात घेण्यात येणारे विविध उपक्रम विद्यार्थ्यांच्या व्यक्तिमत्त्व विकासासाठी उपयुक्त असल्याचे प्रमुख पाहुण्या पालिकेच्या वैद्यकीय अधिकारी डॉ. रेखा जाधव यांनी सांगितले. सावित्रीबाई फुले पुणे विद्यापीठाचे व्यवस्थापन सदस्य तथा महाविद्यालयाचे प्राचार्य डॉ अशोक भोसले, पदवीका विभागाचे प्राचार्य ॲड. सचिन कोतवाल यांच्यासह विद्यार्थी प्रशांत पवार, अनुराधा दौंडकर, श्रावणी दळवी आणि ऋतुजा धुमाळ यांनी मनोगत व्यक्त केले. या कार्यक्रमात अंतिम वर्ष बी.फार्म व डी.फार्म विद्यार्थ्यांना फार्मासिस्ट प्रतिज्ञा कार्यक्रमाचे संयोजक प्रा. विपुल धसाडे यांनी दिली. यावेळी उपप्राचार्य डॉ. विजया बर्गे, डॉ. रवींद्र पाटील, प्रा. कुणाल कणसे, प्रा. प्रशांत खाडे आदी उपस्थित होते.

प्रभात Tue, 28 September 2021
https://epaper.eprabhat.net/c/

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014.

8. Healthcare Awareness Activities

(Online Celebration of World Pharmacist Day)

(A. Y. 2020-21)

Report on…

Online World Pharmacist Day

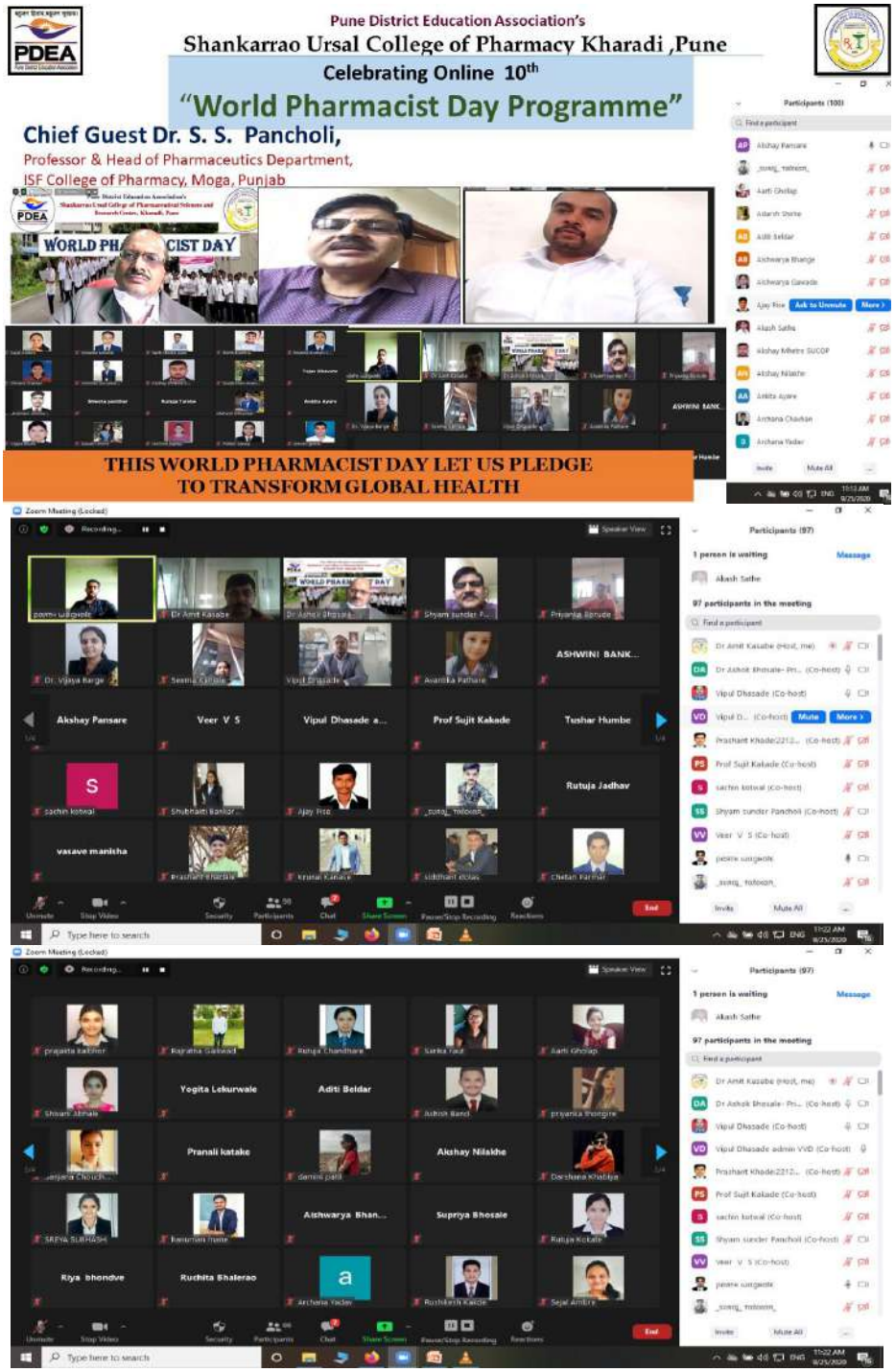
(25th September 2020)

The online programme organized in college with the main objective to promote and advocate the role of pharmacist in improving health of each corner of the world. To showcase the pharmacist in their positive role on health, this year **"Transforming global health**" is the theme of World Pharmacists Day. The chief guest for online programme Dr. S. S. Pancholi, Professor & Head Pharmaceutics, ISF College of Pharmacy, Moga, Punjab, expressed in his motivative talk to the students emphasized on the responsibilities and role of pharmacist towards the welfare of society. Pharmacists all over the world are working hard to cease spread of the COVID-19, and to ensure uninterrupted medicine supply to society in need. We should appreciate for their efforts during this difficult time. Dr. Ashok Bhosale enlightened on the mission of pharmacy profession to the service to the society and briefed the gathering about role of pharmacists in the health care system. Dr. Amit Kasabe administered the Pharmacy Oath to pertinent students.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Some moments during online programme



Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

NOTICE NO.: - 125 **Date: 21/09/2020**

(Academic Year- 2020-2021)

All the students of **B. Pharm. and M. Pharm** are hereby informed that college has been organized celebration of online **"World Pharmacist Day Programme" on 25th Sept. 2020. at 11.00 am.** All students must attend celebration of **"World Pharmacist Day Programme"** through ZOOM meeting app.

Zoom Meeting link-

https://us02web.zoom.us/j/81543024210?pwd=REF5dnlYanVNZUJpUzBHQW1UdEF4QT09

Meeting ID: 815 4302 4210

Passcode: pdeasu

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune-14

"World Pharmacist Day"

Friday, 25th Sept 2020

Theme: Transforming Global Health

PROTOCOL

Sr. No.	Event	Name of the Person
1.	Welcome Guest and Programme anchoring	Prof. Vipul Dhasade
2.	Preamble	Prof. Manoj Jograna
3.	Student Speech	1. Avantika Pathate (S. Y. D. Pharm) 2. Parth Waghole (S. Y. D. Pharm) 3. Akshay Pansare (S. Y. B. Pharm) 4. Aishwarya Bange (T. Y. B. Pharm) 5.Sarika Patil (Final Year B. Pharm) 6. Tushar Humbe (S. Y. M. Pharm)
4.	Pharmacist Oath	Dr. Amit Kasabe
5.	Address by Principal	Prof. Sachin Kotwal Dr. Ashok Bhosale
6.	Address by Chief Guest	Dr. S. S. Pancholi Professor & Head Pharmaceutics, ISF College of Pharmacy, GT-Road,NH-95, Ghal Kalan, Moga, Punjab
7.	Vote of Thanks	Prof. Ashwini Bankar

Join Zoom Meeting
https://us02web.zoom.us/j/81543024210?pwd=REF5dnlYanVNZUJpUzBHQW1UdEF4QT09
Meeting ID: 815 4302 4210
Passcode: pdeasu

Prof. Vipul Dhasade
Programme coordinator

Dr. Ashok Bhosale

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune- 411014.

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E. Institute Code : PH 6385 • Website : www.pdea sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835

Date : 21/9/2020

Ref. No. : SUCOPSRC/ 65 /2020-2021

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
dv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
hanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

Dr. S. S. Panchole
Professor and HOD Pharmaceutics,
ISF College of Pharmacy,
Moga, Punjab.

Subject: Invitation as Chief guest for World Pharmacist Day Programme

Dear Sir,

Our college was established in 2006 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting D. Pharm. course, B. Pharm. course, M. Pharm. course with specializations in Pharmaceutics and Pharmaceutical Quality Assurance. Recently, the college has been recognized as research center for Ph.D. in Pharmacy under the faculty of Science and Technology, Savitribai Phule Pune University, Pune. The College is dedicated towards providing quality education to the students with organizing various co-curricular and social activities.

Since you are an eminent person in this field and have made valuable contributions in pharma profession, we take this opportunity to invite you as a **Chief guest** for online **"World Pharmacist Day Programme" on 25th Sept. 2020. at 11.00 am.**

ZOOM Meeting ID: 815 4302 4210 Passcode: pdeasu

Your guidance aims at imparting the knowledge of pharma profession and contribution of pharmacist in health care activity.

We look forward to your presence and guidance.

Thanking you

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune-411014.

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E. Institute Code : PH 6385 • Website : www.pdea-sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106
Fax. : 020-27013835

Date : 25/09/2020

Ref. No.: SUCOPSRC / 72 /2020-2021

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
dv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
hanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

Dr. S. S. Panchole
Professor and HOD Pharmaceutics,
ISF College of Pharmacy,
Moga, Punjab.

Dear Sir,

At the outset, we wish to convey our sincere gratitude towards you for addressing as a **Chief guest** for **"World Pharmacist Day Programme" on 25th Sept. 2020.** Your valuable guidance has rightly helped us to update our knowledge. Your expertise in the field has been truly inspiring for all students and staff members.

We are looking forward to have such more interaction with you in the future.

Thanking you with regards.

Yours Sincerely,

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014.

Student attended Online World Pharmacist Day Programme

Sr.No.	Name of the Student	Sr.No.	Name of the Student
01	Abhale Shivani Vijay	39	Khandave Shreya Dnyanoba
02	Anandkar Sudarshan Baban	40	Khandve Sayali Tanaji
03	Bande Kiran Shivaji	41	Khilare Amey Chandrakant
04	Bankar Shubhakti Ajit	42	Kiratwad Balaji Tukaram
05	Beldar Aditi Rameshwar	43	Kokate Rutuja Vijay
06	Bhadale Prashant Sunil	44	Kokate Suraj Rajabhau
07	Bhairavkar Chaitrali Prabhakar	45	Kolpe Rushikesh Uttam
08	Bhalerao Ruchita Arvind	46	Kunte Nandesh Ashok
09	Bhondve Atish Shyam	47	Langhe Snehal Sanjay
10	Bhondve Riya Rahul	48	LekurwaleYogita Sopan
11	Bhosale Supriya Sharad	49	Mane Hanuman Keshav
12	Borade Sayali Ashok	50	Mhaiskar Mahesh Rajendra
13	Bramhane Jayshri Annasaheb	51	Mhetre Akshay Namdev
14	Chavan Nitesh Arjun	52	More Gayatri Raju
15	Chavan Rajgouri Harichandra	53	More Mayuri Chandrakant
16	Choudhary Mahendra Aasaram	54	More Mrunalini Sanjiv
17	Choudhary Bharat Ghisaram	55	More Vaishnavi Pradeep
18	Choudhary Nareshkumar Mohanlal	56	Munde Sachin Arjun
19	Dolas Siddhant Manohar	57	Nilakhe Akshay Abhinand
20	Dombe Suvarna Sanjay	58	Pardhe Lalit Genu
21	Dudhwade Prasad Sahebrao	59	Patil Damini Sanjay
22	Gaikwad Rajratna Deepak	60	Patil Sarika Rajaram
23	Galave Shital Tanaji	61	Pawar Jaya Parmeshwar
24	Ganjkar Mayuri Ramesh	62	Pise Ajay Ashok
25	Ghavate Tejas Dipak	63	Rao Abhishai Samson
26	Gholap Aarti Sunil	64	Raut Sarika Ganesh
27	Jadhav Kajal Sandip	65	Sathe Shrutika Dattatray
28	Jadhav Ketaki Ashok	66	Satkar Mrunal Manik
29	Jadhav Rohit Parmeshwar	67	Shevakar Shantanu Sanjay
30	Jadhav Rutuja Pravinkumar	68	Shinde Harshal Mohan
31	Joshi Onkar Sadanand	69	Shreebhagat Sonali Baliram
32	Kadam Ankita Mohan	70	Sreya Subhash
33	Kalbhor Prajakta Pandurang	71	Tambe Jayesh Dattatray
34	Kamble Rohit Harshad	72	Tambe Rutuja Jagdish
35	Katake Pranali Sadashiv	73	Tarmude Shrikrushna Gautam
36	Kaygude Sachin Dattatray	74	Telgote Prachi Raju
37	Khabiya Darshana Vijay	75	Thongire Priyanka Pandhurang
38	Khandave Akshada Hanumant	76	Umrekar Rutuja Mohan

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Student attended Online World Pharmacist Day Programme

Sr.No.	Name of Student	Sr.No.	Name of Student
77.	Ahiraao Chaiitanyaa Deepak	113.	Naikodi Siddhesh Sanjay
78.	Awhale Harshada Sukhdev	114.	Napte Omkar Lahu
79.	Barate Rahul Nilkant	115.	Nawale Prajakta Rajesh
80.	Barde Neha Amol	116.	Nemade Kiran Subhash
81.	Bhagat Preeti Shahaji	117.	Nikhade Vaibhav Ramesh
82.	Bhange Aishwarya Jotiram	118.	Nimbalkar Tejal Mohan
83.	Birgad Sachin Baalaj	119.	Papal Raj Dilip
84.	Chaudhari Mukesh Shivlal	120.	Pardeshi Rupesh Shivcharan
85.	Chaudhary Karan Vajaram	121.	Patil Anmol Basawantarao
86.	Chavan Pranita Prabhakar	122.	Pawar Prashant Balasaheb
87.	Daundkar Anuradha Shashikant	123.	Poul Pratiksha Gopinath
88.	Dhumal Rutuja Ravindra	124.	Prajapati Simran Kantilal
89.	Gaikwad Shubham Ramdas	125.	Raikar Manasi Vikas
90.	Galande Dnyanesh Anil	126.	Rajpurohit Ranusingh Suresh
91.	Garad Nilesh Bhalchandra	127.	Salunke Priyanka Rajendra
92.	Garud Shweta Balkrushna	128.	Satkar Atharwa Tukaram
93.	Gote Sima Datta	129.	Sharma Tushar Kishor
94.	Hajare Tanaji Ram	130.	Shinde Yogita Baban
95.	Hingmire Prasad Tulsidas	131.	Shinde Anupama Anil
96.	Jadhav Mansi Vijay	132.	Shinde Shreya Dnyaneshwar
97.	Jadhav Pratiksha Ajinath	133.	Shitole Pooja Balasaheb
98.	Jagtap Darshana Balasaheb	134.	Tekale Satish Vitthalrao
99.	Jagtap Dhiraj Dattatray	135.	Tekawade Prasad Amit
100.	Jagtap Rutuja Shantaram	136.	Thorat Mayureshwar Bhagwan
101.	Janawale Abhishek Vishwambhar	137.	Thorat Mahesh Rajendra
102.	Kakade Prachi Manohar	138.	Thorat Tejas Vilas
103.	Kakade Suchita Prakash	139.	Tripathi Apoorva Krishnram
104.	Kamble Vijay Sanjay	140.	Varpe Aishwarya Ramesh
105.	Khade Utkarsha Balasaheb	141.	Vibhute Prajakta Bapu
106.	Kodre Rutuja Khushal	142.	Walke Rutuja Dilip
107.	Kshirsagar Snehal Vishnu	143.	Yadav Tejaswini Avinash
108.	Kumar Ashutosh	144.	Yamgar Amit Subhash
109.	Landage Vishwajeet Vikram	145.	Waghmare Vaibhav Madukar
110.	Mahajan Varsha Sahebrao		
111.	Makwana Chandan Sagar		
112.	Mungade Maruti Shivaji		

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014

8. Healthcare Awareness Activities

(Celebration of World Pharmacist Day)

(A. Y. 2019-20)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

A Report on…

"World Pharmacists Day celebration 2019-20"

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune, Maharashtra celebrated the "World Pharmacists Day" on 25 September, 2019 to enlighten the importance of Pharmacy profession in Healthcare system. International Pharmaceutical Association (IPA) encourages the theme of "Pharmacists Role in Patient Safety & Efficacy of Medicines" for this year. The programme was inaugurated by auspicious hands of chief guest Adv. Bhaiyasaheb Jadhav, corporator PMC and Dr. Ashok Bhosale, Principal, of college. The program was embarked with welcome speech by the Prof. Sachin Kotwal, HOD Diploma Branch. He delivered a valuable talk on the history of Pharmacy profession and entitled theme. Adv. Bhaiyasaheb Jadhav mentioned the need of pharmacists in health care team. Dr. Ashok Bhosale enlightened on the mission of pharmacy profession to the service to the society and briefed the gathering about role of pharmacists in the health care system. The Pharmacy Oath was administered to pertinent students by Dr. Vijaya Barge, Vice principal of college. As part of this event, the college conducted a memorable Awareness Campaign "Pharma Rally" at Kharadi gaon with a view to impart safe use of medicine, professionalism of pharmacy education to highlight the Pharmacists expertise to public. Students performed Street Play on sensitizing community regarding the indispensable role of Pharmacist in healthcare. A gathering of 450 students from college and all faculty members wholeheartedly and passionately participated in the rally. The program was coordinated by Prof. Vipul Dhasade and concluded with vote of thanks by Prof. Seema Kenjale.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Chief guest highlights on Pharmacist role in society



Pharmacy Oath was administered to pertinent students

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Health care Awareness Campaign "Pharma Rally"



Student Participated in Health Care Rally at Kharadi Goan

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014

8. Healthcare Awareness Activities

(Celebration of World Pharmacist Day)

(A. Y. 2018-19)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

A Report on…

"World Pharmacists Day celebration"

25th September, 2018

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune, Maharashtra celebrated the "World Pharmacists Day" on 25th September, 20189 to enlighten the importance of Pharmacy profession in Healthcare system. International Pharmaceutical Association (IPA) encourages the theme of "Pharmacists Role in Patient Safety & Efficacy of Medicines" for this year. The programme was inaugurated by auspicious hands of Chief guest Adv. Sumant Kolhe, Ex District Judge, Pune, Hon. Advocate Mohanrao Deshmukh, Treasurer, PDEA, Pune and Dr. Ashok Bhosale, Principal of the college. Adv. Sumant Kolhe in his motivative talk to the students emphasized on the responsibilities and role of pharmacist towards the welfare of society. Adv. Mohanrao Deshmukh, Treasurer, PDEA, Pune mentioned the need of pharmacists in health care team. Dr. Ashok Bhosale enlightened on the mission of pharmacy profession to the service to the society and briefed the gathering about role of pharmacists in the health care system. The Pharmacy Oath was administered to pertinent students by Dr. Vijaya Barge, Vice principal of college. The programme concluded with vote of thanks by Prof. Seema Kenjale and coordinated by Prof. Vipul Dhasade.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Dr. Ashok Bhosale Principal, addressing students



Pharmacy Oath was administered to pertinent students.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

A Report on…

Health Care Rally

25th September, 2018

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune, Maharashtra celebrated the "World Pharmacists Day" on 25th September, 2018 to enlighten the importance of Pharmacy profession in Health Care system. International Pharmaceutical Association (IPA) encourages the theme of "Pharmacists Role in Patient Safety & Efficacy of Medicines" for this year. The college organized a memorable Awareness Campaign "Health care Rally" at Kharadi gaon with a view to impart safe use of medicine, professionalism of pharmacy education to highlight the Pharmacists expertise to public. "Health Care Rally" inaugurated by Hon. Shri Mahendra Pathare, Corporator, P.M.C.

Dr. Ashok Bhosale, Principal, of college was addressing student participants about role of pharmacists in the health care system. Students performed Street Play on sensitizing community regarding the indispensable role of Pharmacist in healthcare.

A gathering of 450 students from college and all faculty members wholeheartedly and passionately participated in the rally. Prof. Vipul Dhasade coordinated the program.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

"Health Care Rally" inauguration by Hon. Shri Mahendra Pathare, Corporator, P.M.C. and Dr. Ashok Bhosale, Principal



Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.





Students performed Street Play during Health Care Rally

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

A Report on…

National Pharmacy Week 2018

Drawing Competition

(26th September 2018)

National Pharmacy Week 2018 was jointly celebrated with Indian Pharmaceutical Association, Pune at various pharmacy colleges of Pune city, Pune District and PCMC area. The prime objective of NPW celebration was to create awareness amongst the public, other healthcare providers and the authorities about role of pharmacist in health care system. The theme selected for the year 2018-19 was **"Pharmacists: Your Medicines Experts"** with the aim of motivating the young budding pharmacists to develop their confidence, knowledge, leadership qualities, organizational capacity and make them understand about the importance of the profession to excel in the field. As part of organizing colleges, our college organized Drawing Competition on 26th September 2018. Total 90 students from different pharmacy colleges participated in the competition. Prof. Bhagwat Nagargoje MAER's MIT College of Pharmacy, Pune and Prof. Vidya Wable, AISSMS College of Pharmacy, Pune evaluate all drawings. The competition was coordinated by Prof. Vipul V. Dhasade.

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



A Glimpse of Drawing Competition



Student Participants during Drawing Competition

Prof. Vipul Dhasade
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

A. Experiential learning

9. Health Check-up Camps and Seminars

(A. Y. 2018-19 to 2022-23)

9. Health Check-up Camps

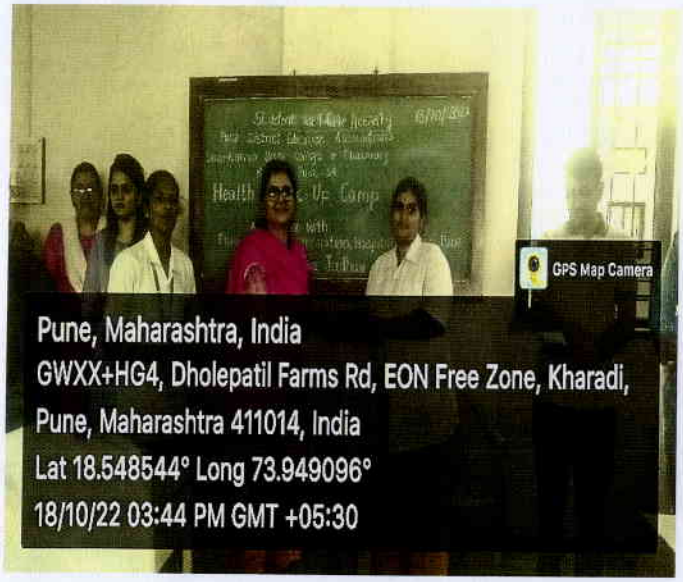
(A. Y. 2022-23)

{18.10.2022, 20.07.2022, 21.02.2023 }

Free Health Check Up Camp

[18th October 2022]

The Free Health Checkup Camp was organised on 18th October 2022 in college for girls. The camp was organized in collaboration with Pune Municipal Corporation Hospital, Kharadi, Pune, as a part student development activity. Dr. Rekha Jadhav and his team was present for this camp. At this occasion she was guided students. and total 32 girl's students actively participated in health checkup camp. The activity was coordinated by Mr. Prashant Khade.





Mr. Prashant Khade

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 18 / 10 / 2022 Ref. No.: SUCOPSRC / 240 / 2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Dr. Rekha Jadhav,
Pune Municipal Corporation Hospital,
Kharadi, Pune-14

Respected Madam,

Madam,

On behalf of P.D.E.A.'s Shankarrao Ursal College of Pharmaceutical sciences and research center and in person, I wish to extend our sincere thanks to you for your visit to our institute and for your kind cooperation for the conduct of Health Check-up camp on October 18, 2022 in the college for students.

Thanking you once again for sparing your valuable time and making it convenient to visit our campus and looking forward for the same co-operation in future.

With warm regards.

Thanking You,

Yours Sincerely,

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune- 411014.

Rohini

Institute Copy

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 17 / 10 / 2022 Ref. No.: SUCOPSRC / 239 / 2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Dr. Rekha Jadhav,

Pune Municipal Corporation Hospital,

Kharadi, Pune-14

Subject: Invitation for conduct Health Checkup Camp....

Dear Madam,

Our college Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm and M. Pharm with specializations in Pharmaceutics and Pharmaceutical Quality Assurance. The College is dedicated towards providing quality education to its students through its magnificent infrastructure, well stocked and updated library, and spacious computer lab with all facilities and modern labs containing sophisticated equipment's.

Every year Board of Student Development of college organized Health Checkup Camp as a part of student welfare activity.

We are very happy to invite to you conduct Health Checkup on October 18, 2022 at 3.30 pm in our college.

We look forward for your co-operation (For any query please contact to coordinator Mr. Prashant Khade-8888872264, email id: phkhade@gmail.com)

Thanking you!

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune- 411014.

Institute Copy

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

FEED BACK FORM FOR HEALTH CHECK UP CAMP

Organized on the occasion of Social Welfare Activity of Pune Municipal Corporation.

Pune Municipal Corporation, Kharadi, Pune

Date: - 18/10/2022

Sr. No.	Particular	Excellent	Very Good	Good	Satisfactory	Poor
1.	Overall organization of the Health Check Up Camp.		✓			
2.	Involvement of health care staff in this camp		✓			
3.	Did you received adequate information as per your expectation in this health checkup camp.		✓			
4.	How did you find service provided by healthcare staff	✓				

Any Other Suggestion Remark or Feedback for future: - —

Bhosure Nikita

Name & Signature of Student

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

FEED BACK FORM FOR HEALTH CHECK UP CAMP

Organized on the occasion of Social Welfare Activity of Pune Municipal Corporation.

Pune Municipal Corporation, Kharadi, Pune

Date: - 18/10/2022

Sr. No.	Particular	Excellent	Very Good	Good	Satisfactory	Poor
1.	Overall organization of the Health Check Up Camp.	✓	✓			
2.	Involvement of health care staff in this camp		✓			
3.	Did you received adequate information as per your expectation in this health checkup camp.	✓	✓			
4.	How did you find service provided by healthcare staff				✓	

Any Other Suggestion Remark or Feedback for future: -

Rinku.

Rinku Bhainje

Name & Signature of Student

Health check-up Camp

Sr No.	Name of student	Class	Mobile Number	F/M	Blood Group	Major Findings			Sign
						Height	Weight	B.P	
1	Surwase Rutuja Vasant	S.Y.B.Pharm	9067652996.	F	A^+	163	58	100/70.	Rutuja.
2.	Vajrashetti Isha S.	S.Y. B.Pharm	7741894725	F.	O^{+ve}	150	46	110/70.	~~Isha~~.
3.	Shinde Rutuja.	S.Y.B.Pharm	8767290422	F	A^{v+}	152	65	100/70.	Shinde
4	Rikame Neha	S.Y.B.pharm	9209083701	F	AB^{tve}	152	35	110/80	~~Neha~~
5.	Mrunali Bapu Jade	S.Y.B.Pharm	9370491505	F	A^{+ve}	155	~~70~~ 69	120/80.	Mjade.
6.	Singh Vartika Sanjay	S.Y.BPharm	7057872792	F	A^{+ve}	167	55	120/80.	
7.	Shivarkar Aarti Subhash	S.Y.B.Pharm	9657374532	F	O^{+ve}	152	37	110/70	A.S Shivarkar
8.	Rathod Vaishnavi	S.Y.B pharm	8468892572	F	O^{+ve}	155	50	130/80	~~Rathod~~
9.	Vaishnavi Khandagale	S.Y.B Pharm	7887329212	F	A^{+ve}	158	55	100/70.	Khandagale
10.	Pratibha Kodag	S.Y.B Pharm	9765605533	F	O^{+ve}	164	48	110/70	Pkodag.
11.	Sakshi Dhumal.	S.Y.B. Pharm	9325051704	F	B^{+ve}	156	48	110/80	S.P Dhumal
12	Chavan Divya kalyan	S.Y.B.Pharm	9356270608	F	O^{+ve}	154	39	120/70.	DK
13	Choudhari. Mayuri. Anil	S.Y.B. Pharm	8600470342	F	O^{+ve}	156	40	100/70.	~~Mayuri~~
14.	Gade Bhakti Ashok	S.Y.B.Pharm	7820998697	f	A^{+ve}	167	47	110/70	Bhakti

Sr No	Name of student	Class	Mobile Number	F/m	Blood group	Major findings			Sign
16)	Dr. Vijaya U. Baage	Vice Principal	9923205133	f	O Rh -ve	127 BP - 120/70			
17)	Dr. Nazan.			f.		BP - 130/80.			
18)	Vaishnavi Kalghot	S.Y.	9527890372	F	A+ve.	BP - 110/70			Kalghot
19)	Bhagyalaxmi Kadam	S Y	9845492505	F	B+ve	BP - 100/70.			Kadam
						Height	Wg		
20)	Kamthe Aishwarya	final year	7774902820	F	A+ve	165	53	110/80.	Kathe
21)	Dhainje Rinku	final year	~~8080~~ 8080265724	F	B+ve	167	51	100/70	Dhainje
22)	Walanj Sejal	final Year	7038274567	F	AB+ve	168	47	100/60	Sejalanj
23)	Khote Shruti	final year	9807297837	F	O+ve	161	52	90/60	Shruti
24)	Bhamare Mansi	final year	7666639202	F	A+	155	~~100~~ 60	110/80	Mansi
25)	Waghmare Diksha	final year	9307216717	F	B+	165	55	100/80	Waghmare
26)	Thorat Rutuja	Final year	9890797820	F	O+	151	47	90/80	Thorat.
27)	Bhosure Nikita	final Year	9307982264	F	A+	149	66.	90/60	Bhosure.
28)	Bhujbal Nandini	final year.	8669246442	F	B+	172	48	100/60	Bhujbal
29)	Shweta Khiratkar	final year	8830067215	F	B+	170	42.	100/70	Khiratkar

30)	Sawita. Sonwane.	Lab. Asst.	9860310556.			
31)	Tejsvini kande	Asst. Professor.	8669062889			
32)	Bhagyashri Shelar.	Asst. Prof.	7744901138			

Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

		BP	
f	B+ve.	130/80.	
f	B+ve.	110/70.	T.R.kande
f	O+ve.	100/70.	BShelar

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Free Health Check-Up Camp

[21st February 2023]

Board of student's development of college was organized free health checkup Camp on 21st February 2023 in college. This Health Check Up Camp was organized for the first year B Pharmacy, first year D Pharmacy and first year M Pharmacy students of the college. The camp was organized in collaboration with PDEA's college of Ayurveda and Research Center, Nigdi, Pune, as a part student development activity.The main objective of a Health Check-Up camp is to provide initial care to students in life-threatening conditions.

Dr. Madhawi Banarase and his team was present for this camp. In this, Dr. Madhavi Bansode and her team were honored by the college. At this occasion she was guided students about healthy health. A total of 87 students were examined in this health check-up camp. The activity was coordinated by Mr. Prashant Khade.





Health Checkup During Camp

Dr. Prashant Khade
Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical Science's & Research Centre
Kharadi, Pune - 411014.

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 16 / 02 / 2023

Ref. No.: SUCOPSRC / 1006 / 2022-2023

To,
Dr. Mrs. Ragini R.Patil
Principal
PDEA's College of Ayurveda &
Research Center, Nigdi, Pune.

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

Subject: Invitation for conduct Health Checkup Camp....

Dear Madam,

Our college Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting D. Pharm, B. Pharm, M. Pharm (Pharmaceutics and Pharmaceutical Quality Assurance) and Research Center. The College is dedicated towards providing quality education to its students through its magnificent infrastructure, well stocked and updated library, and spacious computer lab with all facilities and modern labs containing sophisticated equipment's.

Every year Board of Student Development of college organized Health Checkup Camp as a part of student welfare activity.

We are very happy to invite to you conduct Health Checkup Camp for F. Y. D. Pharm, F. Y. B. Pharm and F. Y. M. Pharm students on 21st February 2023 at 10.30 am in our college. We look forward for your co-operation. (For any query please contact to coordinator Dr. Prashant Khade-8888872264, email id: phkhade@gmail.com)

Thanking you!

Dr. Ashok Bhosale

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Institute Copy

Received
16/2/2023

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 21 / 02 / 2023 Ref. No.: SUCOPSRC / 1026 / 2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Dr. Mrs. Ragini R. Patil
Principal
PDEA's College of Ayurveda &
Research Center, Nigdi, Pune.

Respected Madam,

On behalf of P.D.E.A.'s Shankarrao Ursal College of Pharmaceutical sciences and research center and in person, I wish to extend our sincere thanks to you for your college doctors team visit to our institute and for your kind cooperation for the conduct of Health Check-up camp on 21st February 2023 in the college for First Year B. Pharm, First Year D. Pharm and First Year M. Pharm students. We are very thankful to following doctors team for the conduct Health Check-up camp.

1. Dr. Madhavi Banarase (Professor & HOD Dept. of Shalyatantra)
2. Dr. Anuja Wadadekar (Asso. Professor)
3. Dr. Chinmay Phagke (Asst. Professor)
4. Dr. Jitendra Tapaswi (Asst. Professor)
5. Dr. Megha Bhosale (Asst. Professor)
6. Dr. Ashish Kumar (MS. Surgery)
7. Dr. Sneha Jadhav (MS. Surgery)
8. Dr. Rimaa Ankelkar (MS. Surgery)
9. Dr. Avantika Chintkuntlawar (MS. Surgery)
10. Dr. Kuldeep Jagdale (MD. Agadtantra)

Thanking you once again for sparing your valuable time and looking forward for the same co-operation in future.

With warm regards.

Thanking You,

Yours Sincerely,

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Received
Mbenarase

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Shrutika Harishchandra Jagtap Date of Health Check-up:

Address (Local): Bhekarainagar. Male / Female: Female.

Address(Permanent) Bhekarainagar. Birth Date: 29/08/2003

Class: F.Y.B.Pharm Roll No: 28

Contact No: 8605111998 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☑ Mixed ☐ **Exercise:** Yes ☑ No ☐

Sports : No ☑ Yes ☐ **Extra-Curricular activity:** No ☐ Yes ☑

If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka ☐

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any):

Menstrual History (for Females): ✓ Regular Excessive Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

Height: cms. **Weight:** 42 K.gms. **Pulse:** 88 **B.P.** mm of Hg

C.V.S.: S1S2 (N)

R.S.: AEBE clear

P/A: Soft NT.

SKIN: NAD

EAR: NAD

NOSE: NAD

THROAT: NAD

EYES: NAD

TEETH & GUMS: NAD

for Dr. Baravase

Signature of the Hon. Medical Officer

M. O.
Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune-44

CERTIFICATE

Certify that Shri./Smt.: Shrutika Harishchandra Jagtap.

class F. Y. B. Pharm Roll No. 28 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. Viral fever 2. _____ 3. _____ and is advised to consult: _____ and submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:

   —

4. Treatment advised:

   - Rest, plenty of fluids.
   - soft, light diet (fruits, dal khichdi etc).

Dr Banarase

Signature of the Hon. Medical Officer

M. O.
Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Snehal Ananda Kumbhar Date of Health Check-up:

Address (Local):

Male / Female: Female

Address(Permanent) At/p. Donoli, Tal: Shahuwadi Dist.: Kolhapur Birth Date: 17/04/2004

Class: F.Y. B.Pharm Roll No: 35

Contact No: 9973969898 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☑ Mixed ☐ **Exercise:** Yes ☐ No ☑

Sports : No ☑ Yes ☐ **Extra-Curricular activity:** No ☐ Yes ☐
If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka ☐

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any):

Menstrual History (for Females): Regular ✓ Excessive Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

Height: 164 cms. **Weight:** 50 K.gms. **Pulse:** 90 **B.P.** 110/70 mm of Hg

C.V.S.: S1 S2 (N)

R.S.: AEBE clear

P/A: Soft-

SKIN: Normal.

EAR: Normal

NOSE: Normal.

THROAT: Normal.

EYES: Normal

TEETH & GUMS: Non

Signature of the Hon. Medical Officer

M. O.
Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44

CERTIFICATE

Certify that Shri./Smt.: Snehal Ananda kumbhar

class F.Y.B.pharm Roll No. 35 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. Constipation 2. _____
   3. – and is advised to consult: _____ and
   submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:
   Hmg
4. Treatment advised:
   Syp Duphalac 15ml xHS

Signature of the Hon. Medical Officer

Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Sonali vansing padvi

Date of Health Check-up: 21/2/2023

Address (Local): Hadpsar

Male / Female: ✓

Address(Permanent) at kalibel, Amoni

Birth Date: 23/9/2000

Class: S.Y. B pharm Roll No: 71

Contact No: 7875081217 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☐ Mixed ☑ **Exercise:** Yes ☑ No ☐

Sports : No ☐ Yes ☑ **Extra-Curricular activity:** No ☐ Yes ☑
If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka ☐

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☐

Allergy (If any):

Menstrual History (for Females): Regular ✓ Excessive Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

Height: cms. **Weight:** K.gms. **Pulse:** 82 **B.P.** mm of Hg

C.V.S.:
R.S.:
P/A:
SKIN:
EAR:
NOSE:
THROAT:
EYES:
TEETH & GUMS:

NA

Dr. Pooja Gaikwad

Signature of the Hon. Medical Officer

Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44

CERTIFICATE

Certify that Shri./Smt.: Sonali Vansing padvi

class S4 B pharm Roll No. 71 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. anaemia 2. _____
   3. _____ and is advised to consult: _____ and
   submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:

   - Hgm

4. Treatment advised:

   - ~~Tab~~. Becadsule 1-0-0 | x 15 dy.
   - Gilbtic 10ml - 0 - 10ml |

Signature of the Hon. Medical Officer

M. O.
Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Tanuja Sunil Jadhav. Date of Health Check-up: 21/02/23.

Address (Local): Gondhalenagar, Gangotri Park, Hadapsar, Pune- 28. Male / Female:

Address(Permanent) Same as Above. Birth Date: 05/05/2004.

Class: F.Y. B.pharm. Roll No: 26.

Contact No: 9850479646. Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☑ Mixed ☐ **Exercise:** Yes ☑ No ☐

Sports : No ☑ Yes ☐ **Extra-Curricular activity:** No ☐ Yes ☐
If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any):

Menstrual History
(for Females): Regular ✓ Excessive Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

Height: 164 cms. **Weight:** 38 K.gms. **Pulse:** 78 **B.P.** 120/80 mm of Hg

C.V.S.: S1S2 (N)
R.S.: AEBE Clear
P/A: Soft NT
SKIN: Dryness.
EAR: Normal.
NOSE: Normal.
THROAT: Normal.
EYES: Normal 6/6
TEETH & GUMS: Nor

Signature of the Hon. Medical Officer

M.O.
Ayurved Rugnalaya & Sh... g Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune 44

CERTIFICATE

Certify that Shri./Smt.: Tanuja Jadhav

class F.Y. B. pharm. Roll No. 26 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. — 2. —
   3. _____ and is advised to consult: — and
   submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:
   —
4. Treatment advised:
   —

Signature of the Hon. Medical Officer

M. O.
Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44

2022 - 2023

F. Y. B. Pharm

F. Y. M. Pharm

Direct S. Y. B. Pharm

Health checkup - 21-02-2023

PDEA's College of Ayurveda & Research Centre, Pune.

F.Y.B. pharm.

Sr no	Name of student	Class	Mobile Number	F/M	Blood Group	Major finding			Sign
						Height	Wt	BP	
①	Samruddhi Choudhary	F.Y.B.Pharm	8007778659	F	A+ve	5.2 feet	50.5kg	110/80	
②	Akash Kajale	F.Y.B.Pharm	7498442558	M	A+ve	164	49kg	110/70	
③	Poornima Tage	F.Y.B Pharm	9763116092	F	B+ve	155	45kg	110/90	
④	Kambdeshraddha	F.Y.B Pharm	9322394195	F	O+ve	150	45kg	110/70	
⑤	Sonnad. Khushi	F.Y.B.Pharm	9356891502	F	B+ve	154	79kg	120/80	
⑥	Sonkamble Dheeraj	F.Y.B.Pharm	9021439316	M	B+ve	167	50kg	120/80	
⑦	Gaikwad Manthan	F.Y.B.Pharm	8329208548	M	O+ve	175	61kg	110/70	
⑧	Aklesh Chauhan	F.Y.B Pharm	8793347413	M	A+ve.	172	56kg	120/80	

Sr no	Name of student	Class	Mobile Number	F/M	Blood Group	Major finding			Sign
						Height	BP	Wt	
9	Kiran Nirmal	F.Y.B.Pharm	8446382664	F	B^+ve	157	110/70	43	Nirmal
10	Shreya Narke	F.Y. Bpharm	8010326798	F	B^+ve	163	120/90	50kg	Shreya
11	Shubham Chavan	F.Y B Pharm	9356407377	M	O^+ve	5.6 feet	130/80	47kg	
12	Shrutika Jagtap	F.Y.B.Pharm	8605111998	F	A^+ve	5.3 ft	110/70	42 kg	Shrutika
13	Sanika Kale	F.Y.B Pharm	9175099351	F	A^-ve	157	118/78	43kg	Kale
14	Rekha Choudhary	F.Y.B Pharm	9764929277	F	B^+ve	5.4 Feet	110/70	54 kg	
15	Vaishnavi Ghadge	F.Y.B Pharm	9112331576	F	B^+ve	151	120/80	40 kg	Vaishnavi
16	Mayur Ransing	F.Y.B Pharm	7709934161	M	AB^+ve	174	100/80	61 kg	
17	Sabale Priyanka	F.Y.B Pharm	8010200989	F	A^+ve	5.2 feet	110/80	60 kg	Sabale
18	[illegible]	F.Y.B Pharm	8208619014	F	A^+ve	162	110/90	68 kg	Sanskruti

Sr no.	Name of student	class	Mobile No.	F/M	Blood group	Major findings			Sign
						Height	Wt	BP	
20	Akansha. Sachin. Jambhalkar	F.Y.B.Pharm	9322365297	F	B^{+ve}	151	38 kg	110/80	Akansha.
21	Sakshi Premnath Gaware	F.Y.B Pharm	9834207842	F	B^{+ve}	161	57 kg	120/90	Sakshi
22	Tamboli Safura Anwar	F.Y.B Pharm	9156303240	F	A^{+ve}	5.2 ft	39 kg	110/70	Safura.
23	Neha Avinash Hinge	F.Y.B pharm	7276065175	F	B^{+ve}	5.3 feet	48 kg	110/70	Hinge
24	Aditi Dattatray Kumbharkar	f.Y B pharm	9130891932	F	B^{+ve}	157	54 kg	120/70	Aditi
25	Neha Bharat Jamdade	F Y B pharm	8446117530	F	A^{+ve}	156	56 kg	100/60	Neha
26	Tina Manoharlal Dangi	F.Y B Pharm	9359799383	f	O^{+ve}	159	78 kg	170/70	
27	Taher Unus Shaikh	F.Y. B pharm	7558697282	M	O^{+ve}	170	67 kg	110/70	Shaikh.
28	Ashwini Govind Nanaware	F.Y.B pharm	9022153216	F	B^{+ve}	150	52 kg	110/70	Ashwini

Sr no.	Name of Student	Class	Mobile Number	F/M	Blood Group	Major findings			Sign
						Height	wt	BP	
80	Snehal Ananda Kumbhar	F.Y.B.Pharma	9973969898	F	A+ve	164	50kg	110/70	
81	Vrudhi Rukmaya Gocoda	F.Y B Pharm	9028373871	F	O+ve	157	51kg	120/60	
82	Samruddhi Dameskar	F.y - B-pharm	7767080047	F	O+ve	156	44kg	110/70	
33	Apeksha Ashok potkule	F.Y.B.pharm	9209149701	F	B+ve	157	40kg	110/70	
34	Snehal mahajan	FY. B. Pharm	8421239646	F	A+ve	5.3ft	41kg	120/70	S.S.Mahajan
35	Nikita pawara	F.Y.B.Pharm	9921086197	F	B+ve	156	50kg	120/80	
36	Dnyaneshwari Dhole	F.Y. B Pharm	8169383141	F	O+ve	162cms	43kg	110/80.	
37	Aishwarya Punalkar	F.Y.B.Pharm	9359884769	F	B-ve		53kg	110/80	
38	Tanmay Kunjir	F.Y B Pharm	9921515700	M	A+ve	175	57kg	120/80	

Sr no	Name of student	class	Mobile Number	F/M	Blood Group	Major findings Height	Wt	BP		Sign
40	Sujit Haye	F.Y.B	7264925040	M	B+ve	180	65kg	110/70		Haye
41	Prathviraj S. Ogale	F.Y.B	9284971214	M	O+ve	161	61kg	110/70		Ogale
42	Shivale Gauri	F.Y.B	8580327111	F	A+ve	4.5ft	40 kg.	110/90		
43	Vaishnavi Shelke	F.Y.B	9922900500	F	A+ve	162 cm	40 kg	110/90		
44	Ajit Muktiram Rachmale	F.Y.B	8319541082	M	A+ve	182	62kg	110/80		Akachale
45	Tushar Zole	F.Y.B	9096917142	M	B+	5.6ft	70kg	130/80		
46	Prashant Yadav	F.Y.B	9616557812	M	A+	5.3ft	50 kg	110/70		
47	Giramckar Neha	F.Y.B	9561754161	F	O+ve	161	50kg	100/70		Giramkar
48	Payal Chavan	F.Y.B	9322179363	F	A+ve	-	56kg	130/70		Phavan

Sr no	Name of student	Class	Mobile Number	F/M	Blood group	Major finding Height	Wt	BP		Sign
50	Bhoj Shruti Shivaji	F.Y.B	9322945481	F	A^{+ve}	166	55 kg	110/70		Bhoj
51	Bhusara Rohit Raghunath	F.Y.B	9209121810	M	O^{+}	160	5.5 kg	110/80		Bhusara
52	Tanvee Uday Munde	F.Y.B	8169074655	F	B^{+}	5 ft	45.5 kg	110/70		Munde
53	Shravani T. Jagtap	F.Y.B Pharm	9284420606	F	$B^{+}Ve$	1.57	46.5 kg	110/80		Shravani
54										
55										
56										
57										
58										
59										

Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

M.O.
Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44

Direct S.Y.B. pharm

Sr no	Name of the Student	class	Mobile Number	F/M	Blood Group	Major findings Height	Wt	BP	Sign
01	Shravani. Yeshwant. Dalvi	S.Y.B	8308385473	F	O+ve	5.3ft	50kg	110/70	Dalvi
02	Snehal Rajendra Jadhar	S.Y.B.	8010170876	F	A+ve	160 cm	52 kg	120/80	Snehal
03	Sejal Santosh Thorat	S.Y.B	9850861030	F	A+ve	156 cm	60 kg	100/70	Sejal
04	komal Hiraman Hake.	S.Y.B.	7058559410	F	A+ve	5.2 ft	48 kg	110/80	Komal
05	Sonali vansing padvi	SY.B.	7875081217	F	B+v	150 cm	52 kg	110/90	Sonali
06	Shraddha Bhimanna Bhosbade	SY.B.	7028657048	F	A+ve	5.3ft.	50kg	100/90	Shraddha
07	Mansi. Babar	S.Y.B	9970184509	F	O+ve	5.4ft	55kg	110/70	Mansi
08	Ankita Shinde	S.Y.B	9373757103	F	AB+ve	5.5ft	52kg	120/80	Ankita
09	Avantika Dhore	S.Y.B	9156280266	F	A+ve	5.3ft	50kg	100/80	Dhore
10	Yash Chougule	S.Y.B	9130263033	M	B+ve	5.7ft	80kg	120/70	Yash
11	Jaydeep Shinde	S.Y.B	9322429424	M	O+ve	5.9ft	70kg	110/80	Jaydeep

Student's Development Officer

PRINCIPAL
P.D.E.A's

F. Y. M. pharm.

Sr. no.	Name of student	class	Mobile Number	F/M	Blood group	Major finding Height	wt	BP	Sign
1	Krishna Sable	F.Y.M.pharm QA	8806867764	Male	B+	169	68 kg	130/80	
2	Dagadgave Sudhir	F.Y.M.Pharm P.ceutics	9689180519	Male	O+	6 feet	55kg	120/80	
3	Virkar Prathamesh Ravindra	F.Y.M pharm QA. Ceutics	8390094681.	Male	A+	5.8 feet	69 kg	110/80	
4	Panchal Shubham Shivraj	F.Y.M Pharm P ceutics	9284343406	Male	O+	160	65 kg	110/70	
5	Prathamesh Pandurang Gavali	F.Y.M. Pharm P. ceutics	7798646932	Male	AB+	170	60kg	110/70	
6	Dahifale Rushikesh	FYMPharm QA	9309784406	male	A-	170	58 kg	110/70	
7	Hirave Prathamesh	F.Y.M.pharm P.ceutics	9022870310	Male	B+	168	52 kg	120/82	
8	Parade Nilesh	F.Y.M.Pharm Ceutics	9359456856	Male	B+	178	75 kg	110/80	
9	Arantika Nalawade	F.y.mpharm QA	7822854141	Female	B+	160	60 kg	120/80	
10	Jadhav. Vaishnavi.	F.Y.M.Pharm QA.	9011876916	Female	B+	170	54kg	110/70	
11	Bhawana Bangare	F.Y M Pharm	9284849550	F	B+	156	54kg	110/70	
12	Trupti Shinde	F.Y.M.Pharm QA	9860867043	F	B+	158	45kg	100/70	
13	Deshmukh Pratiksha	F.Y.M.Pharm QA	8983477990	F	B+	5.3 ft	54kg	100/80	

(3)

Sr no.	Name of Student	class	Mobile Number	F/M	Blood group	Major findings Height	wt	BP	Sign
15	Renuka Jaiswal	FY.M Pharm	7020456830	F	B+ve	5.2 feet	60kg	110/70	
16	Simran Prajapati	F.Y.M.Pharm	7666176464	F	AB+	5.3 ft	55kg	100/80	
17	Prashant Balasaheb Pawar	F.Y.M Pharm	7796757555	M	B+ve	186	92kg	130/90	
18	Pallavi Kishor Dalvi	F.Y. M.Pharm	9767701671	F	A+ve	5.2ft	60 kg	120/80	
19	Komal Nayter	F.Y.M.Pharm	7082486171	F	A +ve	158	54kg	110/70	
20	Mengade Dnyaneshwari	F.Y. M. Pharm	9373820052	F	B +ve.	150	51kg	100/70	
21	Anuradha Daundkar	F.Y.M.Pharm	9922447687	F	B +ve	5.5 feet	55kg	100/80	
22	Jyoti Mirgudwad	F.Y.M.Pharm	9860633453	F	AB+ve	5.3ft	53kg	110/70	
23	Yewale Nirmala	F.Y M Pharm	7066693967	F	AB+ve	155 cm	56kg	120/80	
24									
25									

Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

M.O.
Ayurved Rugnalaya & Sterling Multispeciality Hospital
Sec. 27, Nigdi, Pradhikaran, Pune -44.

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences &

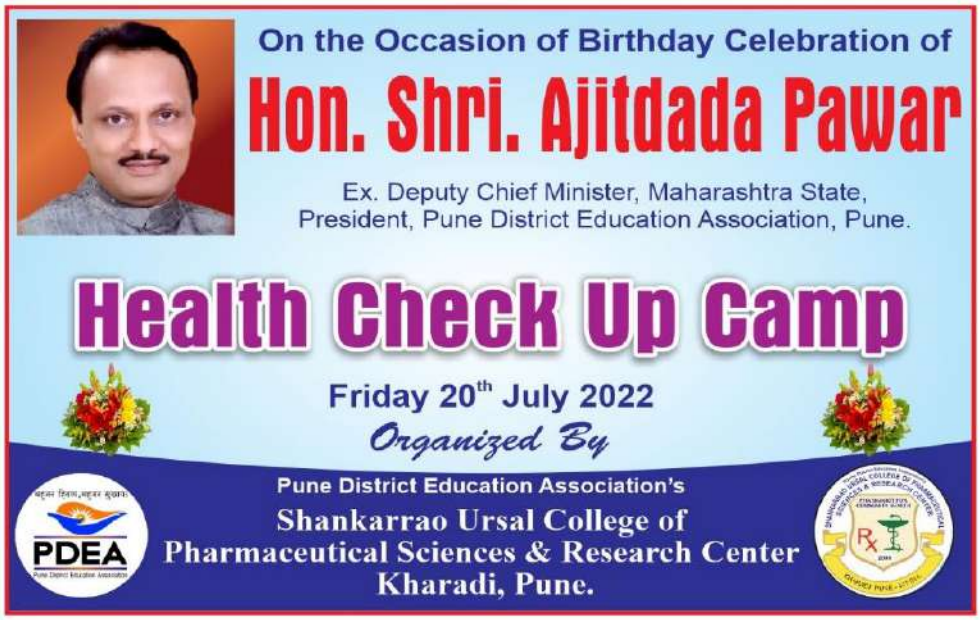
Research Centre, Kharadi, Pune-14.

A Report on

Free Health Checkup Camp (20th July 2022)

(In association with Balaji Hospital Kharadi, Pune)

On the occasion of 63rd birthday celebration of Hon. Shri. Ajiitdada Pawar, Ex. Deputy Chief Minister Government of Maharashtra and President **Pune District Education Associations, the** college organized Free Health Checkup Camp in association with Balaji Hospital Kharadi, Pune. The team of doctors, Orthopedic surgeon- Dr. Sunil Satav, ENT surgeon- Dr. Harsha Satav, Physiotherapist-Dr. Amit Shrivstav and Dr. Nayan Kadav, and general physician- Dr. Rahul Jadhav checked and advised the students and staff members. Dr. Ashok Bhosale, Principal of the institute guided college students regarding importance of regular health check-ups. The students and staff students actively participated in health checkup camp. This Free Health Checkup Camp was coordinated by Mrs. Trusha P. Shangrapawar



Free Health Checkup Camp on the occasion of birthday celebration of Hon. Shri. Ajiitdada Pawar



Dr. Harsha Satav (ENT) consulting students



Dr. Sunil Satav (orthopedic Surgeon) Consulting Principal Dr. Ashok Bhosale



Dr. Sunil Satav (orthopedic Surgeon) Consulting students



Physiotherapist-Dr. Amit Shrivstav and Dr. Nayan Kadav consulting student and staff

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Mrs. Trusha P. Shangrapawar
Cultural Co-ordinator

Pune District Education Association's

Shankarrao Ursal college of Pharmaceutical Sciences & Research Centre,

Kharadi, Pune-14.

Health Check Up Camp- 20/07/2022

Sr. No.	Name of the Student/Participants	Year	Sign
1.	Choudhari Abhijeet Shivlal	T.Y. B Pharm	
2.	Rathod Bharat Babulal	T.Y. B Pharm	
3.	Choudhary Yogesh Kuparam	T.Y. B Pharm	
4.	Bohra Sayam Sunil	T.Y. B Pharm	
5.	Dake Shubham Dadabhau	T.Y. B Pharm	
6.	Dhale Rushikesh Krishna	T.Y. B. Pharm	
7.	Sumit Mohite	T.Y. B pharm	
8.	Shubham Kaspate	T.Y. B pharm	
9.	Suyash Thorat	T.Y. B pharm	
10.	Rutvik Jagtap	T.Y. B pharm	
11.	Hrishikesh Jagtap	T.Y. B pharm	
12.	Aditya mohite	TY B Pharm	
13.	Jadhav shivjeet	T.Y B Pharm	
14.	Vaibhav kirtane	T.Y. B Pharm	
15.	Tejas khaladkar	T.Y. B. Pharm	
16.	Manish Kadam	T.Y. B. Pharm	
17.	Vinit Kale	T.Y. B Pharm	
18.	utkarsh Gaikwad	T.Y. B. Pharm	
19.	vidhate Rachna	T.Y. B. Pharm	
20.	Nalknavare Deepali. R	T.Y. B Phar	
21.	Drushti Sonawane	T.Y. B Pharm	
22.	Yash Shegokar	T.Y. B Pharm	
23.	Sakshi Dolare	T.Y. B Pharm	
24.	Akshada Dombe	T.Y. B Pharm	
25.	Nikita Gaikwad	T.Y. B Pharm	
26.	Jay Lagad	T.Y. B Pharm	
27.	Pawar Vikas R.	T.Y. B. Pharm	

Mrs. T. P. Shangrepawar

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

28.	Srushti Harisingh Rajpurohit	T.Y.B.Pharm	
29.	Pallavi Girase . m.	T.Y.B. Pharm	
30.	Shreya Salunke	T.Y.B. Pharm	
31.	Pranali Shewale	T.Y.B. Pharm	
32.	Aarti Sawant	T.Y.B. Pharm	
33.	Ghule Vaibhavi	T.Y.B.Pharm	
34.	Ghule Sonali	T.Y.B.Pharm	
35.	Ghavate Siddhi	T.Y.B.Pharm	
36.	Tambe Vaibhav	T.Y.B.Pharm	
37.	Omkar Zalte	T.Y.B.Pharm	
38.	Ajay S. Pawar	S.Y.M.ph.	
39.	Vasundhara S. Raje	T.Y.B Pharm	
40.	Ingole Rajlaxmi	T.Y.B.Pharm	
41.	siddhant Dhumal	T.Y.B.Pharm	
42.	Nikita Holkar	T.Y.B.Pharm	
43.	Rutuja Gund	T.Y.B.pharm	
44.	Sakshi Mane	T.Y.B pharm	
45.	Gitanjali Bhosale	T.Y.B pharm	
46.	~~Ra Holkar Nikita~~	~~T.Y.B.pharm~~ T.Y.B.pharm	
47.	Dorage Shreya	T.Y.B.Pharm	
48.	Hamdi Uzma Aarsha	T.Y.B.Pharm	
49.	Mane Rohini	T.Y.B.Pharm	
50.	Gauri Kolhe	T.Y.B.Pharm	
51.	Mayur Mate	T.Y.B.Pharm	
52.	Jagruti Dhumbre	T.Y.B.Pharm	
53.	Rajkar Laukik C.	T.Y.B.Pharm	
54.	Bhakti Todmal	T.Y.B.Pharm	
55.	Gaurav Jadhav	T.Y.B.Pharm	
56.	Vaibhav Jadhav	T.Y.B.Pharm	
57.	Thokal Sakshi B.	T.Y.B.pharm	
58.	Atole Akanksha	T.Y.B.pharm	
59.	~~Nikita Rajaram Holkar~~	T.Y.B.pharm	
60.	Badhe payal S.	T.Y.B.pharm	
61.	Nilam Bavdhane	T.Y.B.pharm	
62.	pratiksha pawar	T.Y.B.pharm	
63.	Shrinath Bahadur	T.Y.B pharm	
64.	Esha Kamble	T.Y.B pharm	

Mrs. T. P. Shangrapawar

2/6

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

65.	Khushi kharabe	T.Y. B.pharm	Khushi
66.	Mrudula thombre	T.Y. B pharm	Mrudula.
67.	Gosavi Subhash S	T.Y.B. pharm	Gosavi.
68.	Hole shubham M.	T.Y.B.pharm	Hole.
69.	Deshmane kamlesh.R	S.Y.M.ph.	Deshmane
70.	Birase Pallavi Sarjerao	S.Y.M.pharm	Pallavi
71.	Tanmayi Kalamkar	S.Y.M-Pharm	Kalamkar.
72.	Avhad Pratiksha	syn pharm	
73.	Shinde Harshal.		
74.	Tanvi Therat	S.Y.M.Pharm	Tanvi
75.	Damini.S. patil	S.Y.M.pharm	Patil
76.	Shinde Harshal	—11—	Harshal
77.	Bramhane Jayshri	S.Y.M.pharm	Bramhane JA
78.	Beldar Aditi	—11—	Aditi
79.	Bhondve Riya	S.Y.M.Pharm	Riya
80.	Mhajan Vishal	—11—	Vishal
81.	Rokade Amol.	—11—	Amol
82.	Biradar Pramod.	—11—	B.pramod
83.	Sanaesh Nagargoje.	—11—	Sandesh
84.	Aadeppa vishakha	S.Y.B.pharm	Aadeppa
85.	Asu Athara Anil	S.Y.B.Pharm	Asu
86.	Awhale Shivraj kondiba	S.Y.B.pharm	Awhale
87.	Awhale vaishnavi Tatayba	S.Y.B Pharm	Awhale
88.	Bhure Shvetal Ramdas	S.Y.B.Pharm	Bhure
89.	Chemmakani Shrikant tirupati	S.Y.B.Pharm	Chemmakani
90.	Chavan Divya kalyan	S.Y.B.pharm	Chavan
91.	Chaugule Akanksha	—11—	Ak
92.	Gokhale Hoosh Ramchandra	S.Y.B.Pharm	Gokhale
93.	Gade Bhakti Ashok	S.Y B.Pharm	Bhakti
94.	Dixit Rutuja Ashok	S.Y.B.Pharm	Rutuja
95.	Gawde Rutuja Prabhakar	S.Y B Pharm	Rutuja
96.	Gadekar Sakshi Suresh	S.Y.B Pharm	Sakshi
97.	Ananya Jadhav	S.Y.B.Pharm	Ananya
98.	Jadhav kalyani	S.Y.B.pharm	K.Jadhav
99.	Jadhav Komal	S.Y.B Pharm	Jadhav
100.	Sakshi Dhumal	S.Y.B.Pharm	S.P.Dhumal
101.	Vaishnavi Kalbhor	S Y B ph	Kalbhor

Mrs. T. P. Shangrapawar

3/6

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

102.	Vaishnavi Khandagale	S.Y. B Pharm	Khandagale
103.	Bhagyalaxmi kadam	S.Y.B.Pharm	Kadam
104.	Tanmay Jagtap.	S.Y.B.pharm.	Jagtap
105.	Kshirsagar Aishwarya	-11-	Kshirsagar
106.	Kale Tejal	-11-	Kale.
107.	Lungare Nitesh	-11-	
108.	Jadhav. Konal	-11-	Jadhav.
109.	Sakshi dhumal	-11-	S.P. Dhumal
110.	Shambhuraje Dhumal	S.Y.B.Pharm	Dhumal
111.	Chaudhari Gaurav	S.Y.B. Pharm	Chaudhari
112.	Siddharth Bodke	S.Y.B. Pharm	B
113.	Jeetendra Chaudhary	S.Y.B. Pharm	Jaudhary
114.	Divya chavan	-11-	DC
115.	Akenksha Chougule	-11-	
116.	Rathod Raj	-11-	
117.	Shitole omkar	-11-	Rathod
118.	Pratibha Kodag	"	Kodag
119.	Vartika Singh	"	Vatika.
120.	Sachin Chavan	11 - 11	Chavan
121.	Suraj Parkale	11 - 11	
122.	Kokate Siddesh	II - II	
123.	Prathamesh Tanwar	B. Pl	
124.	Gabhale Harsh Ramdasha	S.Y. B Pharm	
125.	Gadekar Sakshi Suresh	S.Y.B Pharm	Sakshi
126.	Yeshkumar Wankhede	S.Y.B Pharm	
127.	Pedhekar Ankita	S.Y.B. Pharm	Pedhekar
128.	Salunke Ritesh	S.Y.B. pharm	Salunke.
129.	Yake Neha	Final. Y. B. Phar	Yake
130.	Anisa Mulla	Final Y.B. pharm	Anisa
131.	Gauri V. Khandve.	Final year BPharm	Khandve.
132.	Anuja Patil.	Final year B.Pharm	Anuja.
133.	Ruchita B. Waghmode	final year B.Pharm	Ruchitaa.
134.	Pratiksha B. Salode	final year B.Pharm	Pratiksha.
135.	Rutuja Thorat	-11-	Rutuja.
136.	Komal Shelke	-11-	Komal.
137.	Akshada Raghatwan	-11-	
138.	Minkashi Londhe	-11-	Londhe

128 + 50 = 178

Mrs. T. P. Shangarpawar

4/6

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

139.	Prajakta Pawar	-11-	Pawar
140.	Snehal Ugale	-11-	Snehal
141.	Shweta J Khiratkar	-11-	Khiratkar
142.	Shruti Khole	-11-	Khole.
143.	Surve Sakshi	-11-	S. Surve
144.	Rutuja Kawade	-11-	Rutuja
145.	Kalshetti Aishwarya	-11-	Aishwarya
146.	Mansi Mokashi	-11-	Mokashi
147.	Undre Darshana Sanjay	final year B	
148.	Raj Dake	Final year	Raj.
149.	Kiran Nikalje	-11-	Ki
150.	Vishal Shinde	-11-	Vishal
151.	Dhanle Varsha	Final year B.Pharm	
152.	Paigude Shradha	-11-	Paigude
153.	Abhijit. k. pharate	-11-	Abhi
154.	Vaishnavi S Madane	-11-	
155.	Nandini D. Bhujbal	-11-	Bhujbal
156.	Nikita Bhosure.	-11-	Bhosure.
157.	Snehal Bichukale	-11-	Bichukale
158.	Kudale Swarna	-11-	Kudale
159.	Snehal chaudhary	Final Year BPh	Sneha
160.	Afiya Shaikh	Final yr B.ph	Shaikh
161.	Deepali Sagar	Final Yr. B.Ph.	Deepali
162.	Prachi Raipure	Final Yr B Pharm	Prachi
163.	Priti Pote	Final Year B. Pharm	Priti
164.	Aishwarya Kamthe	-11-	Kamthe.
165.	Mansi Bhamare	final Year B.ph	Bhamare
166.	Rinku Dhanje	final year	Rinku
167.	Diksha. M. Wadhmare	-11-	Wadhmare
168.	Sejal. S. Walay	-11-	Walay.
169.	Harshada S. Kumbharkar	-11-	Kumbharkar
170.	Dhavale Sahil	-11-	
171.	Deepak B. Kokani	-11-	
172.	Ajay B. Wakchaure	-11-	Ajay
173.	Nikhil Deepak Bhapsekar	-11-	Bhapsekar
174.	Akshay B. Atnoale	-11-	Atnoale.
175.	Athara R Aranya	-11-	

Mrs. T. P. Shangarwar

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

176.	Rajuri Rajurohit		
177.	Sarode Rohikiran. D	Final year B pharm	Sarode
178.	Pallavi Damale		
179.			
180.			
181.			
182.			
183.			
184.			
185.			
186.			
187.			
188.			
189.			
190.			
191.			
192.			
193.			
194.			
195.			
196.			
197.			
198.			
199.			
200.			
201.			
202.			
203.			
204.			
205.			
206.			
207.			
208.			
209.			
210.			
211.			
212.			

Answer

Mrs. T. P. Shengrepawar

6/6

PRINCIPAL
P. D. E. A's
Shankarrao Kirad College of
Pharmaceutical Sciences & Research Centre
Khargad, Pune 411048

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Health Check-up Camp- 20th July 2022

Sr. No.	Name of the faculty (Teaching Staff)	Designation	Mobile	Signature
1.	Dr. Amit Kasabe	Asst. Prof.	7709366816	
2.	Khode P.H.	—11—	8888872264	
3.	Dr V.U. Baeje	Professor	9923265133	
4.	Nehorkar Nitin	Asst. Prof.	8484900931	Nitin
5.	T. R. Kande	Asst Prof.	8669062889	T.R.Kande
6.	B. G. Shelar	Asst. Prof	7744901138	Shelar
7.	P. G. Kamun	—11—	7666445155	
8.	Veer V.S.	Asst Prof	9604280837	
9.	Survase, S. R	Lab. Attendant	9881-858774	
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				

Dr. Ashok Bhosale

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Health Check-up Camp- 20th July 2022

Sr. No.	Name of the faculty (Non- Teaching staff)	Designation	Mobile	Signature
1.	Pathan A.B	Lab. Assist	9860469578	
2.	[illegible]	Jr clerk	7637373757	
3.	Mr Pawar S.N	Store keeper	8275741467	
4.	Thakre P.M.	Thakre P.M	8888872264	
5.	V.N. Bhagat	Lab. Assistant	9765458159	
6.	S.S. Parkhi	Jr. clerk	9765944749	
7.	[illegible]	[illegible]	8806791406	
8.	Nagarali S.B	Peon	9881832364	
9.	Damini. S. patil	Lab. Assistant	7218654586	Patil
10.	A. S. Survase	Peon	9322779979	
11.				
12.				
13.				
. 14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				

Dr. Ashok Bhosale

1
1

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Health Check-up Camp- 20th July 2022

Sr. No.	Name of the faculty (Non- Teaching staff)	Designation	Mobile	Signature
1.	Pathan A.B	Lab. Assist	9860469578	
2.	[illegible]	Jr clerk	7637373757	
3.	Mr. Pawar S.N	Store keeper	8275741467	
4.	Khade P.M.	Khade P.M	8888872264	
5.	V.N. Bhandare	Lab. Assistant	7745458159	
6.	S.S. Parkhi	Jr. clerk	9765944749	
7.	[illegible]	[illegible]	8806791406	
8.	Nagarali S.B	Peon	9881832364	
9.	Damini .S.patil	Lab. Assistant	7218654586	
10.	A. S. Survase	Peon	9322779479	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				

Dr. Ashok Bhosale

1
1

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Date- 15/07/2022

Notice No- 212

Health Check-up Camp

All the teaching and non- teaching staff members of B. Pharm and M. Pharm are hereby informed that the college is celebrating the 63rd birthday of Hon Shri. Ajitdada Pawar, Ex Deputy Chief Minister, and President, Pune District Education Association, and on the occasion of this, college has organized Health Check-up Camp, a team of the doctor from the Balaji Hospital, Kharadi would be conducting the camp on 20th July 2022 in our college in seminar hall from the 2.0 pm to 5.30 pm, so all the staff members must remain present for the camp for their health checkup. For further details, you may contact the undersigned.

(Contact person – Mrs Trusha P. Shangrapwar- 9823620854)

Mrs. T. P. Shangrapawar
Cultural coordinator

Dr. Ashok Bhosale
PRINCIPAL
P. E. A's
Pharmac... Ursal Co...ge of
...& R... ...rch Centre
...110 14

D. A. J. Kasabe

Veer V. I.

Dhekade V. V.

PMC

K. G. Kam

Katade S. S

~~Karpe SK~~

Jagtap V B

T. R. Kande

V. N. Bhandare

B. G. Shelar - Shelar

R. B. Ghige

K. R. Ghule

Sawarkar

Gunde C. V.

Jamadar

Parkhi S. S.

Karpe SK

Mr Pawar S. V

Dr. V. U. B

Dr. [illegible]

M. M. Sayyad

V. N. Bhandare -

A. S. Survase -

S. S. Sonawane -

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Date- 15/07/2022

Health Check-up Camp -Roles and Responsibilities

All the staff members are informed to take a note of their roles and responsibilities assigned for the health checkup camp organized on the occasion of celebration 63rd birthday of Hon Shri. Ajitdada Pawar, Ex Deputy Chief Minister, and President, Pune District Education Association, on 20th July 2022 in our college in seminar hall from the 2.0 pm to 5.30 pm.

Sr. No.	Responsibilities	Name of the faculty	Signature
1.	Anchoring	Mrs. Trusha Shangrapawar Ms. Kiran Ghule	
2.	Registration	Ms. Tejaswini Kande	
3.	Hall Arrangement	Mr. Vikram Veer Ms. Bhagyashree Shelar Mr. A. B. Pathan Mr. Rajesh Ghige Mr. Shashikant Nagaralli Mr. D. B. Chande Mrs. V.N. Bhandare	
4.	Guest Felicitation	Ms. Kiran Ghule Ms. Naziya Sayyed	
5.	Guest Refreshment	Mrs. M. G. Zalte Mr. S. R. Suravase Mrs. A. S. Suravase	
6.	Vote of thanks	Mr. Amit Kasabe	

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

1/1

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune- 411014.

Health Check Up Camp
&
A Seminar on Health Awareness

20th July 2022

PROTOCOL

Sr. No.	Name of Event	Responsible Person	Time
1.	Saraswati Pujan	All Dignitaries	2.0 pm to 2.05 pm
2.	Preamble & Anchoring	Prof. Trusha Shangrapawar Prof. Kiran Ghule	2.05 pm to 2.10 pm
3.	Felicitation of Speaker	Principal	2.10 pm to 2.15 pm
4.	Address by Principal (Diploma)	Dr. Sachin Kotwal	2.15 pm to 2.20 pm
5.	Address by Principal	Dr. Ashok Bhosale	2.20 pm to 2.25 pm
6.	Address by Speaker	1. Dr. Sunil Satav, Orthopedic Surgeon, Balaji Hospital (Topic: - Back Pain) 2. Dr. Harsha Satav, ENT Surgeon, Balaji Hospital (Topic :- Immunity)	2.25 pm to 2.45 pm 2.45 pm to 3.05 pm
7.	Vote of Thanks	Dr. Amit Kasabe	3.05 pm to 3.10 pm
8.	Health Check Up Camp	----	3.15 pm to 5.30 pm

Mrs. Trusha P. Shangrapawar
Co-ordinator

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

1/1

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 16 / 7 / 2022 Ref. No.: SUCOPSRC/ 32 /2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Dr. Sunil Satav

Orthopedic Surgeon, Balaji Hospital

Kharadi, Pune-14.

Subject: Regarding organization of Health Check-up Camp in our institute on the occasion of birthday celebration of Hon. Shri. Ajitdada Pawar.on 20th July 2022 at 2.0 pm.

Dear Sir,

As per our telephonic conversation, I am pleased to extend an invitation to you for organization of Health Check-up Camp in our institute on the occasion of birthday celebration of Hon. Shri. Ajitdada Pawar, Ex Deputy Chief Minister, and President, Pune District Education Association, Pune.

As we are aware that you are always working for the wellbeing of the society, and in an endeavor to raise the health awareness and to highlight the importance of regular health check-ups in our students and staff, we take this opportunity to invite you and your team of doctors to our college for organization of Health Check-up Camp on 20th July 2022 at 2.0 pm. So, we look forward to your presence and co-operation. (For any query please contact to coordinator Mrs. Trusha P. Shangrapawar- 9823620854)

Thanking you!

(Dr. Ashok Bhosale)
Principal

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Received
Dr Sunil S. Satav

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date: 19/7/2022 Ref. No.: SUCOPSRC/249 /2022-2023

Thanking Letter

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Dr. Sunil Satav
Director,
Balaji Hospital, Kharadi, Pune

Respected Sir,

At the outset, we wish to convey our sincere gratitude towards you for organizing the Health Check-Up Camp on the occasion of Birthday of Hon. Shri. Ajitdada Pawar Saheb, Ex-Deputy Chief Minister, Maharashtra State and President, Pune District Education Association, Pune on 20th July 2022.

We are looking forward for having much more interaction with you in the future.

Thanking you with regards.

Yours Sincerely,

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune 411014

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36857 Date : 20/07/22

Patients Name : Tejaswini Rinda Age 24y Sex f

Diagnosis : Rt turbinate hypertrophy c Acute lumbago c (2) Sciatica

Rx
DSL-97
B.P - 140 | 90 mm Hg.

- lumbar traction
- IFT back
- Ultrasound back (x 7 days)

SpO2 - 98
Pulse - 90

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	Budnase AQ Nasal spray	1	1	1	x 8 days
२					
३	T. Limcee	1	—	—	x 15 days
४	T. Mio Freedom MS	1		1	x 7 days
५	T. Aceclofenac + Rabeprazole	1		1	
६	T. Pralo Forte	1		0	
७	Dolo gel	1		1	x 7 days

सूचना :
(Instructions)

Doctor's Sign

• फेरतपासणी (Follow-up) :

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like

Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121

काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२१ या नंबरवर फोन करा.

- आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
- आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

BALAJI HOSPITAL, PUNE — BORN TO CURE

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav	Dr. Harsha S. Satav	Dr. Gopal Jaju	Dr. Chintan S. Gujarathi
Chief Ortho. Surgeon	E. N. T. Surgeon	Consultant Physician	Plastic Surgeon
M.B.B.S. D.ORTHO (Mumbai)	M.B.B.S. D.O.R.L. (Mumbai)	M.B.B.S., MD (Medicine)	M.B.B.S., M.S., D.NB, M.Ch
Regd. No. 2001/08/2920	Regd. No. 2005/02/0605	Regd. No. MCI 1139360	Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36810 Date :

Patients Name : R. Y. Patil Age 50y Sex M

Diagnosis : Rt DNS & B/L Wax

Rx BSR- 130
B.P. :- 130/90 mg

SpO2 - 97
Pulse - 87.

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	Fluticasone Nasal	गोळी	2 वेळ		X 15 days
२	spray				
३					
४	Soliwax ear drop	5-6 थेंब	5-6 थेंब		X 5 days
५					
६					
७					

सूचना : (Instructions) CT PNS - PTA

Doctor's Sign

Get Well Soon ! लवकर बरे व्हा !

• फेरतपासणी (Follow-up) :

In case of Emergency like

Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121

काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३१२२, ८८८८८४३१२१ या नंबरवर फोन करा.

- आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
- आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav	Dr. Harsha S. Satav	Dr. Gopal Jaju	Dr. Chintan S. Gujarathi
Chief Ortho. Surgeon	E. N. T. Surgeon	Consultant Physician	Plastic Surgeon
M.B.B.S. D.ORTHO (Mumbai)	M.B.B.S. D.O.R.L. (Mumbai)	M.B.B.S., MD (Medicine)	M.B.B.S., M.S., D.NB, M.Ch
Regd. No. 2001/08/2920	Regd. No. 2005/02/0605	Regd. No. MCI 1139360	Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

• Ortho	• Physiotherapy	• Paediatrics	• Facio-Maxillary Surgery	• Hand Surgery	• Plastic Surgery
• E.N.T.	• Surgery	• Gastroscopy	• Urosurgery	• Spine Surgery	• Gynecology
• Medicine	• Ophthalm	• Psychiatry	• Neurosurgery	• Pathology	• Neurophysician
• 24 hrs. Ambulance Service		• Audiometry	• Health check-up plan for companies		• No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36702 Date : 20/7/2022

Patients Name : Mr. Dr. R. S. Patil. Age _____ Sex _____

Diagnosis : Acute lumbago & ® hip sprain

℞ IFT ® thigh
- Ultrasound ® thigh x 3days

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	T. Arkinac-P 100mg BD			1	
२	T. Mifree fma HS			1	
३	T. Pan 40 Lanzo		1		
४	Orel gel	1		1	x 3days
५					
६					
७					

सूचना : (Instructions)

Doctor's Sign

Get Well Soon ! लवकर बरे व्हा !

• फेरतपासणी (Follow-up) :

In case of Emergency like _____

Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121

काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३१२२, ८८८८८४३१२१ **या नंबरवर फोन करा.**

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36815 Date :

Patients Name : Kiran Ghule Age 25yr. Sex F

Diagnosis :

℞ BSL - 102 . Spo2 : 97
BP - 110/70 Pulse : 94

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१					
२					
३					
४					
५					
६					
७					

सूचना :
(Instructions)

• फेरतपासणी (Follow-up) :

Doctor's Sign
Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like
Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121
काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२१ या नंबरवर फोन करा.

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36707

Date : 28/7/2022

Patients Name : Ms. Trisha Age _____ Sex _____

Diagnosis : Acute Lumbago c (R) Sciatica

Rx

BSL - 106
B.P - 110/70.
SpO2 - 99
Pulse - 90.

℞ Lumbar traction
- Lft back
- Thoracal back (x7days)

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	T. Arkinac-plus-MD	1		1	
२	T. Mirkee-Sr-MS	0		1	
३	T. Pan-D Hang-D	1		0	
४	Gel Gel	1		1	x7days
५					
६					
७					

सूचना :
(Instructions)

• फेरतपासणी (Follow-up) :

Doctor's Sign

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like
Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121
काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२१ या नंबरवर फोन करा.

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36862 Date: 20/07/22

Patients Name: Mrs. Vidya Kamble Age 37 Sex F

Diagnosis:

Rx
BSL - 112
B.P - 150/90.
- Lumbar traction
- IFT back
- O Heat pad back (+) days

SpO2 - 99
Pulse - 88

क्र	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	T. Arkinac P 100=00	1		1	
२	T. Aroflee Sha MS	0		1	
३	T. Pan 40 Domo	1		0	7 days
४	Volgel	1		1	
५					
६					
७					

सूचना :
(Instructions)

Doctor's Sign

• फेरतपासणी (Follow-up):

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like
Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121
काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२९ या नंबरवर फोन करा.

- आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
- आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201

BALAJI HOSPITAL, KHARADI

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36804 Date :

Patients Name : Mr. Parshuram Khade Age 35yrs. Sex M

Diagnosis :

R_x

BSL :- 92.
B.P :- 110/70.

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१					
२					
३					
४					
५					
६					
७					

सूचना :
(Instructions)

Doctor's Sign

• फेरतपासणी (Follow-up) :

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like

Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121

काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३१२२, ८८८८८४३१२१ या नंबरवर फोन करा.

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No.
LCBP201600190

BALAJI HOSPITAL, Kharadi.

Bypass Chowk, Nagar Road, Chandannagar-Kharadi, Pune -411014.
Phone.: 9850060894, 7276239333, 8888843122, 8888843121 | Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

NECK PAIN

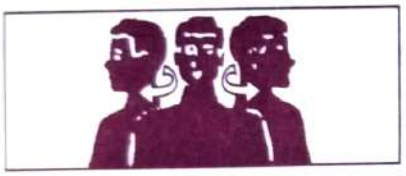
To avoid neck pain, follow the following instructions.

(1) Don't take a big pillow under your neck while sleeping (2) Don't read or watch TV while sleeping (3) Don't lift any heavy weight on your neck while in pain (4) Don't twist your neck while in pain (5) Avoid bending your neck at home or while working (6) Avoid driving in neck pain to prevent jerks.

Exercises for neck pain



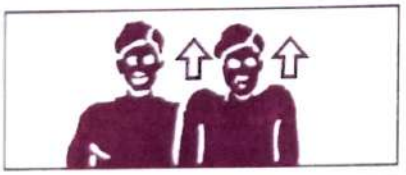
1. Keep your neck straight and bend it to right and left side.



2. Keep your neck straight and turn it to right and left side.



3. Bend your neck forward and backward slowly. Hold position for few seconds.



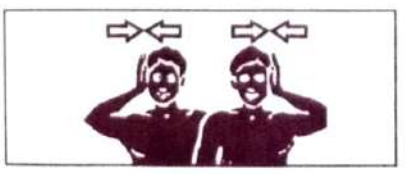
4. Lift your shoulder in upward direction till it reaches your ear and keep for 3-4 seconds and take it downward slowly.



5. Put your hands back on your head and put gentle pressure backward and resist with your hands.



6. Put your hands on your forehead and put pressure forward and resist with your hands.



7. Put your hand on your ear and press the hand with neck and press the ear with hand. Repeat the same on opposite side.

Note: For doing above exercises consult the Ortho Surgeon or a Physiotherapist.

मराठी माहितीसाठी पाठीमागे पहा.

Dr. Sunil Satav
Chief Ortho Surgeon & Founder, Balaji Hospital, Kharadi.

BALAJI HOSPITAL, Kharadi.

Hospital Regd. No. LCBP201600190

Bypass Chowk, Nagar Road, Chandannagar-Kharadi, Pune -411014.
Phone.: 9850060894, 7276239333, 8888843122, 8888843121 | Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

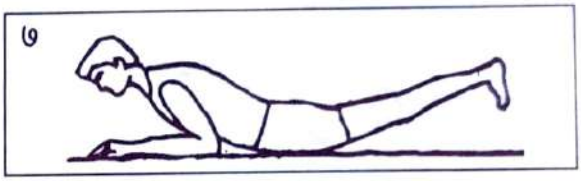
BACK PAIN

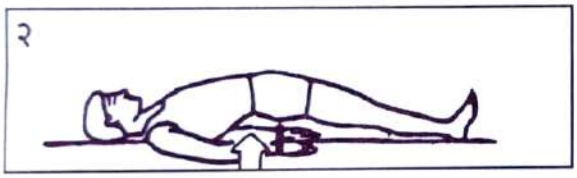
To avoid back pain, follow the following instructions.

(1) Avoid lifting weight till back pain is reduced. (2) While getting up from lying position turn to one side to avoid strain on painful nerves and muscles. (3) While lifting heavy weight bend on your knees not on your back to avoid strain. (4) Keep equal and same weight on both the hands while lifting. (5) While working on table, keep the legs parallel and don't bend at back and keep posture straight. (6) Keep your back straight while sitting on chair. (7) Make sure that your matress should be plain and slightly hard while sleeping. (8) Keep your posture straight while walking and don't bend.

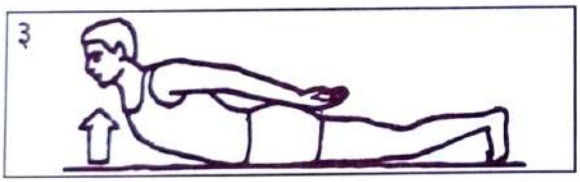
Exercises for back pain



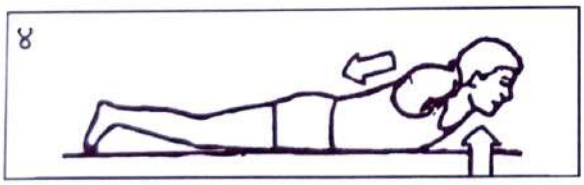




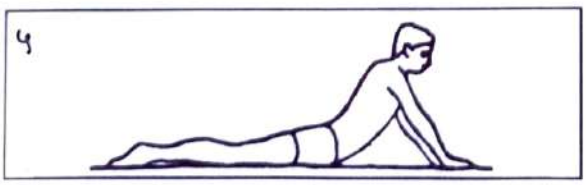




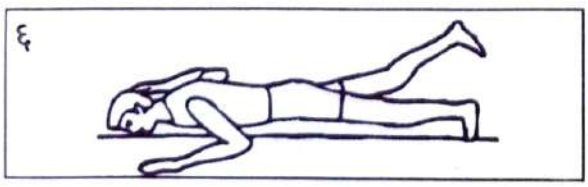


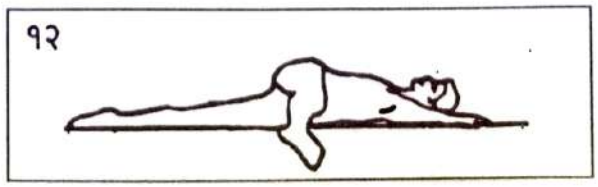












Note: For doing above exercises consult the Ortho Surgeon or a Physiotherapist.

मराठी माहितीसाठी पाठीमागे पहा.

Dr. Sunil Satav
Chief Ortho Surgeon & Founder, Balaji Hospital, Kharadi.

9. Seminars on Immunity and Back Pain

(A. Y. 2022-23)

{20.07.2022}

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences &

Research Centre, Kharadi, Pune-14.

A Report on

A Seminar on "Immunity" (20th July 2022)

On the occasion of 63rd birthday celebration of Hon. Shri. Ajiitdada Pawar, Ex. Deputy Chief Minister, Government of Maharashtra and President, Pune District Education Associations**,** the college organized a seminar on "Health Awareness' in our institute. Since Dr. Harsha Satav, ENT surgeon Balaji Hospital Kharadi, Pune, is an eminent speaker in this field and have made valuable contributions to the topic, and in an endeavor to raise the health awareness and to highlight the importance of good health in our students and staff, the Dr. Harsha Satav, delivered the seminar on "Immunity". The students and staff members actively participated in this activity. This seminar was coordinated by Mrs. Trusha P. Shangrapawar.



Dr. Harsha Satav, delivering seminar on "Immunity"

Mrs. Trusha P. Shangrapawar
Cultural Co-ordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal college of Pharmaceutical Sciences & Research Centre,

Kharadi, Pune-14.

Seminar on Immunity- 20/07/2022

Sr. No.	Name of the Student/Participants	Year	Sign
1.	Thombe Vaibhav V	Ty B pha..	
2.	Ghavate Siddhi A	Ty B Pha..	
3.	Tanuri . S. patil	S.Y.M.Pharm	
4.	Vaibhav N Patange	Ty B pha..	
5.	Omkar Ganesh Zolte	Ty B Pharm	
6.	Ghule Sonali	T.Y.B Pharm	
7.	Ghule Vaibhavi	T.Y.B Pharm	
8.	Dhale Rushikesh	T.Y.B Pharm	
9.	Pawar Vikas R.	T.Y.B.pharm	
10.	Sahva Sayam	T.Y.B Pharm	
11.	chaudhari abhijeet	T.Y.B Pharm	
12.	Chaudhari Yogesh	T.Y B Pharm	
13.	Phar Prathamesh Salunke	T.Y B.pharm	
14.	Rathot bharath	T.Y B Pharm	
15.	Sarvesh pobale	Ty B..	
16.	Alex Munde	TY D..	
17.	Vaibhav Jadhav	T.Y.	
18.	Pawan Thile	T.Y.B.Pharm	
19.	Deke Shubham Dadabhau	T.Y.B.Pharm	
20.	Gaurav Jedhe	T.Y.B.Pharm	
21.	Rajkar Laukik. C.	T.Y.B.Pharm	
22.	Gosavi Subhash S.	T.Y.B.Pharm	
23.	Hole Shubham M.	T.Y.B.Pharm	
24.	Khushi Kharabe	T.Y.B.Pharm	
25.	Esha Kamble	T.Y.B.Pharm	
26.	Mrudula Thombre	T.Y.B.Pharm	
27.	Snehal Narvekar	T.Y.B.Pharm	

Mrs. T. P. Shangarpalle

1/5

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

28.	Saniya Pandekar	T. Y. B. Pharm	Saniya
29.	Vaishnavi Pujari	T. Y. B. Pharm	vaish.
30.	Rutuja Gund	T. Y. B Pharm	Gund
31.	Rajlaxmi Ingole	T. Y. B Pharm	
32.	Sakshi Mane	T. Y. B Pharm	
33.	Bhosale Gitoyali	T. Y. B Pharm	Bhosale
34.	Shreeya Dorige	T. Y. B Pharm	
35.	Akshada Dumbre	T. Y. B. Pharm	Dumbre
36.	Nikita Gaikwad	T. Y. B. Pharm	Gaikwad
37.	Sakshi Dolare	T. Y. B. Pharm	Dolare
38.	Dipalee Naiknaware	T. Y. B. Pharm	Dipalee
39.	Rachana Vidhate	T. Y. B Pharm	Rachana
40.	Pranali Shewale	T. Y. B. pharm	Shewale
41.	Sawant Aarti	T. Y. B. pharm	Aarti
42.	Salunke Shreya	T. Y. B. pharm	
43.	Rajpurohit Drushti	T. Y. B. pharm	
44.	Girase pallavi	T. Y. B. pharm	
45.	Todmal Bhakti Nilesh	T. Y. B. Pharm	Bhakti
46.	Holkar Nikita Rajaram	T. Y. B. Pharm	
47.	Badhepayal Santosh	T. Y. B. Pharm	Payal
48.	Thokal Sakshi	T. Y B Pharm	Sakshi
49.	Bavdhane Nilam	T. Y B. Pharm	Nilam
50.	Pawar pratiksha.	T. Y B. Pharm	
51.	Atole Akanksha	T. Y B. Pharm	Akanksha
52.	Rachna vidhate	T. Y. B Pharm	Rachna
53.	Jagruti S. Dumbre	T. Y. B Pharm	Jagruti
54.	Gauri Kolhe	T. Y. B Pharm	Gauri
55.	Mayuri Mane	T. Y. B Pharm	Mayuri
56.	Siddarth Dhummal	T. Y. B Pharm	
57.	Jai Jagad	T. Y. B Pharm	Jai
58.	Shriram Bochare	T. Y. B Pharm	Shriram
59.	Utkarsha Nambis	T. Y. B Pharm	
60.	Rohini Mane	T. Y. B Pharm	Rohini
61.	Vasundhara S. Raje.	T. Y. B. Pharm	
62.	Saurabh Thopar	T. Y. B Pharm	
63.	Aditya Mohite	T. Y. B Pharmacy	
64.	Tejas Khadakar	T. Y. B Pharm	

Mrs. T. P. Shangrapawar

2/5

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

65.	Jadhav Shivjeet	T.Y. B.Pharm	
66.	Vaibhav Kirdane	T.Y.B Pharm	
67.	Gaikwad Utkarsh	T.Y.B Pharm	
68.	Shrinath Bochare	T.Y. Bpharm	
69.	Manish Kadam	T.Y.B.Pharm	
70.	Pawar Vijay S.	S.Y. M.Ph	
71.	Deshmane Kamlesh R.	S.Y.M.Ph.	
72.	Borase Pallavi Sanjerao	S.Y.M.pharm	
73.	Harshal Shinde	— " —	
74.	Tanvi Thorat	S.Y.M.Pharm	
75.	Tanmayi Kalamkar	S.Y.M.Pharm	
76.	Ahad Pratiksha	S.Y.M.Pharm	
77.	Bramhane Jayshri A	S.Y.M.pharm	
78.	Baldar Aditi R.	S.Y.M.pharm	
79.	Riya Bhonave.	——"	
80.	Mahajan Vishal	S.Y.M.pharm	
81.	Sandesh Nagargoje.	S.Y.M.pharm	
82.	Rokade Amol	S.Y.M.pharm	
83.	Vishal Mahajan	S.Y.M.Ph	
84.	Ruchita Bhalerao	S.Y.M.Ph	
85.	Biradar pramod.	S.Y.M.pharm	
86.	Survase Rutuja.	S.Y.B.Pharm	
87.	Sodde Shreeyash	S.Y.B.Pharm	
88.	Singh Vartika Sanjay	S.Y.BPharm	
89.	Shivankar Aarti Subhash	S.Y. BPharm	
90.	Shitole Omkar Arun	S.Y. B Pharm	
91.	Shinde Swayam V.	S.Y.B.Pharm	
92.	Shinde Rutuja Rajiv	S.Y.B.Pharm.	
93.	Yogiraj Thombare	S.Y.B.Pharm	
94.	Shinde Akshada Govind	S.Y.B.Pharm	
95.	Swati Ram Mahore	S.Y.B pharm	
96.	Patekale Sutaj H.	S.Y.B.Pharm	
97.	Parse Swati Gauri	S.Y.B.Pharm	
98.	Patil Vaishnavi	S.Y.B pharm	
99.	Pawar Aditi	S.Y.B.Pharm	
100.	Pedhekar Onkar	S.Y.B.Pharm	
101.	Pratibha Kodag	S.Y B Pharm	

Mrs. T P Shangrapawar

3/5

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

102.	Prangv Rajpure	Sy. BPharm	Prangv
103.	Rathod Raj	S.Y. B.Pharm	Rathod
104.	Sachin Bhimu Chavan	S. Y. B. pharm	Chavan
105.	Mrunali Tagde	S. Y. B. Pharm	Tagde
106.	Neha Pikame	— " —	Pikame
107.	Isha Vajrashetti	— " —	Isha
108.	Sakshi Wadhai	— / —	Sakshi Wadhai
109.	Yeshwant Wankhede	— " —	Yeshwant
110.	Salunke Ritesh	— " —	Salunke
111.	Shinde Rutuja	— " —	Rutuja
112.	Survase Rutuja	— " —	Survase
113.	Pallavi Damale	Final year B. pharm	Pallavi
114.	Vaesha Dhanle	— " —	Vaesha
115.	Gauri Khandve	Final year B Pharm	Gauri
116.	Anuja patil.	Final yr. B-Pharm	Anuja
117.	Pratiksha Sarode	— " —	Sarode
118.	Rushita Waghade	— " —	Rushita
119.	Rutuja Thorat	— " —	Rutuja
120.	Komal Shelke	— " —	Komal
121.	Akshada Raghatwan	— " —	Akshada
122.	Londhe Minakshi	— " —	Londhe
123.	Prajakta Pawar	— " —	Pawar
124.	Snehal Ugale	— " —	Snehal
125.	Shweta Khirakar	— " —	Khirakar
126.	Shruti Khute	— " —	Shruti
127.	Surve Sakshi	— " —	Sakshi
128.	Rutuja Jawande	— " —	Rutuja
129.	Kalchetti Aishwarya	— " —	Kalchetti
130.	Mansi Mokashi	— " —	Mansi
131.	Undre darshana Sanjay	final year B	Undre
132.	Raj Dake	Final year B	Raj
133.	Vishal Shinde	Final year B	V. Shinde
134.	Kiran Nikalje	Final year B	Kiran
135.	Abhijit K. Pharale	— " —	Abhijit
136.	Vaishnavi S. Madure	— " —	Vaishnavi
137.	Paigude Shraddha	— " —	Paigude
138.	Nandini D. Bhujbal	— " —	Nandini

4/5

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre

139.	Nikita Bhosure	Final Yr. B.Pharm	
140.	Kudale Suvarna	Final yr. B pha	Kudale
141.	Snehal Bichukale	Final yr. B Pharm	Bichukale
142.	deepali sagar	Final yr. B. ph.	
143.	Prachi Raipure	Final Yr B Pharm	
144.	Priti Pote	Final Year B Pharm	
145.	Aishwarya kanthe.	〃	
146.	Mansi Bhamare	final yr. B.pharm	
147.	Rinku Dhaije	final year	
148.	Diksha. M. Waghmare	〃	
149.	Sejal. S. Walay	〃	
150.	Harshada S. kumbharkar	〃	
151.	Sahil S. Dhavale	〃	
152.	Deepak B. kokani	〃	
153.	Akshay B. Athade	〃	
154.	Atharva R Aranya	〃	
155.	Nikhil Deepak Bhapsekar	〃	
156.	Ajay B. Wakchaure	〃	
157.	Rajury Rajnight R-	〃	
158.	Sarode Ravikiran. D	〃	
159.	Akshay Pansare	〃	
160.	Rohan Ubale	〃	
161.			
162.			
163.			
164.			
165.			
166.			
167.			
168.			
169.			
170.			
171.			
172.			
173.			
174.	Hake Neha	Nikhil. Y. B Pha-	
175.			

Mrs. T. P. Shangarpawar

5/5

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 19/7/2022 Ref. No.: SUCOPSRC/ 38 /2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Dr. Harsha Sunil Satav
ENT Surgeon, Balaji Hospital
Kharadi, Pune-14.

Subject: Regarding invitation as resource person for the seminar on "Health Awareness' in our institute.

Dear Sir,

As per our telephonic conversation, I am pleased to extend an invitation as resource person for the seminar on "Health Awareness' in our institute on the occasion of birthday celebration of Hon. Shri. Ajitdada Pawar, Ex Deputy Chief Minister, and President, Pune District Education Association, Pune. The proposed seminar aims to highlight the health issues encountered now a days and to spread awareness about good health.

Since you are an eminent speaker in this field and have made valuable contributions to the topic, and in an endeavor to raise the health awareness and to highlight the importance of good health in our students and staff, we take this opportunity to invite you as a resource person for this seminar on 20th July 2022 at 2.30 pm. So, we look forward to your presence and co-operation. (For any query please contact to coordinator Mrs. Trusha P. Shangrapawar- 9823620854)

Thanking you!

(Dr. Ashok Bhosale)
Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-14.

Received
Dr. Harsha Satav
19/7/22

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 19/7/2022

Ref. No.: SUCOPSRC/ 40 /2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

Thanking Letter

To,

Dr. Harsha Satav

ENT Surgeon,

Balaji Hospital, Kharadi, Pune

Respected Madam,

At the outset, we wish to convey our sincere gratitude towards you for addressing as a **resource person** on 20th July 2022 for seminar on **"Immunity"**. Your valuable guidance has rightly helped us. Your expertise in the field has been truly applicable for all students and staff members to implement in their daily life.

We are looking forward to have such more interaction with you in the future.

Thanking you with regards.

Yours Sincerely,

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014.

Received
Dr. Harsha Satav
Hsatav

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences &

Research Centre, Kharadi, Pune-14.

A Report on

A Seminar on "Back Pain" (20th July 2022)

On the occasion of 63rd birthday celebration of Hon. Shri. Ajiitdada Pawar, Ex. Deputy Chief Minister, Government of Maharashtra and President, Pune District Education Associations**,** the college organized a seminar on "Health Awareness' in our institute. Since Dr. Sunil Satav, Orthopedic surgeon Balaji Hospital Kharadi, Pune, is an eminent speaker in this field and have made valuable contributions to the topic, and in an endeavor to raise the health awareness and to highlight the importance of good health in our students and staff, the Dr. Sunil Satav, delivered the seminar on "Back Pain". The students and staff members actively participated in this activity. This seminar was coordinated by Mrs. Trusha P. Shangrapawar.



Dr. Sunil Satav, delivering seminar on "Back Pain"



Dr. Sunil Satav, delivering seminar on "Back Pain"

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Mrs. Trusha P. Shangrapawar
Cultural Co-ordinator

Pune District Education Association's

Shankarrao Ursal college of Pharmaceutical Sciences & Research Centre,

Kharadi, Pune-14.

Health Check Up Camp- 20/07/2022

Sr. No.	Name of the Student/Participants	Year	Sign
1.	Choudhari Abhijeet Shivlal	T.Y. B Pharm	
2.	Rathod Bharat Babulal	T.Y. B Pharm	
3.	Choudhary Yogesh Kuparam	T.Y. B Pharm	
4.	Bohra Sayam Sunil	T.Y. B Pharm	
5.	Dake Shubham Dadabhau	T.Y. B Pharm	
6.	Dhale Rushikesh Krishna	T.Y. B. Pharm	
7.	Sumit Mohite	T.Y. B pharm	
8.	Shubham Kaspate	T.Y. B pharm	
9.	Suyash Thorat	T.Y. B pharm	
10.	Rutvik Jagtap	T.Y. B pharm	
11.	Hrishikesh Jagtap	T.Y. B pharm	
12.	Aditya mohite	TY B Pharm	
13.	Jadhav shivjeet	T.Y B Pharm	
14.	Vaibhav kirtane	T.Y. B Pharm	
15.	Tejas khaladkar	T.Y. B. Pharm	
16.	Manish Kadam	T.Y. B. Pharm	
17.	Vinit Kale	T.Y. B Pharm	
18.	utkarsh Gaikwad	T.Y. B. Pharm	
19.	vidhate Rachna	T.Y. B. Pharm	
20.	Nalknavare Deepali. R	T.Y. B Phar	
21.	Drushti Sonawane	T.Y. B Pharm	
22.	Yash Shegokar	T.Y. B Pharm	
23.	Sakshi Dolare	T.Y. B Pharm	
24.	Akshada Dombe	T.Y. B Pharm	
25.	Nikita Gaikwad	T.Y. B Pharm	
26.	Jay Lagad	T.Y. B Pharm	
27.	Pawar Vikas R.	T.Y. B. Pharm	

Mrs. T. P. Shangrapawar

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

28.	Srushti Harisingh Rajpurohit	T.Y.B.Pharm	
29.	Pallavi Girase M.	T.Y.B. Pharm	
30.	Shreya Salunke	T.Y.B. Pharm	
31.	Pranali Shewale	T.Y.B. Pharm	
32.	Aarti Sawant	T.Y.B. Pharm	
33.	Ghule Vaibhavi	T.Y.B.Pharm	
34.	Ghule Sonali	T.Y.B.Pharm	
35.	Ghavate Siddhi	T.Y.B.Pharm	
36.	Tambe Vaibhav	T.Y.B.Pharm	
37.	Omkar Zalte	T.Y.B.Pharm	
38.	Ajay S. Pawar	S.Y.M.Ph.	
39.	Vasundhara S. Raje	T.Y.B.Pharm	
40.	Ingole Rajlaxmi	T.Y.B.Pharm	
41.	Siddhant Dhumal	T.Y.B.Pharm	
42.	Nikita Holkar	T.Y.B.Pharm	
43.	Rutuja Gund	T.Y.B.Pharm	
44.	Sakshi Mane	T.Y.B.Pharm	
45.	Gitanjali Bhosale	T.Y.B.Pharm	
46.	~~Ra Holkar Nikita~~	~~T.Y.B.Pharm~~ T.Y.B.Pharm	
47.	Dorage Shreya		
48.	Hamdi Utkarsha	T.Y.B.Pharm	
49.	Mane Rohini	T.Y.B.Pharm	
50.	Gauri Kolhe	T.Y.B.Pharm	
51.	Mayur Mate	T.Y.B.Pharm	
52.	Jagruti Dhumbar	T.Y.B.Pharm	
53.	Rajkar Laxmikant C.	T.Y.B.Pharm	
54.	Bhakti Todwal	T.Y.B.Pharm	
55.	Gaurang Jadhav	T.Y.B.Pharm	
56.	Vaibhav Jadhav	T.Y.B.Pharm	
57.	Thokal Sakshi B.	T.Y.B.Pharm	
58.	Atole Akanksha	T.Y.B.Pharm	
59.	~~Nikita Rajaram Holkar~~	T.Y.B.Pharm	
60.	Badhe Payal S.	T.Y.B.Pharm	
61.	Nilam Bavdhane	T.Y.B.Pharm	
62.	Pratiksha Pawar	T.Y.B.Pharm	
63.	Shrinath Bahade	T.Y.B.Pharm	
64.	Esha Kamble	T.Y.B.Pharm	

Mrs. T. P. Shangrepawar

2/6

PRINCIPAL
P.D.E.A's
Shankarrao Usal College of
Pharmaceutical Sciences & Research Centre
Pune-411014

65.	Khushi kharabe	T.Y. B.pharm	Khushi
66.	Mrudula thombre	T.Y. B pharm	Mrudula.
67.	Gosavi Subhash S	T.Y.B. pharm	Gosavi.
68.	Hole shubham M.	T.Y.B.pharm	Hole.
69.	Deshmane kamlesh.R	S.Y.M.ph.	Deshmane
70.	Birase Pallavi Sarjerao	S.Y.M.pharm	Pallavi
71.	Tanmayi Kalamkar	S.Y.M-Pharm	Kalamkar.
72.	Avhad Pratiksha	syn pharm	
73.	Shinde Harshal.		
74.	Tanvi Therat	S.Y.M.Pharm	Tanvi
75.	Damini.S. patil	S.Y.M.pharm	Patil
76.	Shinde Harshal	—11—	Harshal
77.	Bramhane Jayshri	S.Y.M.pharm	Bramhane JA
78.	Beldar Aditi	—11—	Aditi
79.	Bhondve Riya	S.Y.M.Pharm	Riya
80.	Mhajan Vishal	—11—	Vishal
81.	Rokade Amol.	—11—	Amol
82.	Biradar Pramod.	—11—	B.pramod
83.	Sanaesh Nagargoje.	—11—	Sandesh
84.	Aadeppa vishakha	S.Y.B.pharm	Aadeppa
85.	Asu Athara Anil	S.Y.B.Pharm	Asu
86.	Awhale Shivraj kondiba	S.Y.B.pharm	Awhale
87.	Awhale vaishnavi Tatayba	S.Y.B Pharm	Awhale
88.	Bhure Shvetal Ramdas	S.Y.B.Pharm	Bhure
89.	Chemmakani Shrikant tirupati	S.Y.B.Pharm	Chemmakani
90.	Chavan Divya kalyan	S.Y.B.pharm	Chavan
91.	Chaugule Akanksha	—11—	Ch.
92.	Gokhale Harsh Ramchandra	S.Y.B.Pharm	Gokhale
93.	Gade Bhakti Ashok	S.Y B.Pharm	Bhakti
94.	Dixit Rutuja Ashok	S.Y.B.Pharm	Dixit
95.	Gawde Rutuja Prabhakar	S.Y B Pharm	Rutuja
96.	Gadekar Sakshi Suresh	S.Y.B Pharm	Sakshi
97.	Ananya Jadhav	S.Y.B.Pharm	Ananya
98.	Jadhav kalyani	S.Y.B.pharm	K.Jadhav
99.	Jadhav Komal	S.Y.B Pharm	Jadhav
100.	Sakshi Dhumal	S.Y.B.Pharm	S.P.Dhumal
101.	Vaishnavi Kalbhor	S Y B ph	Kalbhor

Mrs. T. P. Shangrapawar

3/6

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

102.	Vaishnavi Khandagale	S.Y. B Pharm	Khandagale
103.	Bhagyalaxmi kadam	S.Y.B.Pharm	Kadam
104.	Tanmay Jagtap.	S.Y.B.pharm.	Jagtap
105.	Kshirsagar Aishwarya	-11-	Kshirsagar
106.	Kale Tejal	-11-	Kale.
107.	Lungare Nitesh	-11-	
108.	Jadhav. Konal	-11-	Jadhav.
109.	Sakshi dhumal	-11-	S.P. Dhumal
110.	Shambhuraje Dhumal	S.Y.B.Pharm	Dhumal
111.	Chaudhari Gaurav	S.Y.B. Pharm	Chaudhari
112.	Siddharth Bodke	S.Y.B. Pharm	B
113.	Jeetendra Chaudhary	S.Y.B. Pharm	Jaudhary
114.	Divya chavan	-11-	DC
115.	Akanksha Chougule	-11-	
116.	Rathod Raj	-11-	
117.	Shitole omkar	-11-	Rathod
118.	Pratibha Kodag	"	Kodag
119.	Vartika Singh	"	Vatika.
120.	Sachin Chavan	11 - 11	Chavan
121.	Suraj Parkale	11 - 11	
122.	Kokate Siddesh	II - II	
123.	Prathamesh Tanwar	B. Pl	
124.	Gabhale Harsh Ramchandra	S.Y. B Pharm	
125.	Gadekar Sakshi Suresh	S.Y.B Pharm	Sakshi
126.	Yeskumar Wankhede	S.Y.B Pharm	
127.	Pedhekar Ankita	S.Y.B. Pharm	Pedhekar
128.	Salunke Ritesh	S.Y.B.pharm	Salunke.
129.	Yake Neha	Final. Y. B. Pharm	Yake
130.	Anisa Mulla	Final Y.B. pharm	Anisa
131.	Gauri V. Khandve.	Final year BPharm	Khandve.
132.	Anuja Patil.	Final year B.Pharm	Anuja.
133.	Ruchita B. Waghmode	final year B.Pharm	Ruchitaa.
134.	Pratiksha B. Salode	final year B.Pharm	Pratiksha.
135.	Rutuja Thorat	-11-	Rutuja.
136.	Komal Shelke	-11-	Komal.
137.	Akshada Raghatwan	-11-	
138.	Minkashi Londhe	-11-	Londhe

128 + 50 = 178

Mrs. T. P. Shangarpawar

4/6

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

139.	Prajakta Pawar	-11-	Pawar
140.	Snehal Ugale	-11-	Snehal
141.	Shweta J Khiratkar	-11-	Khiratkar
142.	Shruti Khole	-11-	Khole.
143.	Surve Sakshi	-11-	S. Surve
144.	Rutuja Kawade	-11-	Rutuja
145.	Kalshetti Aishwarya	-11-	Aishwarya
146.	Mansi Mokashi	-11-	Mokashi
147.	Undre Darshana Sanjay	final year B	
148.	Raj Dake	Final year	Raj.
149.	Kiran Nikalje	-11-	Ki
150.	Vishal Shinde	-11-	Vishal
151.	Dhanle Varsha	Final year B.Pharm	
152.	Paigude Shradha	-11-	Paigude
153.	Abhijit. k. pharate	-11-	Abhi
154.	Vaishnavi S Madane	-11-	
155.	Nandini D. Bhujbal	-11-	Bhujbal
156.	Nikita Bhosure.	-11-	Bhosure.
157.	Snehal Bichukale	-11-	Bichukale
158.	Kudale swarna	-11-	Kudale
159.	Snehal chaudhary	Final Year BPh	Sneha
160.	Afiya Shaikh	Final yr B.ph	Shaikh
161.	Deepali Sagar	Final Yr. B.Ph.	Deepali
162.	Prachi Raipure	Final Yr B Pharm	Prachi
163.	Priti Pote	Final Year B. Pharm	Priti
164.	Aishwarya Kamthe	-11-	Kamthe.
165.	Mansi Bhamare	final Year B.ph	Bhamare
166.	Rinku Dhanje	final year	Rinku
167.	Diksha. M. Wadhmare	-11-	Wadhmare
168.	Sejal. S. Walay	-11-	Walay.
169.	Harshada S. Kumbharkar	-11-	Kumbharkar
170.	Dhavale Sahil	-11-	
171.	Deepak B. Kokani	-11-	
172.	Ajay B. Wakchaure	-11-	Ajay
173.	Nikhil Deepak Bhapsekar	-11-	Bhapsekar
174.	Akshay B. Atnoale	-11-	Atnoale.
175.	Athara R Aranya	-11-	

Mrs. T. P. Shangarwar

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

176.	Rajuri Rajurohit		
177.	Sarode Rohikiran. D	Final year B pharm	Sarode
178.	Pallavi Damale		
179.			
180.			
181.			
182.			
183.			
184.			
185.			
186.			
187.			
188.			
189.			
190.			
191.			
192.			
193.			
194.			
195.			
196.			
197.			
198.			
199.			
200.			
201.			
202.			
203.			
204.			
205.			
206.			
207.			
208.			
209.			
210.			
211.			
212.			

Answer

Mrs. T. P. Shengrepawar

6/6

PRINCIPAL
P. D. E. A's
Shankarrao Kirad College of
Pharmaceutical Sciences & Research Centre
Khargad, Pune 411048

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Health Check-up Camp- 20th July 2022

Sr. No.	Name of the faculty (Teaching Staff)	Designation	Mobile	Signature
1.	Dr. Amit Kasabe	Asst. Prof.	7709366816	
2.	Khode P.H.	—11—	8888872264	
3.	Dr V.U. Baeje	Professor	9923265133	
4.	Nehorkar Nitin	Asst. Prof.	8484900931	Nitin
5.	T. R. Kande	Asst Prof.	8669062889	T.R.Kande
6.	B. G. Shelar	Asst. Prof	7744901138	Shelar
7.	P. G. Kamun	—11—	7666445155	
8.	Veer V.S.	Asst Prof	9604280837	
9.	Survase, S. R	Lab. Attendant	9881-885774	
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				

Dr. Ashok Bhosale

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Health Check-up Camp- 20th July 2022

Sr. No.	Name of the faculty (Non- Teaching staff)	Designation	Mobile	Signature
1.	Pathan A.B	Lab. Assist	9860469578	
2.	[illegible]	Jr clerk	7637373757	
3.	Mr Pawar S.N	Store keeper	8275741467	
4.	Thakle P.M.	Thakle P.M	8888872264	
5.	V.N. Bhagat	Lab. Assistant	9765458159	
6.	S.S. Parkhi	Jr. clerk	9765944749	
7.	[illegible]	[illegible]	8806791406	
8.	Nagarali S.B	Peon	9881832364	
9.	Damini. S. patil	Lab. Assistant	7218654586	Patil
10.	A. S. Survase	Peon	9322779979	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				

Dr. Ashok Bhosale

1
1

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Health Check-up Camp- 20th July 2022

Sr. No.	Name of the faculty (Non- Teaching staff)	Designation	Mobile	Signature
1.	Pathan A.B	Lab. Assist	9860469578	
2.	[illegible]	Jr clerk	7637373757	
3.	Mr. Pawar S.N	Store keeper	8275741467	
4.	Khade P.M.	Khade P.M	8888872264	
5.	V.N. Bhandare	Lab. Assistant	7745458159	
6.	S.S. Parkhi	Jr. clerk	9765944749	
7.	[illegible]	[illegible]	8806791406	
8.	Nagarali S.B	Peon	9881832364	
9.	Damini .S.patil	Lab. Assistant	7218654586	Patil
10.	A. S. Survase	Peon	9322779479	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				

Dr. Ashok Bhosale

1
1

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Date- 15/07/2022

Notice No- 212

Health Check-up Camp

All the teaching and non- teaching staff members of B. Pharm and M. Pharm are hereby informed that the college is celebrating the 63rd birthday of Hon Shri. Ajitdada Pawar, Ex Deputy Chief Minister, and President, Pune District Education Association, and on the occasion of this, college has organized Health Check-up Camp, a team of the doctor from the Balaji Hospital, Kharadi would be conducting the camp on 20th July 2022 in our college in seminar hall from the 2.0 pm to 5.30 pm, so all the staff members must remain present for the camp for their health checkup. For further details, you may contact the undersigned.

(Contact person – Mrs Trusha P. Shangrapwar- 9823620854)

Mrs. T. P. Shangrapawar
Cultural coordinator

Dr. Ashok Bhosale
PRINCIPAL
P. E. A's
Pharmac... Ursal Co...ge of
...& R... ...rch Centre
...110 14

Dr. A. J. Kasabe

Veer V. S.

Dhekade V. V.

PMC

K. G.

Kakade S. S

~~Karpe SK~~

Jagtap V B

T. R. Kande — T.R. Kands

V. N. Bhandare —

B. G. Shelar - BShelar

R. B. Ghige

K. R. Ghule

Sawant S. P.

Gunde C. V.

Jamadar [illegible]

Parkhi S. S.

Karpe SK Sunita.

Mr Pawar S. V

Dr. V. U. B

Dr. [illegible]

M. M. Sayyad

V. N. Bhandare -

A. S. Sutrave —

S. S. Sonawane -

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14.

Date- 15/07/2022

Health Check-up Camp -Roles and Responsibilities

All the staff members are informed to take a note of their roles and responsibilities assigned for the health checkup camp organized on the occasion of celebration 63rd birthday of Hon Shri. Ajitdada Pawar, Ex Deputy Chief Minister, and President, Pune District Education Association, on 20th July 2022 in our college in seminar hall from the 2.0 pm to 5.30 pm.

Sr. No.	Responsibilities	Name of the faculty	Signature
1.	Anchoring	Mrs. Trusha Shangrapawar Ms. Kiran Ghule	
2.	Registration	Ms. Tejaswini Kande	
3.	Hall Arrangement	Mr. Vikram Veer Ms. Bhagyashree Shelar Mr. A. B. Pathan Mr. Rajesh Ghige Mr. Shashikant Nagaralli Mr. D. B. Chande Mrs. V.N. Bhandare	
4.	Guest Felicitation	Ms. Kiran Ghule Ms. Naziya Sayyed	
5.	Guest Refreshment	Mrs. M. G. Zalte Mr. S. R. Suravase Mrs. A. S. Suravase	
6.	Vote of thanks	Mr. Amit Kasabe	

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

1/1

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune- 411014.

Health Check Up Camp
&
A Seminar on Health Awareness

20th July 2022

PROTOCOL

Sr. No.	Name of Event	Responsible Person	Time
1.	Saraswati Pujan	All Dignitaries	2.0 pm to 2.05 pm
2.	Preamble & Anchoring	Prof. Trusha Shangrapawar Prof. Kiran Ghule	2.05 pm to 2.10 pm
3.	Felicitation of Speaker	Principal	2.10 pm to 2.15 pm
4.	Address by Principal (Diploma)	Dr. Sachin Kotwal	2.15 pm to 2.20 pm
5.	Address by Principal	Dr. Ashok Bhosale	2.20 pm to 2.25 pm
6.	Address by Speaker	1. Dr. Sunil Satav, Orthopedic Surgeon, Balaji Hospital (Topic: - Back Pain) 2. Dr. Harsha Satav, ENT Surgeon, Balaji Hospital (Topic :- Immunity)	2.25 pm to 2.45 pm 2.45 pm to 3.05 pm
7.	Vote of Thanks	Dr. Amit Kasabe	3.05 pm to 3.10 pm
8.	Health Check Up Camp	----	3.15 pm to 5.30 pm

Mrs. Trusha P. Shangrapawar
Co-ordinator

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

1/1

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 16 / 7 / 2022 Ref. No.: SUCOPSRC/ 32 /2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Dr. Sunil Satav

Orthopedic Surgeon, Balaji Hospital

Kharadi, Pune-14.

Subject: Regarding organization of Health Check-up Camp in our institute on the occasion of birthday celebration of Hon. Shri. Ajitdada Pawar.on 20th July 2022 at 2.0 pm.

Dear Sir,

As per our telephonic conversation, I am pleased to extend an invitation to you for organization of Health Check-up Camp in our institute on the occasion of birthday celebration of Hon. Shri. Ajitdada Pawar, Ex Deputy Chief Minister, and President, Pune District Education Association, Pune.

As we are aware that you are always working for the wellbeing of the society, and in an endeavor to raise the health awareness and to highlight the importance of regular health check-ups in our students and staff, we take this opportunity to invite you and your team of doctors to our college for organization of Health Check-up Camp on 20th July 2022 at 2.0 pm. So, we look forward to your presence and co-operation. (For any query please contact to coordinator Mrs. Trusha P. Shangrapawar- 9823620854)

Thanking you!

(Dr. Ashok Bhosale)
Principal

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Received
Dr Sunil S. Satav

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date: 19/7/2022 Ref. No.: SUCOPSRC/249 /2022-2023

Thanking Letter

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Dr. Sunil Satav
Director,
Balaji Hospital, Kharadi, Pune

Respected Sir,

At the outset, we wish to convey our sincere gratitude towards you for organizing the Health Check-Up Camp on the occasion of Birthday of Hon. Shri. Ajitdada Pawar Saheb, Ex-Deputy Chief Minister, Maharashtra State and President, Pune District Education Association, Pune on 20th July 2022.

We are looking forward for having much more interaction with you in the future.

Thanking you with regards.

Yours Sincerely,

Dr. Ashok Bhosale
PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune 411014

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav	Dr. Harsha S. Satav	Dr. Gopal Jaju	Dr. Chintan S. Gujarathi
Chief Ortho. Surgeon	E. N. T. Surgeon	Consultant Physician	Plastic Surgeon
M.B.B.S. D.ORTHO (Mumbai)	M.B.B.S. D.O.R.L. (Mumbai)	M.B.B.S., MD (Medicine)	M.B.B.S., M.S., D.NB, M.Ch
Regd. No. 2001/08/2920	Regd. No. 2005/02/0605	Regd. No. MCI 1139360	Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36857 Date : 20/07/22

Patients Name : Tejaswini Rinda Age 24y Sex f

Diagnosis : Rt turbinate hypertrophy c Acute lumbago c (2) Sciatica

Rx DSL-97 — lumbar traction — IFT back — Ultrasound back (x 7 days)

BP - 140 | 90 mm Hg. SpO2 - 98 Pulse - 90.

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	Budnase AQ Nasal spray	1	1	1	2 day x 8 days
२					
३	T. Limcee	1	—	—	X 15 days
४	T. Mio Freedom MS	1		1	x 7 days
५	T. Ankinac plus RD	1		1	
६	T. Pralo Forte	1		0	
७	Ovel gel	1		1	x 7 days

सूचना :
(Instructions)

Doctor's Sign

• फेरतपासणी (Follow-up) :

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like

Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121

काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२१ या नंबरवर फोन करा.

- आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
- आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36810 Date :

Patients Name : R. Y. Patil Age 50y Sex M

Diagnosis : Rt DNS & B/L Wax

℞ BSR- 130
B.P. :- 130/90 mg

SpO2 - 97
Pulse - 87.

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	Fluticasone Nasal	गोळी	2 वेळ		× 15 days
२	spray				
३					
४	Soliwax ear drop	5-6 थेंब	5-6 थेंब		× 5 days
५					
६					
७					

सूचना : (Instructions) CT PNS - PTA

Doctor's Sign

Get Well Soon ! लवकर बरे व्हा !

• फेरतपासणी (Follow-up) :

In case of Emergency like
Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121
काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३१२२, ८८८८८४३१२१ या नंबरवर फोन करा.

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav	Dr. Harsha S. Satav	Dr. Gopal Jaju	Dr. Chintan S. Gujarathi
Chief Ortho. Surgeon	E. N. T. Surgeon	Consultant Physician	Plastic Surgeon
M.B.B.S. D.ORTHO (Mumbai)	M.B.B.S. D.O.R.L. (Mumbai)	M.B.B.S., MD (Medicine)	M.B.B.S., M.S., D.NB, M.Ch
Regd. No. 2001/08/2920	Regd. No. 2005/02/0605	Regd. No. MCI 1139360	Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36702 Date : 20/7/2022

Patients Name : Mr. Dr. R. S. Patil. Age _____ Sex _____

Diagnosis : Acute lumbago & ® hip sprain

℞ Rx - IFT ® thigh
- Ultrasound ® thigh ×7days

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	T. Ankinac-P 100mg BD			1	
२	T. Mifree fem MS		0	1	
३	T. Pan D 40mg OD		1	0	
४	Orel gel	1		1	×7days
५					
६					
७					

सूचना : (Instructions) तांदळा व मुसळीचा आहार द्यावा

Doctor's Sign

Get Well Soon ! लवकर बरे व्हा !

• फेरतपासणी (Follow-up) :

In case of Emergency like _____

Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121

काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३१२२, ८८८८८४३१२१ **या नंबरवर फोन करा.**

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36815 Date :

Patients Name : Kiran Ghule Age 25yr. Sex F

Diagnosis :

℞ BSL - 102 . Spo2 : 97
BP - 110/70 Pulse : 94

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१					
२					
३					
४					
५					
६					
७					

सूचना :
(Instructions)

• फेरतपासणी (Follow-up) :

Doctor's Sign
Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like
Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121
काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२१ **या नंबरवर फोन करा.**

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36707

Date : 28/7/2022

Patients Name : Ms. Trisha Age _____ Sex _____

Diagnosis : Acute Lumbago c (R) Sciatica

Rx

BSL - 106
B.P - 110/70.
SpO2 - 99
Pulse - 90.

℞ Lumbar traction
- Lft back
- Thoracal back (x7days)

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	T. Arkinac-plus-MD	1		1	
२	T. Mildrea Sra MS	0		1	
३	T. Pcm-Lo 400mg CD	1		0	
४	Orol gel	1		1	x7days
५					
६					
७					

सूचना :
(Instructions)

• फेरतपासणी (Follow-up) :

Doctor's Sign

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like
Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121
काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२१ या नंबरवर फोन करा.

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201600190

BALAJI HOSPITAL, KHARADI.

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36862 Date: 20/07/22

Patients Name: Mrs. Vidya Kamble Age 37 Sex F

Diagnosis:

Rx
BSL - 112
B.P - 150/90.
- Lumbar backache
- IFT back
- O Headache (+2 days

SpO2 - 99
Pulse - 88

क्र	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१	T. Aknil-P 100mg-BD	1		1	
२	T. Aricoxia 90 MG	0		1	
३	T. Pan 40 mg OD	1		0	5 days
४	Volgel	1		1	
५					
६					
७					

सूचना :
(Instructions)

Doctor's Sign

• फेरतपासणी (Follow-up):

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like
Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121
काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३९२२, ८८८८८४३९२९ या नंबरवर फोन करा.

- आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
- आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

Hospital Regd. No. LCBP201

BALAJI HOSPITAL, KHARADI

By-pass Chowk, Nagar Road, Chandannagar-Kharadi, Pune - 411014.
Ph. No.: 9850060894, 7276239333, 8888843121, 8888843122
Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

• Available daily OPDs & Emergency Service •

Dr. Sunil S. Satav
Chief Ortho. Surgeon
M.B.B.S. D.ORTHO (Mumbai)
Regd. No. 2001/08/2920

Dr. Harsha S. Satav
E. N. T. Surgeon
M.B.B.S. D.O.R.L. (Mumbai)
Regd. No. 2005/02/0605

Dr. Gopal Jaju
Consultant Physician
M.B.B.S., MD (Medicine)
Regd. No. MCI 1139360

Dr. Chintan S. Gujarathi
Plastic Surgeon
M.B.B.S., M.S., D.NB, M.Ch
Regd. No. MMC 2010/06/2087

• Panel consultants of following branches available for IPDs & Emergency Service •

- Ortho
- E.N.T.
- Medicine
- 24 hrs. Ambulance Service
- Physiotherapy
- Surgery
- Ophthalm
- Paediatrics
- Gastroscopy
- Psychiatry
- Audiometry
- Facio-Maxillary Surgery
- Urosurgery
- Neurosurgery
- Health check-up plan for companies
- Hand Surgery
- Spine Surgery
- Pathology
- Plastic Surgery
- Gynecology
- Neurophysician
- No Obstetrics

Authorised for many Cashless Insurance Companies.

No.: 36804 Date :

Patients Name : Mr. Parshuram Khade Age 35yrs. Sex M

Diagnosis :

℞

BSR :- 92.
B.P :- 110/70.

क्र.	औषधाचे नाव (Name of medicine)	सकाळी (Morning)	दुपारी (Afternoon)	रात्री (Night)	दिवस (Days)
१					
२					
३					
४					
५					
६					
७					

सूचना :
(Instructions)

Doctor's Sign

• फेरतपासणी (Follow-up) :

Get Well Soon ! लवकर बरे व्हा !

In case of Emergency like

Call on Emergency Contact No.: 9850060894, 7276239333, 8888843122, 8888843121

काही इमर्जन्सी असल्यास ताबडतोब ९८५००६०८९४, ७२७६२३९३३३, ८८८८८४३१२२, ८८८८८४३१२१ या नंबरवर फोन करा.

• आपला त्रास वाढल्यास ताबडतोब डॉक्टरांना दाखविणे. • हॉस्पिटलमध्ये येताना हा पेपर बरोबर आणावाच.
• आपल्याला कुठल्याही औषधांची ॲलर्जी असल्यास डॉक्टरांना सांगणे.

BALAJI HOSPITAL, Kharadi.

Hospital Regd. No. LCBP201600190

Bypass Chowk, Nagar Road, Chandannagar-Kharadi, Pune -411014.
Phone.: 9850060894, 7276239333, 8888843122, 8888843121 | Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

NECK PAIN

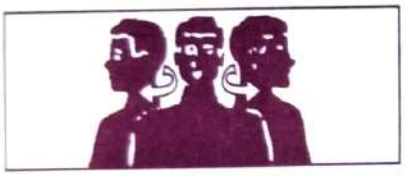
To avoid neck pain, follow the following instructions.

(1) Don't take a big pillow under your neck while sleeping (2) Don't read or watch TV while sleeping (3) Don't lift any heavy weight on your neck while in pain (4) Don't twist your neck while in pain (5) Avoid bending your neck at home or while working (6) Avoid driving in neck pain to prevent jerks.

Exercises for neck pain



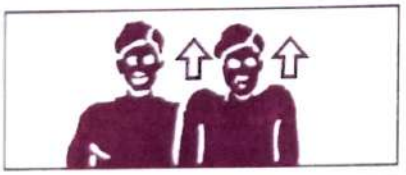
1. Keep your neck straight and bend it to right and left side.



2. Keep your neck straight and turn it to right and left side.



3. Bend your neck forward and backward slowly. Hold position for few seconds.



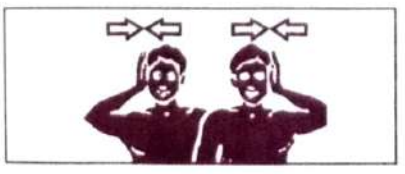
4. Lift your shoulder in upward direction till it reaches your ear and keep for 3-4 seconds and take it downward slowly.



5. Put your hands back on your head and put gentle pressure backward and resist with your hands.



6. Put your hands on your forehead and put pressure forward and resist with your hands.



7. Put your hand on your ear and press the hand with neck and press the ear with hand. Repeat the same on opposite side.

Note: For doing above exercises consult the Ortho Surgeon or a Physiotherapist.

मराठी माहितीसाठी पाठीमागे पहा.

Dr. Sunil Satav
Chief Ortho Surgeon & Founder, Balaji Hospital, Kharadi.

BALAJI HOSPITAL, Kharadi.

Hospital Regd. No. LCBP201600190

Bypass Chowk, Nagar Road, Chandannagar-Kharadi, Pune -411014.
Phone.: 9850060894, 7276239333, 8888843122, 8888843121 | Visit us: www.balajihospitalkharadi.com

• Accident • ICU • Multispeciality • Pharmacy • 24 Hrs. Emergency Service

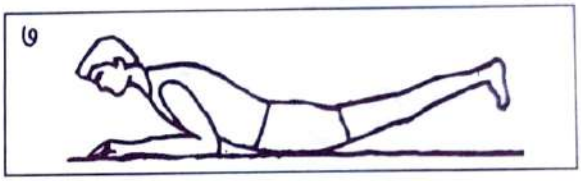
BACK PAIN

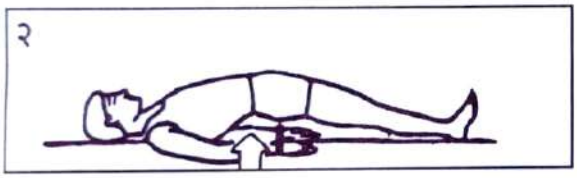
To avoid back pain, follow the following instructions.

(1) Avoid lifting weight till back pain is reduced. (2) While getting up from lying position turn to one side to avoid strain on painful nerves and muscles. (3) While lifting heavy weight bend on your knees not on your back to avoid strain. (4) Keep equal and same weight on both the hands while lifting. (5) While working on table, keep the legs parallel and don't bend at back and keep posture straight. (6) Keep your back straight while sitting on chair. (7) Make sure that your matress should be plain and slightly hard while sleeping. (8) Keep your posture straight while walking and don't bend.

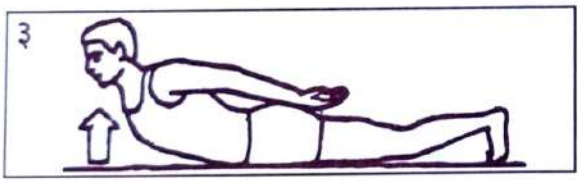
Exercises for back pain



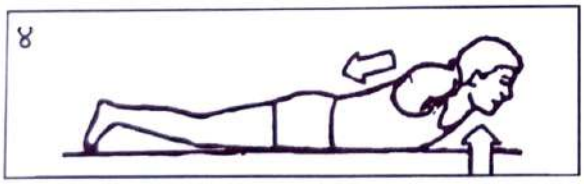




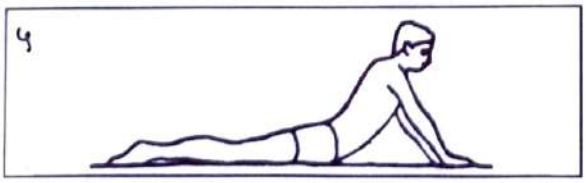




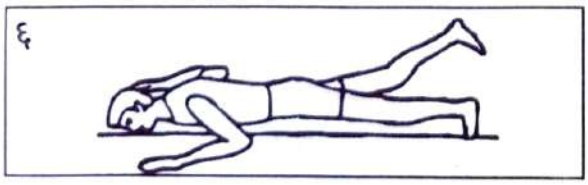


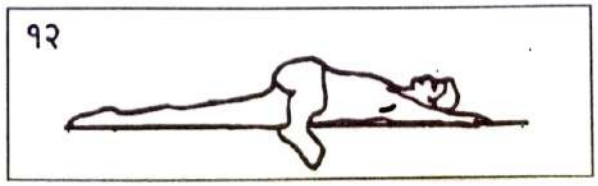












Note: For doing above exercises consult the Ortho Surgeon or a Physiotherapist.

मराठी माहितीसाठी पाठीमागे पहा.

Dr. Sunil Satav
Chief Ortho Surgeon & Founder, Balaji Hospital, Kharadi.

9. Health Check-up Camps

(A. Y. 2019-20)

{18.07.2019, 21.01.2020}

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,
Kharadi, Pune-14

A Report on

Free Health Check-Up Camp

Tuesday, 21st January 2020 at 11.00 am.

The Board of student's development of college was organized free health checkup Camp for First Year B. Pharm, First Year M. Pharma and Direct Second Year B. Pharm students in colleges. The heath check-up camp was organized in collaboration with Motherhood Hospital, Kharadi, Pune.

Objective: The main objective of a Health Check-Up camp is to provide initial care to students in life-threatening conditions.

Dr. Swati Gaikwad, Senior doctor (Motherhood Hospital, Kharadi, Pune) were present as the Chief guests for this event. The event began with the welcome of the chief guests. Dr. Swati Gaikwad, Senior doctor from Motherhood hospital in his motivational talk emphasized on the need and importance of good health in life.

Achievement: A total of 75 students were examined in this health check-up camp.

The activity was coordinated by Mr. Prashant Khade.





Health Check-up during Camp

Mr. Prashant Khade
Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

Dr. Ashok Bhosale
PRINCIPAL
Pune District Education Asso...
Shankarrao Ursal College of Phar...
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 • Website : www.pdea-sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835

Date : 21 / 1 / 2020 Ref. No.: SUCOPSRC / 522 / 2019-20

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

To,

Center Head,

Motherhood Hospitals,

Kharadi, Pune-14

Respected Sir,

Sir,

On behalf of P.D.E.A.'s Shankarrao Ursal College of Pharmaceutical sciences and research center and in person, I wish to extend our sincere thanks to you for your visit to our institute and for your kind cooperation for the conduct of Health Check-up camp on 21st January 2020 in the college for First Year B. Pharm and M. Pharm students.

Thanking you once again for sparing your valuable time and making it convenient to visit our campus and looking forward for the same co-operation in future.

With warm regards.

Thanking You,

Yours Sincerely,

Dr. Ashok Bhosale

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical Science's & Research Centre
Kharadi, Pune - 411014.

Received
21/1/2020

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 • Website : www.pdea-sucopsrc.org • E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835

Date : 16 / 01 / 2020 Ref. No.: SUCOPSRC / 519 / 2019 - 2020

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

To,

Center Head,

Motherhood Hospitals,

Kharadi, Pune-14

Subject: Invitation for conduct Health Checkup Camp....

Dear Sir,

Our college Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm and M. Pharm with specializations in Pharmaceutics and Pharmaceutical Quality Assurance. The College is dedicated towards providing quality education to its students through its magnificent infrastructure, well stocked and updated library, and spacious computer lab with all facilities and modern labs containing sophisticated equipment's.

Every year Board of Student Development of college organized Health Checkup Camp as a part of student welfare activity.

We are very happy to invite to you conduct Health Checkup Camp for First Year B. Pharm and First Year M. Pharm students on 21st January 2020 at 11.00 am in our college.

We look forward for your co-operation (For any query please contact to coordinator Mr. Prashant Khade-8888872264, email id: phkhade@gmail.com)

Thanking you!

Dr. Ashok Bhosale

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune- 411014.

Institute Copy

04

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: NIKHIL DEEPAK BHAPSEKAR Date of Health Check-up:

Address (Local): 5 4/1HP Lohiya nagar, Male / Female:

Address(Permanent) Ganjpeth pune-42 Birth Date: 16 November 2001

Class: F.Y. B.Pharm Roll No: 4

Contact No: 7218729630 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☐ Mixed ☑ **Exercise:** Yes ☑ No ☐

Sports : No ☐ Yes ☑ **Extra-Curricular activity:** No ☐ Yes ☑
If yes, Specify: Teaching.

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka ☐
Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any): dust allergy.

Menstrual History
(for Females): Regular Excessive Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

RBS 121

Height: 166 cms. **Weight:** 42 K.gms. **Pulse:** 72 **B.P.** 100/60 mm of Hg

C.V.S.:
R.S.:
P/A:
SKIN:
EAR:
NOSE:
THROAT:
EYES:
TEETH & GUMS:

NAD

MOTHERHOOD HOSPITAL PUNE
RHEA HEALTHCARE PVT. LTD.

Signature of the Hon. Medical Officer

CERTIFICATE

Certify that Shri./Smt.: NIKHIL DEEPAK BHAPSEKAR

class F.Y. B. Pharm Roll No. 4 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. DNS 2. _____
   3._____ and is advised to consult: _____ and
   submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:

   _____

   _____
4. Treatment advised: Advise - ENT Opinion.

   _____

   _____

No weight gain, Rhinitis +.

MOTHERHOOD HOSPITAL PUNE
RHEA FALTHCARE PVT. LTD

Signature of the Hon. Medical Office

Direct second year

Roll no:- 57

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Bhange Aishwarya Jotiram Date of Health Check-up:

Address (Local): In chandannagar Male / Female: Female

Address(Permanent) :- Indapur, Pune Birth Date: 14/07/1999

Class: S.Y.B.Pharm Roll No: 57

Contact No: 9767313323 Category: SC/ST/DTNT/OBC/EBC/~~OPEN~~/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☐ Mixed ☑ **Exercise:** Yes ☐ No ☑

Sports : No ☐ Yes ☑ **Extra-Curricular activity:** No ☐ Yes ☑
If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any): Nil

Menstrual History
(for Females): ☑ Regular Excessive Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

Height: 163 cms. **Weight:** 45 K.gms. **Pulse:** 92 **B.P.** 110/60 mm of Hg

BSL 104.

C.V.S.:
R.S.:
P/A:
SKIN:
EAR:
NOSE:
THROAT:
EYES:
TEETH & GUMS:

NAD.

MOTHERHOOD HOSPITAL PUNE
RHEA HEALTHCARE PVT. LTD.

Signature of the Hon. Medical Officer

CERTIFICATE

Certify that Shri./Smt.: Bhange Aishwarya Jotiram

class S.Y.B.Pharm Roll No. 57 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. _____ 2. _____ 3._____ and is advised to consult: _____ and submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:

   _____

   _____
4. Treatment advised: Gynaecologist opinion

   _____

   _____

MOTHERHOOD HOSPITAL

Signature of the Hon. Medical Office

(12)

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Onkar Sunil Raje. Date of Health Check-up: 21/1/2020.

Address (Local): Wagholi Male / Female: Male.

Address(Permanent) Wagholi Birth Date: 13/10/1996.

Class: M-Pharm Roll No: 12

Contact No: 9766815212 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☐ Mixed ☑ **Exercise:** Yes ☑ No ☐

Sports : No ☐ Yes ☑ **Extra-Curricular activity:** No ☑ Yes ☐
If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any): Nil

Menstrual History
(for Females): Regular Excessive Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

Height: 169 cms. **Weight:** 80 K.gms. **Pulse:** 80 **B.P.** 110/70 mm of Hg BSC 96 mg/dl

C.V.S.:
R.S.:
P/A:
SKIN:
EAR:
NOSE:
THROAT:
EYES:
TEETH & GUMS:

NAD

OTHERHOOD HOSPITAL PUNE RHEA HEALTHCARE PVT. LTD.

Signature of the Hon. Medical Officer

CERTIFICATE

Certify that Shri./~~Smt.~~: Onkar Sunil Raje

class M-pharm Roll No. 12. has completed Health Check-up.

1. He/~~She~~ is found to be fit.
2. He / ~~She~~ is suffering from (Provisional Diagnosis) 1. _____ 2. _____ 3._____ and is advised to consult: _____ and submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:

_____

_____

4. Treatment advised:

_____

_____

MOTHERHOOD HOSPITAL PUNE

Signature of the Hon. Medical Office

Roll NO	Name of student	class	M/F	contact NO	Blood group	Major Finding	signature

F.Y.B.Pharm

2019 - 2020

M.Pharm, Direct Second Year

21-01-2020

~~Sr. No.~~ Roll No.	Name of Students	Class	m/f	Contact NO.	Blood Group	Major ending	Sign
1	Tushar R. Humbe	F.Y. M.pharm	M.	7743805617	A+		Humbe.
2	Sangram Binanje	F.Y. Mpharm	M	8007018473	A+		Binanje
3	Onkar S. Raje	F.Y.M-pharm	M	9766815212	A+		Raje
4	Tushar. R. Kale	F.Y.M.pharm	M	7744072810	A+		Kale
5	Amar C. Suryawanshi	F.Y.M.pharm	M	9168254573	A+	Rhinitis, Breadthlessness	
6	Kamthe Kiran Ananda	F.Y.M.pharm	M	8149152621	AB+		Kamthe.
7	Nitin Neharkar	F.Y.M pharm	M	8484900931	O+ve		Niti
8	Prasad Hingmire	DS.B.Pharm	M	7796712688			
9	Raut Neena Ashok	F.Y.M.Pharm	F	9860562950	A+ve		
10	Pawar Shweta V.	F.Y.M.pharm	F	9922875883	A+ve		Pawar.
11	Nangare Aarti. C	F.Y.M pharm	F	8975103997	AB+ve		Aarti
12	More Akshata. M	FY M Pharm	F	8605017505	A+ve		Akata
13	Thorat Kotaki Vivek	F.Y. M.Pharm	F	8796951306	B+ve		Kotaki.
14	Nawale Prajakta Rajesh	SY B Pharm	F	7499698526	B-ve.		

21-01-2020

Sr. No	Name of student	class	M/F	Contact No	Blood group	Major Finding	Signature
16.	Jadhav Mansi Vijay	S.y.B.Pharm	female	7875866275	A+	-	Mansi
17	Pratiksha Gopinath paul	S.Y.B.Phar	female	8G 2402140g	A+	-	Pratiksha
18.	Suchita Prakash Kakade	S.Y.B.Pharm	Female	7719005652	O-	-	Kakade
19)	Chavan Pranita Prabhakar	S.Y.B.Pharm	Female	7218152564	B+ve	-	Pranita
20)	Thorat Supriya Sanjay	S.Y.B.Pharm	female	9130379911	A+	-	Supriya
21)	Lawande Rutuja Vikas	F.Y.B.Pharm	female	7083896721	A+	-	Rutuja
22)	Londhe Minakshi Raosaheb	F.Y.B.Pharm	Female	9765337416	A+	-	Londhe
23)	Anisa Imam Mulla	FY.B.Pharm	Female	8975516063	B+	-	Anisa
24)	Prajakta Jyotish Pawar	F.Y.Bpharm	Female	6360318357	A+	-	Pjpawar
25)	madure Vaishnavi sachin	F.Y.B pharm	Female	8080681213	B+	Recurrent rhenitis	Vaishnavi
26	phatak Abhijit kailas	F.Y.Bpharm	male	7447350707	O+	obesity	Abhijit
27)	Maharnavar shankar shivaji	F.Y.B Pharm	Male	8379098165	B+	-	Shankar
28.	Khobare Abhishek Suresh	F.Y.B. Pharm	Male	7620005066	AB+	-	Abhishek
29	Khaladkar vaibhav Bhausо	F.Y.B.Pha	Male	7499330816	O+	-	vaibhav
30	Akshay Pansare	FY B Pharm	M	9067780374	B+	Obesity	Pansare

21-01-2020

Sr.No / Roll No	Name of Student	Class	m/f	Contact No.	Blood group	Major ending	Sign
32	khote Shruti	F.Y.B.ph.	Female	9307297837	O+ve	-	
33	Harshada shankar Kumharkar	F.Y.B.ph.	Femal	7888215075	B+ve		
34	Suvarna Gautam kadale	F.Y.B.ph.	Female	9272165951	A+		
35	~~Shewta Swetta~~ Shewta Janardan Khiratkar	F.Y.B.ph.	Female	9881642012	B+		
36	Pathak chaitanya Dashrath	FY B.ph.	male	7218870369	-		
37	Kokane deepak Bapu	F.Y.B.ph.	male	9892126097	-		
38	Omkar Lahu Nap~~kth~~	S.Y.B.ph. F.Y.B.ph.	male	9766128189	.		
39	Shinde Sagar Jaysing	-1-	M	7083053669			
40	Shinde Mayuri Baburao	-1-	f	7796266270	O+		
41	Akshada Uttam Raghatwan	-1-	f	8828148177	B+		
42	Deepali Rajendra Sagar	-1-	f	8275019022	A+		
43	Prachi Nitin Raipure	-1-	f	7020272900	A+		
44	Rushita Bappu Waghade	-1-	f	8830487457	B+		
45	Shelake komal kisan	-1-	F	9011836464	O+		

21-01-2020

Sr. No.	Name of Student	Class	M/F	Mobile No.	Blood Group	Major Ending	Sign
47	Rutuja Bapusaheb Thorat	FY. B Pharm	F	9890797820	O+		Rutuja.
48	Sejal Santosh walanj	-1-	F	7038274567	AB+		Walanj
49	Waghmare Diksha Mahendra	-1-	f	9307216717	B+		Waghmare
50	Saurabh Shivaji Shinde	-1-	M	9858283535	A+		Saurabh
51	Sarode Ravikiran Dattatray	-1-	M	7972230945	A+		Sarode
52	Ubale Suresh Rohan	-1-	M	9370556308	B+		Rohan.
53	Shitole Tejas Eknath	-11-	M	9615699696	A+		Shitole
54	Raj Atul Dake	-1-	M	7083111340	O+		Raj
55	Galgunde soham Dnyandev	-11-	M	9960280497	AB+		Soham
56	Gund Omkar Dattatray	-11-	M	7373675050	A+		Gund.
57	Kabire Dinesh Pandharinath	-11-	M	8975170498	A+		Dinesh
58	AKhade AKshay Balkrishna	-11-	M	9309550293	A+		Akhade.
59	Nikhile Deepak Bhapsekar	-11-	M	7218729630	O+		Bhapsekar
60	Atharva Ravindra Aranya	-11-	M	9767899036	O+		Atharva
61	Manasi Deepak bhamare	-11-	Female	7660639202	A+		Bhamare

Sr. No.	Name & Student	Class	F/M	Mobile No.	Blood group	Major Ending	Sign
63	RinkuBhimrao Dhainje	F.Y.B.pharm	Female	8080265724	B+		Dhainje
64	Gawar Sonali Ravindra	—11—	Female	9850188269	A+	I	
65	Jamdade gayatri-Santh	—11—	Female	7057432832	O+		21/11/20
66	Bhosure Nikita kaluram	—11—	Female	9307982264	A+		
67	Nandini Dashrath Bhujal	—11—	Female	8669246442	B+		Bhujbal
68	Bichukale snehal janardan	—11—	Female	9970920764	A+		SBichukale
69	Vaishanavi Jagtap	—11—	Female	8686 259191	-		Jagtap
70	Aishwarya kalshetti	—11—	Female	9604060240	A+		Akalshetti
71	Neha Nake	—11—	Female	8625995941	B+		Nake
72	Snehal shantaram choudhary	—11—	Female	9762728640	B+		Snehal
73	Mansi Mohan Mokashi	—11—	Female	8796209031	A+		Mokashi
74	Puri Ravi Kailas	—11—	Male	737876 5550			Pkailas
75	Khandave Gauri vasant	—11—	Female	7385071404			Khandave

Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Associations

Sankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune-14

Free Health Checkup Camp

18th July 2019

The Free Health Checkup Camp was organised on the occasion of birthday celebration of Hon. Shri. Ajitdada Pawar on 18th July 2019. The camp was organized in collaboration with Nobel Hospital, Hadapsar as a part of NSS activity and around 132 students & staff members actively participated in health checkup camp. The activity was coordinated by Mr. Sujit Kakade.





Free health checkup camp on the occasion of birthday celebration of Hon. Shri. Ajitdada Pawar.

Mr. Sujit Kakade
NSS Programme Officer

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

FREE HEALTH CHECK-UP CAMP

class :- Final Year B.pharm (2019-20).

Page No.:
Date: 18/07/19

Sr.No.	Name of Student	Age	Gender	Sign
1)	Ghatule Swapnil	23	Male	
2)	Jadhav Rushikesh	21	Male	
3)	Jagtap Yogesh	22	Male	
4)	Kedari Abhishek	20	Male	
5)	Bankar Snehal	21	Female	
6)	Gaike Shubham	22	Male	
7)	Ladkat Shweta	20	Female	
8)	Male puja	21	female	
9)	Sandesh barure	21	M	
10)	khade Swapnil	21	M	
11)	Jagtap Digvijay	22	M	
12)	Lalit Choudhary	22	M	
13)	Mokshada kulal	21	F	
14)	pratiksha shishupal	21	F	
15)	Akshada Gavane	21	F	
16)	Sakpal Bhavana	20	F	
17)	Tambe kalyani	21	F	
18)	Jadhav Snehal	21	F	
19)	Shivani Bhosale	21	F	
20	Sonawane Tejashree	20	F	
21.	Gable pratiksha	21	F	
22.	Shubhangi Karkhile	20	F	
23.	Waghmare Aishwarya	21	F	
24.	Gaysamudre Priyanka	24	F	
25.	Jadhav. Manasi	21	F	
26.	Kadam. Pragati	21	F	
27.	Kadlag. Tejaswini	22	F	

Scanned by CamScanner

Page No.:
Date: / /

28)	Kudale Prajakta.	21	F	Kudale
29)	Shaikh Shaikh Ghushti	21	F	Shaikh
30)	Chappe Anjali	21	F	Chappe
31)	sagar patel	21	M	Patel
32.	khape priya	21	F	khape

Scanned by CamScanner

Class: ~~Second~~ Third Year B.Pharm (2019-20)

Page No.:
Date: 18/7/19

Sl.No.	Name of Student	Age	Gender	Sign.
1)	Bankar Shubhakshi	20	Female	SB
2)	Bhosale Supriya.	20	Female	Bhosale
3)	Khabiya Darshana	20	Female	
4)	Sadkar Mrunal	20	Female	Sadkar
5)	Raut Sarika	20	Female	Raut
6)	Tambe Rutuja	20	Female	Rutuja
7)	Pawar Jaya Parmeshwar	20	Female	Jaya
8)	Umrekar Rutuja	20	Female	Rutuja
9)	Abhale Shirdi	20	Female	Abhale
10)	Dombe Suvarna	20	Female.	Dombe
11)	Beldar Aditi	20	Female	Aditi.
12)	Ikkurvale Yogita S.	20.	Female	Yogita.
13)	Rutuja umretar	20	female	Rutuja
14)	Kokate Suraj	21	Male	
15)	Kadam Ankita	21	F	Aka
16)	Kamble Rohit	20	M	Rohit
17)	parde lalit	21	M	lalit
18)	Balaji Kiratwad	23	M	Bki
19)	Rushikesh kolape	21	M	Rkolape
20)	Mane Hanumant	21	M	Hanu
21)	Munde Sachin	23	M	Sachin
22)	Tarmude Shrikrishna	21	M	Shrik
23)	Pise Ajay	21	M	
24)	Patil. Sanika.	20	f	
25)	More. Mayuri	20	f	Mayuri
26)	Khandve Shreya	20	F	Shreya
27)	Gayatri More	20	F	Gayatri

Scanned by CamScanner

Page No.:____
Date:__/__/__

38)	Dudhawade Rahul	19	male	
39)	Rohit P. Jadhav	20	M	
40)	Choudhary Mahendra	19	Male	
41)	More Mrunalini Sanjiv	21	Female	
42)	Tejas Ghavte	19	Male	
43)	Rajratna Gaikwad	19	Male	
44)	prashant Bhadale	19	Male	

Scanned by CamScanner

2nd year B- pharm (2019-20)

Page No.:
Date: 15/07/19

Sr. No.	Name of Student	Age	Gender	Sign.
1)	Rahul N. Barate	19	Male	Rahul.
2)	Anuradha daundkar	18	Female	Anu.
3)	Shweta Gatad	18	Female	Gat
4)	Prajakta Vibhute	19	Female	Prajkta
5)	Walke Rutuja	18	Female	Rutuja
6)	Harshada Awhale	19	Female	Awhale
7)	Atharwa Sutkar	19	F	Sutkar.
8)	Shreya Shinde	19	F	S.D.Shinde
9)	Yogita Shinde	19	F	Yogita
10)	Aishwarya Varpe	19	F	
11)	Rutuja Dhumal	19	F	Dhumal
12)	Tejal Nimbalkar	19	F	
13)	Simran Prajapati	19	F	Simran
14)	Tejaswini Yadav	19	F	Tejaswini
15)	Rutuja Jagtap	19	F	Jagtap
16)	Priyanka Salunke	19	F	SalunkePA
17)	Pooja Shitole	19	F	Shitole
18)	parshana jagtap	19	f.	Jagtap
19)	kshitijsagar shelal	19	M	kshitijsagar
20)	Mansi Raikar	18	F	Raikar
21)	Ranusingh Rajpurohit	18	M	
22)	Tushar sharma.	20	M	Tush
23)	Anupama Shinde	19	F	Shinde
24)	Khade Utkarsha	18	F	Khade
25)	Kadre Rutuja	19	F	
26)	Bhagat priti	19	F	Bhagat
27)	Abhishek Jamdade	19	M	Abhi
28)	Vijay Kamble	19	M	

Scanned by CamScanner

Page No.:
Date: / /

29)	Nitnaude Vaibhav	20	M	
30)	Thorat Mayur	20	M	
31)	Yamgar Amit	19	M	
32)	Nanavat Shivani	18	F	
33)	Chandan Makwana.	19	M	
34)	Thorat Tejas	19	M	
35)	Ashutosh Kumar	19	M	
36)	Patil Anmol	19	M	
37)	Nilesh Garad	20	M	
38)	Hajare Tanaji	20	M	
39)	Nemade Kiran	18	M	
40)	Gaikwad Shubham	18	M	
41)	Sachin Bhegad	19	M	

Scanned by CamScanner

9. Seminar on Health and Hygiene of Girls

(A. Y. 2019-20)

{4.03.2020}

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune - 411014

Report On

"Health and Hygiene of Girl"

4th March 2020

Board of Students Development



Dr. Swati Gaikwad guiding students

Dr. Swati Gaikwad, Motherhood Hospital, Pune are invited as resource person of this seminar.

Dr. Swati Gaikwad discussed general aspects of nutrition, component of nutrition and nutrition deficiency disorders common in ladies with special emphasis on iron deficiency, anaemia, sources of iron, and symptoms of iron deficiency its prevention and treatment. The activity was co-ordinated by Mr. Prashant H. Khade, Student Welfare Officer.

Mr. Prashant Khade,

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

9. Health Check-up Camps

(A. Y. 2018-19)

{24.07.2018, 26.10.2018}

Pune District Education Associations
Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune-14

A Report on

Free Health Checkup Camp (24th July 2018)

On the occasion of 59th birthday celebration of Hon. Shri. Ajiitdada Pawar, Ex. Deputy Chief Minister Government of Maharashtra and President P.D.E.A. Free Health Checkup Camp was organized in the college in the association with Nobel blood bank, Hadapsar.

For this Free Health Checkup Camp Hon. Shri. Sunil Bankar, Ex corporator PMC, Hon. Shri. Bhaiya Saheb Jadhav, corporator PMC and Hon. Shri. Somnath Sable, vice president NCP Vadgaon Sheri, where present as a guest.

Dr. Ashok Bhosale, Principal of the institute guided college students regarding importance of regular health check up.

Total 250 students actively participated in health checkup camp and Noble hospital issued them health card.

NSS volunteer actively participated in Free Health Checkup Camp. Free Health Checkup Camp was coordinated by prof. Sujit Kakade NSS programme officer.



Free Health Checkup Camp on the occasion of birthday celebration of Hon. Shri. Ajiitdada Pawar

Mr. Sujit Kakade
NSS Program Officer

Dr. Ashok Bhosale
Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune- 411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14

Date-23/07/2018

Notice No- 46

All the students of B.Pharm and M. Pharm. are hereby informed that on the occasion of 59th Birthday celebration of Hon. Shri. Ajitdada Pawar, Ex Deputy Chief Minister, Govt. of Maharashtra and President, Pune District Education Association, college is organizing Blood Donation Camp and Free Health Check-up Camp on 24th July 2018. Schedule for the program is given below-

Sr. No	Activity	Day and Time	Venue	Event Co-ordinator
1.	Free Health Check-up Camp	24th July 2018 10.30 am onwards	Library	Mr. S. S. Kakade
2.	Blood Donation Camp	24th July 2018 11.00 am onwards	Library	Mr. S. S. Kakade

Mr. S. S. Kakade
NSS Program Officer

Dr. Ashok V. Bhosale

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Pune – 14

Date-23/07/2018

Notice No- 47

Academic Year 2018-19

All the Teaching and Non-Teaching Staff members of B.Pharm and M. Pharm. are hereby informed that on the occasion of 59th Birthday celebration of Hon. Shri. Ajitdada Pawar, Ex Deputy Chief Minister, Govt. of Maharashtra and President, Pune District Education Association, college is organizing Blood Donation Camp and Free Health Check-up Camp on 24th July 2018. Schedule for the program is given below-

Sr. No	Activity	Day and Time	Venue	Event Co-ordinator
1.	Free Health Check-up Camp	24th July 2018 10.30 am onwards	Library	Mr. S. S. Kakade
2.	Blood Donation Camp	24th July 2018 11.00 am onwards	Library	Mr. S. S. Kakade

Mr. S. S. Kakade
NSS Program Officer

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

FREE HEALTH CHECK-UP CAMP (2018-19)

class :- Final Year B. Pharmacy

Page No.:
Date: 24/07/2018

Sr. No.	Name of Student	Age	gender	signature
1)	Indersing Rathod	21	M	
2)	Tushar Humbe	21	M	
3)	Omkar shitole	21	M	
4)	mukund shitole	21	M	Shitolem.M
5)	Akshay Bodke	23	M	
6)	Kartik sodnaware	21	M	
7)	Chirag Ranaware	22	M	
8)	Rahul Yede	21	M	
9)	Sonali Zanjurne	21	F	
10)	pooja maurya	22	F	
11)	Lalitkumar	22	M	
12)	Neena Pout	21	F	
13)	Kishor M. Jadhav	24	M	
14)	Rupesh Nagawde	21	M	
15)	Trupti. Khedekar	21	F	Khedkar.T
16)	Rakshanda sonawne	21	F	
17)	Kamthe Kiran	21	M	
18)	Vasave Ravindra	21	M	
19)	Giri shreelaxmi H.	21	F	
20)	Shishupal pratiksha	21	F	
21)	Ghule Rohini	21	F	
22)	Pandule Snehal	21	F	
23)	Jaytap Suraj	21	M	

Scanned by CamScanner

FREE HEALTH CHECK-UP CAMP (2018-19)

Class: T.Y.B. pharmacy

Page No.:

Date: 24/07/2018

Sr. No.	Name of student	Age	gender	signature
1)	Swapnil Khade	20	M	Khade
2)	Mahesh mali	20	M	mali
3)	Abhishek Kedari	20	M	Abhishek
4)	Yogesh Jagtap	20	M	Jagtap
5)	Tambe Kalyani	20	F	Tambe.
6)	Sakpal Bhavana	19	F	Bhavana
7)	Karkhile Shubhangi	19	F	S.Karkhile
8)	Jadhav Snehal	20	F	Jadhav
9)	Sanalage Ashwini	23	F	Ashwini
10)	Sonawane Tejashree	19	F	Sonawane
11)	Bhairavkar Chaitali	19	F	Bhairavkar
12)	Shishupal Pratiksha.	20	F	Shishupal
13)	Jagtap Digvijay	21	M	Digvijay
14)	pathare Rutuja	20	F	Pathare
15)	Waghmare Aishwarya	20	f	WaghmareA.
16)	sabale pratiksha	20	F	Psabale.
17)	Deshmukh Harshad			
18)	saurabh Dhavle	20	M	Dhavle
18)	Tejaswini Kadlag	21	F	Kadlag
19)	Prajakta Kudale	20	F	Kudale
20)	shreya Khandre	20	F	Khandre
21)	Akansha gavhane	20	F	Akgavhane
22)	Harshad deshmukh	20	M	Deshmukh
23)	Bhujbal srushti	21	F	Bhujbal
24)	Dhawale srushti	20	F	srushtiD
25)	veer sayali	21	F	Veers
26)	Chappe Anjali		F	Chappe.

Scanned by CamScanner

FREE HEALTH CHECK-UP CAMP (2018-19)

class: S.Y.B. pharmacy

Page No.:
Date: 24/07/2018

Sr. No.	Name of student	Age	gender	signature
1	Riya · Bhondve	19	F	
2	Rutuja · Kokate	19	F	
3	Ruchita · Bhalerao	19	F	
4	Mayuri · Ganjkar	19	F	
5.	Snehal Langhe	21	F.	
6.	Jaya Pawar	19	F.	
7.	Gayatri More	19.	F.	
8.	Vaishanavi More	18	F.	
9.	Rutuja umrekar	19.	F.	
10.	Sheetal galave	19	F.	
11.	More Mayuri	19	F.	
12.	Yogita Lekurwale	19.	F.	
13.	Pranali Katke	19.	F.	P.S.Kedake.
14.	Prachi Telgote	19	F	
15.	Rutuja Jadhav	19	F	
16.	prashant Bhadale.	19	M	
17.	Sarika Raut	19	F	
18.	Mrunal Satkar	18	F	
19	Dolas Siddhant	20	M	
20	pise Ajay	20	M	
21	chaudhary mahendra	20	M	Mahendra.
22	Jadhav Kajal	20	F	
23	Shrutika D. sathe	18	F	S.D.Sathe
24	priyanka Thongire	18	F	P.Thongire
25.	Damini Patil.	19	F	D. Patil
26	Kalbhor Prajakta	19	F	

Scanned by CamScanner

अमृतमहोत्सवी
स्थापना १९३९
पुढारी
प्रचंड खपाचे एकमेव निःपक्ष व निर्भीड दैनिक
www.pudhari.com
पुणे ५
शनिवार । २८ जुलै २०१८ । स्थापना वर्ष ८० वे । आवृत्ती वर्ष ११ । मुंबई, पुणे, औरंगाबाद, कोल्हापूर, सांगली, सातारा, ठाणे, रायगड, सिंधुदुर्ग, रत्नागिरी, अहमदनगर, नाशिक, सोलापूर, बेळ



आरोग्य शिबिरात उपस्थित मान्यवर.

उरसळ महाविद्यालयात आरोग्य तपासणी

चंदननगर : माजी उपमुख्यमंत्री व पुणे जिल्हा शिक्षण मंडळाचे अध्यक्ष अजित पवार यांच्या वाढदिवसानिमित्त मोफत आरोग्य तपासणी शिबिर व रक्तदान शिबिराचे आयोजन खराडी येथील शंकरराव उरसळ कॉलेज ऑफ फार्मसी येथे करण्यात आले होते. सावित्रीबाई पुणे विद्यापीठाच्या राष्ट्रीय सेवा योजनअंतर्गत व नोबेल हॉस्पिटल हडपसर यांच्या सहकार्याने आयोजित रक्तदान शिबिराचे उद्घाटन पुणे महापालिकेचे मा. नगरसेवक सुनील बनकर यांनी केले. यावेळी नगरसेवक भैयासाहेब जाधव, राष्ट्रवादी वडगाव शेरीचे उपाध्यक्ष सोमनाथ सावळे, प्राचार्य डॉ अशोक भोसले आदी मान्यवर उपस्थित होते. प्रास्ताविक पदविका विभागाचे प्रमुख प्रा. सचिन कोतवाल यांनी केले. आभार राष्ट्रीय सेवायोजना अधिकारी प्रा. सुजित काकडे यांनी मानले.

SKCS - CPEA

AD - 31.7.18

P.D.E.A.'s S. U. College Of P. S. & R. C. Kharadi
INWARD NO: 419
DATE: 31/7/18

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,
Kharadi, Pune-14

A Report on

Free Health Check-Up Camp

Friday, 26th October 2018 at 11.00 am.

The Board of student's development of college was organized free health checkup Camp for First Year B. Pharm, First Year M. Pharma and Direct Second Year B. Pharm students in colleges. The heath check-up camp was organized in collaboration with Apollo Clinic, Kharadi, Pune.

Objective: The main objective of a Health Check-Up camp is to provide initial care to students in life-threatening conditions.

Dr. Suryabhan Yadav, Senior doctor (Apollo Hospital, Kharadi, Pune) were present as the Chief guests for this event. The event began with the welcome of the chief guests. Dr. Suryabhan Yadav, Senior doctor from Apollo clinic in his motivational talk emphasized on the need and importance of good health in life. Dr. Ashok Bhosale, Principal of the college guided the students in Health Check-Up camp.

Achievement: A total of 74 students were examined in this health check-up camp. The activity was coordinated by Mr. Prashant Khade.



Dr. Suryabhan Yadav, Guided Students



Health Check-up during Camp

Mr. Prashant Khade
Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

Dr. Ashok Bhosale
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 Website : www.pdea-sucopsrc.org E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835

Date : 24/10/2018 Ref. No.: SUCOPSRC/618/2018-2019

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam

Treasurer
Adv. Shanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

To,
Dr. Indrabhan Yadav
Centre Head
Apollo Health & Lifestyle Limited,
Kharadi, Pune-14.

Subject: Invitation for conduction of health checkup camp....

Sir,

Our college was established in 2009 with the prime aim of providing quality education in the Pharmaceutical Sciences. The college is conducting B. Pharm and M.Pharm course.

Every year student development department of college organizing health checkup camp as a part of student welfare activity.

Sir, we are very happy to invite you to conduct 'health checkup camp' for First Year B. Pharm and M. Pharm students on 26th October 2018 at 11.00 am in our college.

Looking forward for your co-operation.

Thanking You,

Yours Faithfully,

(Dr.Ashok Bhosale)
PRINCIPAL

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

Received

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E. Institute Code : PH 6385 Website : www.pdea-sucopsrc.org E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020-27011106 Fax. : 020-27013835

Date : 26/10/2018 Ref. No.: SUCOPSRC/ 618 /2018-2019

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
DR. Ashok Bhosale

To,
Dr. Indrabhan Yadav
Centre Head
Apollo Health & Lifestyle Limited,
Kharadi, Pune-14.

Sir,

On behalf of P.D.E.A.'s Shankarrao Ursal College of Pharmaceutical sciences and research center and in person, I wish to extend our sincere thanks to you for your visit to our institute and for your kind cooperation for the conduct of Health Check-up camp on 26th October 2018 in the college for First Year B. Pharm and M. Pharm students.

Thanking you once again for sparing your valuable time and making it convenient to visit our campus and looking forward for the same co-operation in future.

With warm regards.

Thanking You,

Yours Faithfully,

Dr. Ashok Bhosale
(Principal)

Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

Received
Yadav

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Harshada Sukhdev Awhale Date of Health Check-up:

Address (Local): Awhalwadi, Wagholi ~~Male~~ / Female:

Address(Permanent) Awhalwadi, Wagholi Birth Date: 15/01/2000

Class: F. Y. B. Pharm Roll No: 02

Contact No: 9168156464 Category: ~~SC/ST/DTNT/OBC/EBC~~/OPEN/~~ANY OTHER~~

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☐ Mixed ☑ **Exercise:** Yes ☑ No ☐

Sports : No ☐ Yes ☑ **Extra-Curricular activity:** No ☐ Yes ☑
If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any): Dust

Menstrual History (for Females): ~~Regular~~ Excessive Scanty Painful Menarche -ve

Males: Phimosis Testes Inguino-scrotal swelling

Height: 152 cms. **Weight:** 45 K.gms. **Pulse:** 89 **B.P.** 100/70 mm of Hg

C.V.S.:
R.S.:
P/A:
SKIN:
EAR:
NOSE:
THROAT:
EYES:
TEETH & GUMS:

WNAD

Apollo Health and Lifestyle Ltd.

Signature of the Hon. Medical Officer

CERTIFICATE

Certify that Shri./Smt.: Harshada Awhale.

class F.Y. B Pharm Roll No. 02 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. _____ 2. _____ 3. _____ and is advised to consult: _____ and submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:

   None

4. Treatment advised:

   vaccine [HPV
   Hep B]

Apollo Health and Lifestyle Ltd.

Signature of the Hon. Medical Officer

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Bankat Shubhakhi Ajit Date of Health Check-up:

Address (Local): Male / Female: Female.

Address(Permanent) Wadachandnagar, Dist-Pune Tal- Indapur Birth Date: 27-06-1999

Class: S.y. B Pharm Roll No: 59

Contact No: 7066178459 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☐ Mixed ☑

Exercise: Yes ☑ No ☐

Sports : No ☑ Yes ☐

Extra-Curricular activity: No ☑ Yes ☐

If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☑

Allergy (If any): No allergy

Menstrual History (for Females): Regular Excessive Mod Scanty Painful Menarche E Pain +

Males: Phimosis Testes Inguino-scrotal swelling

Height: ~~156~~ cms. **Weight:** 47 K.gms. **Pulse:** 71 **B.P.** ~~70/110~~ 120/80 mm of Hg

C.V.S.: 148 . NAD

R.S.: clear

P/A:

SKIN:

EAR:

NOSE:

THROAT:

EYES:

TEETH & GUMS:

NAD

Apollo Health and Lifestyle

Signature of the Hon. Medical Officer

CERTIFICATE

Certify that Shri./Smt.: Bankar Shubhakti Ajit

class Sy. B Pharm Roll No. 59 has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. _____ 2. _____ 3. _____ and is advised to consult: _____ and submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:

   None

4. Treatment advised:

   New

Apollo Health and Lifestyle Ltd.

Signature of the Hon. Medical Officer

Vaccine: HPV
Hep B

15 - 26

m pharm

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune-14

Students Health Service Scheme

Name: Prajakta Mahadev Magar. Date of Health Check-up:

Address (Local): I-502 Magarpatta city PUNE 411013 Male / Female: female

Address(Permanent) same Birth Date: 17-4-1993

Class: M.Pharm f.y Roll No:

Contact No: 9373495757 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Purpose of the health check-up:

Health check-up of every first year students seeking admission in college is compulsory. This is for benefit of the students as unrecognized disease/s which they are not aware of can be detected at the time of the check-up and the treatment can be taken at appropriate time.

[Please Tick (√) wherever applicable]

Diet : Veg. ☐ Mixed ☑ **Exercise:** Yes ☑ No ☐

Sports : No ☐ Yes ☑ **Extra-Curricular activity:** No ☑ Yes ☐

If yes, Specify:

Habits : Tobacco Chewing ☐ Tobacco Smoking ☐ Gutka

Alcohol Consumption ☐ Pan Parag ☐ No Habit ☐

Allergy (If any): None

Menstrual History (for Females): Regular Excessive Mod. Scanty Painful Menarche

Males: Phimosis Testes Inguino-scrotal swelling

Height: 158 cms. **Weight:** 45.2 K.gms. **Pulse:** 85 **B.P.** 110/70 mm of Hg

C.V.S.:

R.S.:

P/A:

SKIN:

EAR:

NOSE:

THROAT:

EYES:

TEETH & GUMS:

Apollo Health and Lifestyle Ltd.

Signature of the Hon. Medical Officer

CERTIFICATE

Certify that Shri./Smt.: Magar Rajakka. Mahadev

class F.Y. M.pharm. Roll No. ____ has completed Health Check-up.

1. He/She is found to be fit.
2. He / She is suffering from (Provisional Diagnosis) 1. ____ 2. ____
   3. ____ and is advised to consult: ____ and
   submit certificate at college office after consulting specialist Doctor.
3. Investigation Advised:
   . Haemogram Urine R&M
   Vit B12 S. Calcium - Vit D3
4. Treatment advised:
   done

Apollo Health and ...

Signature of the Hon. Medical Officer

Anorexia

↓ appetite

↓

MB (Chronic infn

Remo Recommended

Hep. B —

H R vaccine — Preventive vaccination

2018 - 2019

F.Y. B. Pharm.

F.Y. M. Pharm.

Direct Second Year.

B. Pharm

26th Oct 2018

Roll No	Name of student	class	m/f	Contact No	Blood group	Major Findings	Signature
1	Lohot Sagar Ramdas	F.Y.M.Pharm	M	9922562659	O+		
2	Magar Rajakka. Mahadev.	F.Y.M.pharm	F	9373495757	AB+		
3	Lalage Monali Bharatkumar	F.Y.M pharm	F	8805746613	A+		
4	Satav Komal Ramesh	F.Y.M.Pharm	F	7776003766	O+		
5.	Choudhary Bharat G.	S.Y.B.pharm	M	8806040204.	O+ve		
6.	Pardeshi Rupesh S	F.Y B.pharm	M	9527645732	O-ve		
7.	Aishwarya Varpe.	FY Bpharm	F	9881552789	A+		
8.	Atharwa Satkar.	F.Y.B Pharm	F	8788672514	O+ve		
9.	Anuradha Daundkar	F.Y.B Pharm	f	7030860186	B+ve		
10.	Tanaji Hajare	F.Y.B.Pharm	M	7038378292	B+ve		
11.	Harshada Awhale	F.Y.B.Pharm	F	9168156464	B+		
12.	Gamud Shweta	F.Y.B.Pharm	F.	8806620201	B+ve		
14	Neha Barde	FY BPharm	F	9373506797	O+ve		
15	Jadhav Pratiksha	FY B.pharm	F	7219379308	AB+ve		

Roll NO	Name of student	class	M/F	Contact NO	Blood group	Major Finding	Signature
32	Tejas vilas Thorat	F.Y.B.pharm	M	8805253162	O+		Thorat
33	Rutuja Dilip Walke	F.Y.B-Pharm	F	8805068870	B+		Rutuja
34	Bankar shubhakki Ajit	Sy.Bpharm	F	7066178459	B+		Bankar
35	chavan Rajgouri Harichndra	S.yBpharm	F	8308687076			RC
36	More Mrunalini Sanjii	S.YBpharm	F	7066606570	A+		
37	Kadam Ankita Mohan	—11—	F	7218447396	A+		Ankita
38	Bramhane Jayshri Annasaheb	—11—	F	9359229134	A+		Bramhane
39	Bhosale Supriya Sharad.	S.Y.BPharm	F	8805755336	B+		Bhosale.
40	Mane Hanuman Keshav	—11—	M	9158761250	—		
41	chavan Nitesh Arjun	—11—	M	7057118064	—		
42	Kunte Nandesh Ashok	S.Y Bpharm	M	7028852073	O+		
43	Shinde yogita Baban	B.Y. B.		9420414048	B+.		Yshinde
44	Vibhute Prajkta Bapu.	F.Y.B.		9370448574	O—		Prajkta.
45	Salunke Priyanka Rajendra	F.Y. B.		9623830065	A+		SalunkeP.R
46	Apoorva Tripathi	F.Y.B		7558317376	AB+		Apoorva

RSTI. NO	Name of student	class	M/F	contact NO	Blood group	Major Finding	Signature
47	Mansi Raikar.	F.Y. BPharm	F	9881973708	O+ve		Raikar
48	Ruke Dhanshree	F.Y.BPharm	F	7057563036	B+ve		Ruke
49	Tejaswini yadav	F.Y.BPharm	F	9763399007	A+ve		Tejaswini
50	simran Prajapati	F.Y.B.Pharm	F	9730966622	A+		Simran
51	Pooja shitole	F.Y.B.Pharm	F	8007911251	B+		Pshitole
52	Shreya shinde	F.Y.B.Pharm	F	8669463797	B+		S.P.Shinde
53	Tushar. Sharma.	F.Y.B.Pharm	M	7276430285	O+		Tushar
54	Anmol Patil	F.Y.B.Pharm	M	8857988801	A+		A.Patil
55	Ranusingh Rajpurohit	F.Y.B.Pharm	M	7066959280	A+		
56	Prasad. Tekawade	F.Y.B Pharm	M	8381037878	AB+		Prasad.
57	Jagtap Rutuja	F.Y.Bpharm	F	7517822429	B+		
58	Jamdade Abhishek	F.Y.B Pharm	M	7709751720	O+ve		
59	kamble Sakshi	F.Y.B Pharm	F	7710864562	O−		Kamble
60	Nimbalkar Tejal	F.Y.B.pharm	F	9975665882	B+ve		Nimbalkar

Sr No	Name of student	class	M/F	contact No	Blood group	Major Finding	Signature
62	Kodre Rutuja	F.Y	F	9145442799	A+		
63	Kshirsagar snehal vishnu	F.Y	F	7038952518	O+		
64	bamble vijay	F.Y	M	7378507595	O+		
65	Khade utkarsha	FY	F	7719962971	O+		
66	Shinde Nenanath	FY	F	7218542746	O+		
67	Kolse Shubham	F.Y	M	8390400008	O+		
68	Ashutosh · Kumar	F.Y	M	9673650294	O+		
69	Mungade Maruti	FY	M	9168846760			
70	Vishwajeet Landage	F.Y.	M.	9112857812	O+		
71	Naikodi Siddhesh	F.Y	M	9527561715	A+		
72	Kiran Nemade	F.Y.	M	7038630482	A+		
73	Papal Raj	F.Y.	M	7744877976	O+		
74	Kale Anjali R	M pharm F.Y	F	7756050695	A+		

Student's Development Officer
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre

Participatory learning

- Use of cutting-edge teaching tools like Power Point presentations with animations, videos, etc.
- Demonstration of various models of the human body system and extraction assembly by faculty.
- Software like Chem Sketch, PKSolver, PCP Disso and Ex Pharma are used to make the fundamentals clear.
- Both post graduate and undergraduate students are urged to operate sophisticated equipments like UV Spectrophotometer, HPLC, Photostability chamber, Dissolution Test apparatus and Brookfield Viscometer.
- Competitive and Team Spirit are developed through group discussions and debates held during regular classes.
- Hands-on demonstrations are used in the Industrial Pharmacy to offer explanations of unit operations and machine functioning.
- The students are regularly exposed to seminars, workshops, guest lectures and conferences.
- By posing questions to the class, getting feedback at the end of lectures and conducting interactive exercises during practicals, all faculty members engage students in classroom interaction.
- Presentations are made by the students on various subjects.
- Sessions on personality development are part of the training and placement process.
- e-learning and ICT use by students.
- Posters, charts, and displays are being prepared by the students.
- Encouraging students to participate in a variety of competitions and extracurricular events.
- MOUs are signed with leading industries/institutes to bridge the gaps in the curriculum.
- Students participate in institute-run Add-on/Certificate courses.

B. Participatory learning

1. Students learn software handling

Class: First Year M. Pharm P.Q.A
Semester: I (2019 Pattern)
Subject: Quality Control and Quality Assurance (MQA103T)
Date: 09/02/2022

Group Discussion

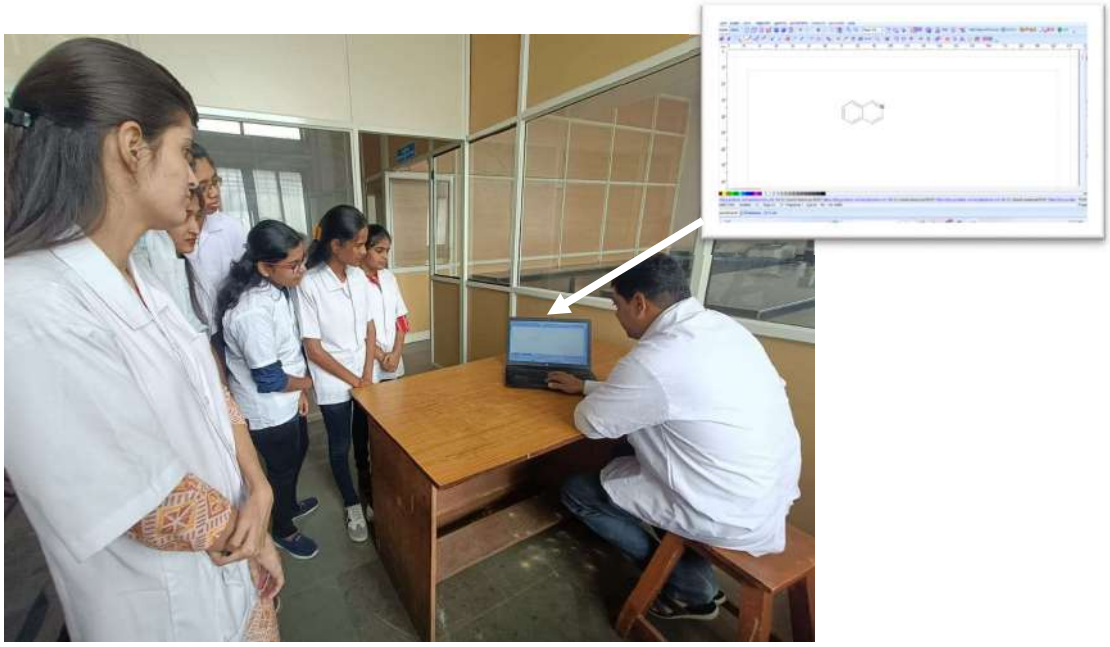
Topic: Demonstration on Use of Software- Chem Draw, PkSolver



Demonstration given to students of F.Y. M. Pharmacy on how to use ChemSketch and PkSolver softwares.

ACD/ChemSketch is a molecular modeling program used to create and modify images of chemical structures. Also, there is a software that allows molecules and molecular models displayed in two and three dimensions, to understand the structure of chemical bonds and the nature of the functional groups, whereas PKSolver, a freely available menu-driven add-in program for Microsoft Excel written in Visual Basic for Applications (VBA), for solving basic problems in pharmacokinetic (PK) and pharmacodynamic (PD) data analysis. The program provides a range of modules for PK and PD analysis including noncompartmental analysis (NCA), compartmental analysis (CA), and pharmacodynamic modeling. Two special built-in modules, multiple absorption sites (MAS) and enterohepatic circulation (EHC), were

developed for fitting the double-peak concentration–time profile based on the classical one-compartment model. In addition, twenty frequently used pharmacokinetic functions were encoded as a macro and can be directly accessed in an Excel spreadsheet.



List of Students Participated in demonstration of software handling

Roll No.	Candidate Name
16.	Avhad Pratiksha Bhagwan
17.	Borase Pallavi Sarjerao
22.	Jadhav Purva Suresh
23.	Jadhav Rutuja Pravinkumar
24.	Kalamkar Tanmayi Dattatray
25.	Kendre Komal Anand
26.	Patil Dipti Sambhaji
27.	Pawal Suvarna Pradip
28.	Pinjari Pranali Vasant

Dr. Amit Kasabe
Subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

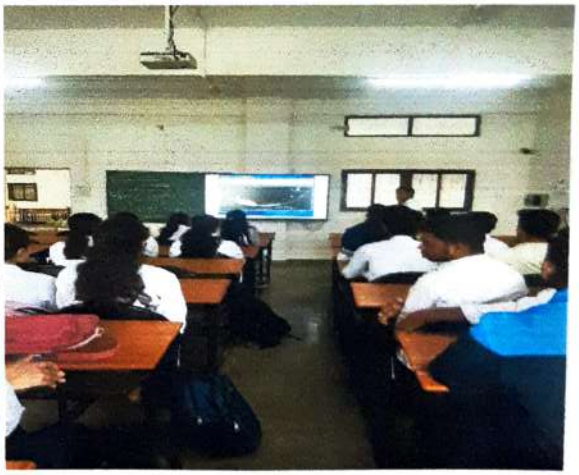
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

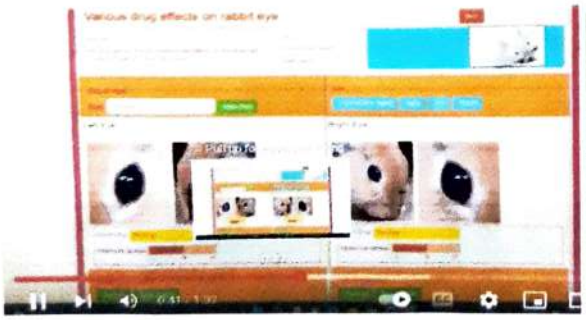
Demonstration of various softwares

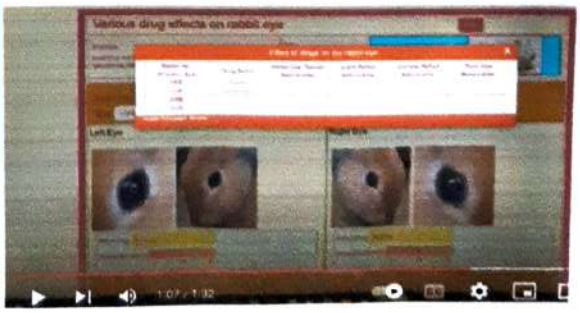
Class : Second Year B. Pharmacy **Sub: Pharmacology-I**

Aim: Effect of drugs on rabbit eye on Ex Pharma Software.









Mr. Krunal Kanase

HOD & Asst. Prof. in Pharmacology

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-411014.

PRINCIPAL

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

B. Participatory learning

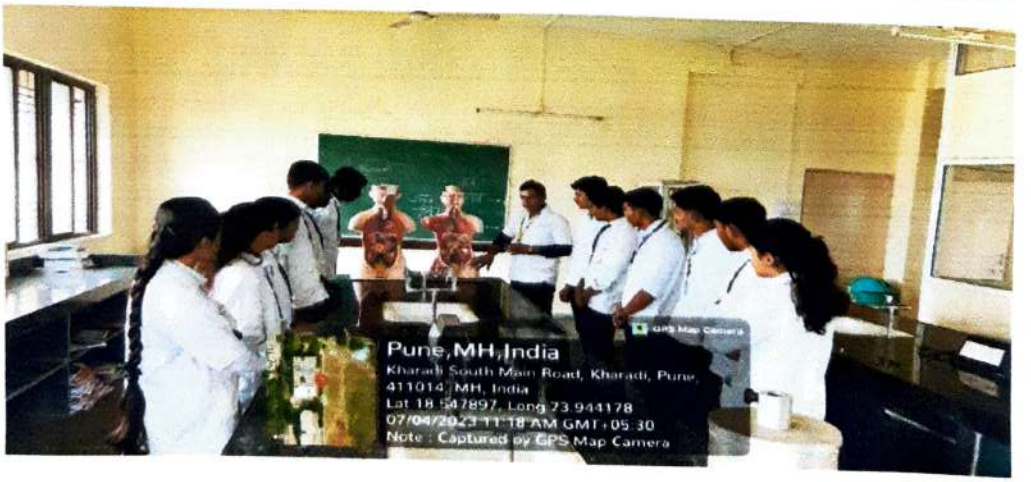
2. Demonstration of various models

Demonstration of various models

Class : First Year B. Pharmacy **Sub: Human Anatomy & Physiology**

Aim: Demonstration of Various Human Body System





PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.



Demonstration of anatomy & physiology of Kidney



Demonstration of anatomy & physiology of Muscular System

Mr. Krunal Kanase

HOD & Asst. Prof. in Pharmacology

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-411014.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

B. Participatory learning

3. Instrument Handling

Class: First Year M. Pharm. (Semester-I, 2019 P)
Subject: Quality Assurance Practical- I (MQA 105P)
Academic Year: 2022-23

Aim – To estimate the concentration of Diclofenac sodium and Paracetamol using Simultaneous Equation Method (Vierordt's method)

Principle – A sample contains two absorbing drugs (X and Y) each of which absorbs at the wavelength maxima (λ_{max}) of each other, it may be possible to determine the concentration of both drugs by the technique of simultaneous equation.

$$C_x = \frac{A2(ax2) - A1(ay2)}{ax1\ ay1 - ax1\ ay2}$$

$$C_y = \frac{A1(ax2) - A2(ax1)}{ax2\ ay1 - ax1\ ay2}$$

Where, A_1, A_2 : absorbance of sample (X,Y)
ax_1, ax_2, ay_1, ay_2 : molar absorptivity of X and Y
C_x, C_y : concentration of X and Y drug



M. Pharm. students performing analysis of Pharmaceutical Formulation using UV-Visible Spectrophotometer (Date: 06.01.2023)

Name and signature of subject teacher:
Dr. Vijaya Uday Barge

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: F. Y. M. Pharm.

Semester: II (2019 Pattern)

Subject: Pharmaceutics Practical -II (MPH 205P)

Academic Year: 2022-23

Aim: Optimization of Diclofenac SR Tablet Formulation by Factorial Design.

Principle:

- The controlled release drug delivery systems are aimed at controlling the rate of drug delivery, sustaining the duration of therapeutic activity and / or targeting the delivery of the drug to a tissue.
- The objective of the study is to design diclofenac SR tablets employing a combination of HPMC K 100 M (hydrophilic polymer) and ethyl cellulose (lipophilic polymer) for better controlled release.
- Diclofenac SR tablet formulation was optimized by 2^2 – factorial design.
- Diclofenac SR tablets were formulated employing the selected combinations of HPMC (Factor A) and EC (Factor B) as per 2^2 factorial study and prepared by wet granulation method.



Formulation of Diclofenac SR Tablet using Rotary Tablet Compression Machine

Mr. Sujit Kakade
Subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi Pune

Class: Third Y. B. Pharm
Subject – Pharmacognosy and Phytochemistry -II
Semester: V
Academic Year: 2022 -2023

Aim: To study the Crude drugs with the help of Macroscopical and Microscopical method.

Principle: Evaluation of a drug ensure the identity of a drug and determines the quality and purity of drugs. The main reasons behind the need for evaluation of crude drugs are biochemical variation in the drug, effect of treatment and storage of drugs, and the adulterations and substitutions.





Practical Demonstration of Microscopical Evaluation of Crude drugs using Projection Microscope

Name of subject teacher: Dr. R. Y. Patil

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: S.Y.B. Pharm

Subject: Pharmacology-I

Semester: IV (2019 Pattern)

Academic Year: 2021-22

Aim: Effects of skeletal muscle relaxants using rota-rod apparatus.

Principle: One of the important pharmacological action of anti-anxiety agents of benzo diazepam class of drugs is muscle relaxing property. The skeletal muscle relaxation together with taming or calming effect, these agents reduce anxiety and tension. The loss of muscle grip is an indication of muscle relaxation. This effect can be easily studied in animals using inclined plane or rotating rods.

The difference in the fall off time from the rotating rod between the control and diazepam treated animal is taken as an index of muscle relaxation. The angle of the slope of the inclined plane, or the rate of rotation of the rod should be adjusted such that a normal mouse can stay on the plane or on the rod for an appreciable period of time.



Demonstration of Rotarod Apparatus

Name of subject Teacher: Mr. Vivek Ingale

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre Kharadi Pune-14.

Class: Third Y. B. Pharm
Subject –Herbal Drug Technology (BP609)
Semester: VI (Pattern 2019)
Year of the study: 2021 -2022

Aim: To formulate and Evaluate Herbal Clove Tablet

Principle:
The current study was aimed for the formulation and evaluation of herbal tablets incorporated Powder. The tablets were prepared by wet granulation method using clove powder.
The prepared tablets were subjected to physical evaluation like weight variation, hardness, thickness, friability and disintegration test.



Demonstration of Punching Herbal Tablet

Name of subject teacher: Dr. R. Y. Patil

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

- **Class: S. Y. B. Pharm, Sem IV**
- **Subject: Pharmacognosy and Phytochemistry I**
- **Academic Year: 2022-2023**
- **Aim:** To Determine the **Ash Value** of given sample
- **Principle:**. The ash remaining following ignition of herbal materials is determined by three different methods which measure total ash, acid-insoluble ash and water-soluble ash.

The total ash method is designed to measure the total amount of material remaining after ignition. This includes both "physiological ash", which is derived from the plant tissue itself, and "non-physiological" ash, which is the residue of the extraneous matter (e.g. sand and soil) adhering to the plant surface.

Acid-insoluble ash is the residue obtained after boiling the total ash with dilute hydrochloric acid, and igniting the remaining insoluble matter. This measures the amount of silica present, especially as sand and siliceous earth.

Water-soluble ash is the difference in weight between the total ash and the residue after treatment of the total ash with water



Student learn handling of Muffle furnase apparatus for ash value determination

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.

Name: Prof. Vipul Dhasade

Department of Pharmacognosy

B. Participatory learning

4. Group Activities

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Date: 07/02/2022

Group Discussion

Topic: NMR Spectroscopy



Students participating in a group discussion utilizing charts on the subject of NMR Spectroscopy



Students participating in a discussion utilizing charts on the subject of NMR Spectroscopy

Scanned with CamScanner

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Date: 08/02/2022

Group Discussion

Topic: Mass Spectroscopy



Students participating in a group discussion utilizing charts on the subject of Mass Spectrometry



Students participating in a group discussion utilizing charts on the subject of Mass Spectrometry

Dr. Vijaya Barge
Subject Teacher

Scanned with CamScanner

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Date: 07/02/2022 & 08/02/2022

List of Students Participated in Group Discussion
on the Topic of NMR Spectroscopy Using Charts

Roll No.	Dept. of Pharmaceutics	7.2.2022	8.2.2022	Roll No.	Dept. of P.Q.A	7.2.2022	8.2.2022
	Candidate Name				Candidate Name		
1.	Bamdale P	Pr	Pr	17.	Avhad P.	Pr	AB
2.	Beldar A.	Pr	Pr	18.	Borase P.	AB	Pr
3.	Bhalerao R.	Pr	Pr	19.	Deshmane K.	Pr	Pr
4.	Bhondve R.	Pr	Pr	20.	Gaikwad R.	Pr	Pr
5.	Biradar P.	Pr	Pr	21.	Gavhane M.	Pr	Pr
6.	Brahmne J.	Pr	Pr	22.	Gawade A.	Pr	Pr
7.	Gaysamudare P.	AB	Pr	23.	Ghawate D.	Pr	Pr
8.	Jadhav S.	Pr	Pr	24.	Jadhav P.	Pr	Pr
9.	Joshi S.	Pr	Pr	25.	Jadhav R.	Pr	Pr
10.	Mahajan V.	Pr	Pr	26.	Kalamkar T.	Pr	Pr
11.	Nagargoje S.	Pr	Pr	27.	Kendre K.	Pr	Pr
12.	Patil D.	Pr	Pr	28.	Patil D.	Pr	Pr
13.	Pawar A.	Pr	Pr	29.	Pawal S.	Pr	Pr
14.	Rokade A.	Pr	Pr	30.	Pinjari P.	Pr	Pr
15.	Shinde H.	Pr	Pr	31.	Rode M.	Pr	Pr
16.	Thorat T.	Pr	AB	32.	Shaikh A.	Pr	Pr

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Scanned with CamScanner

Class: Final Year B. Pharm (Semester-VII, 2015 P)
Subject: Pharmaceutical Analysis V
Academic Year: 2019-20

In Class Group Activity
Think, Pair and Share (TPS)
COURSE: 4.7.2 T PHARMACEUTICAL ANALYSIS –V

Topic: Infrared Spectroscopy
Subtopic: Fourier Transform Infrared Spectrometry

Learning objectives:

The students will be able to understand

1. **The difference between dispersive and non-dispersive instruments.**
2. **Practical applications of dispersive and non-dispersive instruments.**
3. **The advantages of Fourier Transform Infrared Spectrometer over other instruments.**
4. **Working of FTIR instrument.**



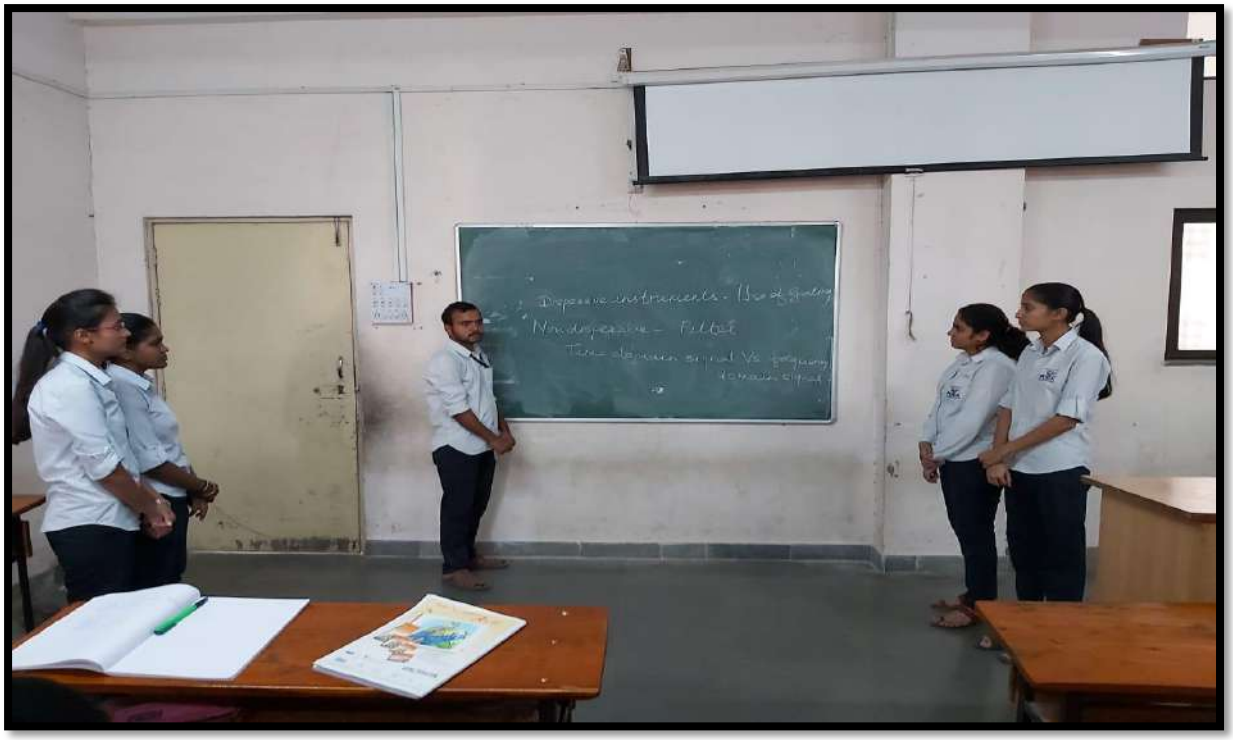
The teacher is outlining the learning objectives of Think, Pair and Phase activity
Students are given a think-phase question.



Individual students think about the answer to a question (1-3 min.) {Think Phase}



**Teacher asks another question related to previous one,
each student is paired with another student (5-10 min) {Pair Phase}**



Students share their thinking with the entire class {Share phase}



A teacher moderating the discussion

COURSE: 4.7.2 T PHARMACEUTICAL ANALYSIS –V (2015P)

- **Topic: Infrared Spectroscopy**
- **Subtopic: Fourier Transform Infrared Spectrometry**
- **Think Phase Question: How do dispersive and non-dispersive instruments work?**

  #Multiple solution approach: Yes

Solution:

Non dispersive instruments make use of series of narrow band filters of appropriate wavelengths.

Dispersive instruments make use of monochromators like prisms or gratings.

- (Time upto 3 mins))
- **Pair Phase Question: When analyzing a sample, what benefits could FT instruments have over dispersive and non-dispersive instruments?**

  #Mapping between think and pair phase is shown with red color and further consequence is in green color.

  #Pair phase task is taken place as given below.

-The nondispersive instruments are usually used for the quantitative analysis of alkali metals by exposing the sample to an appropriate filters sequentially. These instruments are simple to operate, cheaply available, give good signal to noise ratio but do not provide important spectral details over a wide range of wavelengths, which are particularly important for the qualitative analysis and structure elucidation.

-In dispersive instruments, rotation of a dispersive element like grating makes available sequentially all the wavelengths in the region of interest. The speed of motion of the

dispersive element decides the time required for completing the scan. Since, sample is exposed to all the wavelengths sequentially, much time is wasted in scanning the spectral regions that contain little or no information. Hence qualitative analysis become time consuming. -FT instruments are special instruments which make use of multiple detectors or channels to obtain information about different parts or elements of the spectrum simultaneously. Hence its most important advantage is that it makes possible recording of a spectrum in a small time period 0.5 to 1 sec. Also it provides very high S/N ratio.

- (Time upto 10 mins)
- **Share Phase: Pairs are sharing the answer …….**

Non dispersive instruments make use of series of narrow band filters of appropriate wavelengths.

Dispersive instruments make use of monochromators like prisms or gratings.

-The nondispersive instruments are usually used for the quantitative analysis of alkali metals by exposing the sample to an appropriate filters sequentially. These instruments are simple to operate, cheaply available, give good signal to noise ratio but do not provide important spectral details over a wide range of wavelengths, which are particularly important for the qualitative analysis and structure elucidation.

-In dispersive instruments, rotation of a dispersive element like grating makes available sequentially all the wavelengths in the region of interest. The speed of motion of the dispersive element decides the time required for completing the scan. Since, sample is exposed to all the wavelengths sequentially, much time is wasted in scanning the spectral regions that contain little or no information. Hence qualitative analysis become time consuming.

-FT instruments are special instruments which make use of multiple detectors or channels to obtain information about different parts or elements of the spectrum simultaneously. Hence its most important advantage is that it makes possible recording of a spectrum in a small time period 0.5 to 1 sec. Also it provides very high S/N ratio.

Dr. Vijaya Barge

Subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

B. Participatory learning

5. Participation of students in Seminars/ Workshops/ Conferences organized by the institute

(A. Y. 2018-19 to 2022-23)

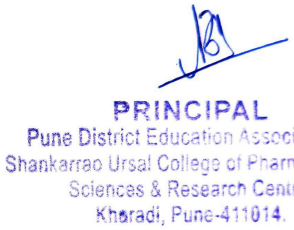
	Name of the workshop/ seminar/ conference	Number of Participants	Date From – To	Link to the Activity report on the website
2022-23	Seminar on "Back Pain"	178	20/07/2022-20/072022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/97/Seminar%20On%20Back%20Pain.pdf
2022-23	Seminar on "Immunity"	160	20/07/2022-20/072022	https:// **Year** pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/100/A%20Seminar%20on%20Immunity.pdf
2022-23	One day seminar on Career Guidance, GPAT Exam Preparation and Development of Soft Skills.	84	16/09/2022-16/09/2022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/101/One%20day%20seminar%20on%20Career%20Guidance,%20GPAT%20Exam%20Preparation%20and%20Development%20of%20Soft%20Skills..pdf
2022-23	One day seminar on the topics "Career Guidance and Business Opportunity "and "Career in Innovative Entrepreneur for Pharma Graduates"	67	17/09/2022-17/09/2022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/104/One%20day%20seminar%20on%20the%20topics%20Career%20Guidance%20and%20Business%20Opportunity%20and%20Career%20in%20Innovative%20Entrepreneur%20for%20Pharma%20Graduates.pdf
2022-23	Research Avishkar.	23	06/01/2023-06/01/2023	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/105/Research%20Avishkar.pdf
2022-23	Seminar on "Pharmacovigilance in India"	190	25/02/2023-25/02/2023	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/106/Seminar%20on%20Pharmacovigilance%20in%20India.pdf
2022-23	Seminar on "Personality Development"	190	25/02/2023-25/02/2023	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/107/Seminar%20on%20Personality%20Development.pdf
2022-23	Seminar on "The Art of Pharma Marketing-Increase Your Skills and Build Your Career"	190	25/02/2023-25/02/2023	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/108/Seminar%20on%20The%20Art%20of%20Pharma%20Marketing%20Increase%20Your%20Skills%20and%20Build%20Your%20Career.pdf
2022-23	One day state Level Seminar on "Research Methodology"	72	29/03/2023-29/03/2023	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/109/One%20day%20state%20Level%20Seminar%20on%20Research%20Methodology.pdf
2022-23	One day state Level Seminar on "Intellectual Property Rights"	72	29/03/2023-29/03/2023	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/110/One

				%20day%20state%20Level%20Seminar%20on%20Intellectual%20Property%20Rights.pdf
2021-22	Research Avishkar	67	27/07/21-28/-7/2021	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/111/Research%20Avishkar.pdf
2021-22	Seminar on “Road Safety and Traffic Awareness”	301	05/03/2022-05/03/2022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/112/Seminar%20on%20Road%20Safety%20and%20Traffic%20Awareness.pdf
2021-22	Two days seminar on the topic "Entrepreneurship and career guidance"	76	25/03/2022-26/03/2022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/113/Two%20days%20seminar%20on%20the%20topic%20Entrepreneurship%20and%20career%20guidance.pdf
2021-22	Seminar on Gender Equality.	67	07/04/2022-07/04/2022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/114/Seminar%20on%20Gender%20Equality..pdf
2021-22	Seminar on Ragging as a social menace’	100	07/04/2022-07/04/2022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/115/Seminar%20on%20Ragging%20as%20a%20social%20menace.pdf
2021-22	One-Day State Level Seminar on "Intellectual Property Rights"	99	11/05/2022-11/05/2022	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/116/One-Day%20State%20Level%20Seminar%20on%20Intellectual%20Property%20Rights.pdf
2020-21	Research Avishkar.	80	22/12/2020-23/12/2020	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/117/Research%20Avishkar..pdf
2020-21	Seminar on “Gender Sensitization.	150	20/04/2021-20/04/2021	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/118/Seminar%20on%20Gender%20Sensitization.pdf
2019-20	Seminar on Introduction to Entrepreneurship.	113	20/09/2019-20/09/2019	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/119/Seminar%20on%20Introduction%20to%20Entrepreneurship.pdf
2019-20	Department of Science & Technology sponsored three days Entrepreneurship Awareness Program.	84	26/09/2019-28/09/2019	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/120/Department%20of%20Science%20&%20Technology%20sponsored%20three%20days%20Entrepreneurship%20Awareness%20Program.pdf
2019-20	One day state-level seminar on "Publication Guidelines and Ethics"	80	25/02/2020-25/02/2020-	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/121/One%20Day%20state%20level%20seminar%20%20on%20Publication%20Guidelines%20and%20Ethics.pdf
2018-19	Two Days National Level Seminar on “Emerging Trends in Analytical Techniques”	75	18/09/2018-20/09/2018	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/122/Two%20Days%20National%20Level%20Seminar%20on%20Emerging%20Trends%20in%20Analytical%20Techniques.pdf
2018-19	Two Days State Level Seminar on “Recent Trends in Formulation Development”	70	21/09/2018-22/09/2018	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/123/Two%20Days%20State%20Level%20semina



				r%20on%20Recent%20Trends%20in%20Formulation%20Development.pdf
2018-19	Department of Science & Technology sponsored three days Entrepreneurship Awareness Program.	79	19/10/2018-21/10/2018	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/124/Department%20of%20Science%20&%20Technology%20sponsored%20three%20days%20Entrepreneurship%20Awareness%20Program..pdf
2018-19	One day state Level Seminar on "Intellectual Property Rights"	90	27/12/2018-27/12/2018	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/125/One%20day%20state%20Level%20Seminar%20on%20Intellectual%20Property%20Rights.pdf
2018-19	Workshop on “Disaster Management "	170	13/03/2019-14/03/2019	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/126/Workshop%20on%20%20Disaster%20Management.pdf





A. Experiential learning

6. Participation of students in Seminars/ Workshops/ Conferences organized by other institutes

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY, SASWAD

CERTIFICATE

This is to certify that, Dr./Mr./Mrs./Ms. Komal Anand Kendre from Pdea's Shankarrao ursal College of pharmaceutical sciences and research centre kharadi Pune attended a National Webinar on **"Current Trends in Regulation and Export of Herbal Medicines"** held on 23rd



Mr. V.C. Shilimkar

Co-ordinator

Our Patron: Padmavibhushan Hon. Sharadchandraji Pawarsaheb, Ex. Agriculture Minister, Govt. of India.

Dr. R.S. Chavan

Principal

Made for free with Certify'em

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY, SASWAD

CERTIFICATE

This is to certify that, Dr./Mr./Mrs./Ms. Pawal Suvarna pradip from PDES'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER KHARADI attended a National Webinar on **"Current Trends in Regulation and Export of Herbal Medicines"** held on 23rd December 2022.



Mr. V.C. Shilimkar

Co-ordinator

Our Patron: Padmavibhushan Hon. Sharadchandraji Pawarsaheb, Ex. Agriculture Minister, Govt. of India.

Dr. R.S. Chavan

Principal

Made for free with Certify'em

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

सत्यमेव जयते

NIPAM
NATIONAL IP AWARENESS MISSION

Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

CERTIFICATE

This is to certify that, **MS. KOMAL ANAND KENDRE** of **PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE KHARADI PUNE** has successfully participated in IP Awareness/Training program under **NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION**

on December 27,2022

Organized by
Intellectual Property Office, India

Date:January 04,2023

(Prof. (Dr) Unnat P. Pandit)
CONTROLLER GENERAL OF
PATENTS, DESIGNS & TRADE MARKS

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

सत्यमेव जयते

NIPAM
NATIONAL IP AWARENESS MISSION

Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

CERTIFICATE

This is to certify that, **MS. PRANALI VASANT PINJARI** of **PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI, PUNE** has successfully participated in IP Awareness/Training program under **NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION**

on December 27,2022

Organized by
Intellectual Property Office, India

Date:January 04,2023

(Prof. (Dr) Unnat P. Pandit)
CONTROLLER GENERAL OF
PATENTS, DESIGNS & TRADE MARKS

72nd INDIAN PHARMACEUTICAL CONGRESS

IPC

NAGPUR

NITIKA

Theme:
"Access to Quality & Affordable Medical Products"

72nd Indian Pharmaceutical Congress, Nagpur

January 20-22, 2023

आज़ादी का अमृत महोत्सव

Harman

Emcure
SUCCESS THROUGH INNOVATION

CERTIFICATE OF PARTICIPATION

DELEGATES

It is our pleasure to certify that

TANMAYI KALAMKAR of **Shankarro ursal college of pharmacy and research centre Kharadi Pune** has participated as delegate in the 72nd Indian Pharmaceutical Congress held at Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur January 20-22, 2023.

Dr. V. G. Somani	Mr. Atul Mandlekar	Prof. Milind Umekar	Prof. Prakash Itankar
President, IPCA	Chairman,LOC	Organising Secretary,LOC	Organising Secretary,LOC



IPC Registration Number: 4957941


72nd INDIAN PHARMACEUTICAL CONGRESS
IPC
NAGPUR
NITIKA
Theme:
"Access to Quality & Affordable Medical Products"
INTAS
72nd Indian Pharmaceutical Congress, Nagpur
Certificate
POSTER
It is our pleasure to certify that,
MAYURI GAVHANE presented a Poster in Scientific Session entitled "REVIEW ON BIOANALYTICAL METHOD DEVELOPMENT IN HUMAN PLASMA" in the 72nd Indian Pharmaceutical Congress held at Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur during January 20-22, 2023.
Dr. V. G. Somani
President, IPCA
Mr. Atul Mandlekar
Chairman,LOC
Prof. Milind Umekar
Organising Secretary,LOC
Prof. Prakash Itankar
Organising Secretary,LOC
Prof. Roop K. Khar
Convener, IPCA-SSC
Prof. Dadasaheb M. Kokare
Chairman, Scientific Committee, LOC
GPAT™
DISCUSSION CENTER


72nd INDIAN PHARMACEUTICAL CONGRESS
IPC
NAGPUR
NITIKA
Theme:
"Access to Quality & Affordable Medical Products"
72nd Indian Pharmaceutical Congress, Nagpur
January 20-22, 2023
Harman
Emcure
CERTIFICATE OF PARTICIPATION
It is our pleasure to certify that
MAYURI GAVHANE of Shankarro ursal college of pharmacy and research centre Kharadi Pune has participated as delegate in the 72nd Indian Pharmaceutical Congress held at Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur January 20-22, 2023.
Dr. V. G. Somani
President, IPCA
Mr. Atul Mandlekar
Chairman,LOC
Prof. Milind Umekar
Organising Secretary,LOC
Prof. Prakash Itankar
Organising Secretary,LOC
DELEGATES

72nd INDIAN PHARMACEUTICAL CONGRESS

IPC NAGPUR NITIKA

Theme: "Access to Quality & Affordable Medical Products"

72nd Indian Pharmaceutical Congress, Nagpur

January 20-22, 2023

आज़ादी का अमृत महोत्सव

Harman

Emcure

SUCCESS THROUGH INNOVATION

CERTIFICATE OF PARTICIPATION

DELEGATES

It is our pleasure to certify that **PALLAVI BORASE** of **PDEA's Shankarrao Ursal COPS and Research Center** has participated as delegate in the 72nd Indian Pharmaceutical Congress held at Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur January 20-22, 2023.

Dr. V. G. Somani	Mr. Atul Mandlekar	Prof. Milind Umekar	Prof. Prakash Itankar
President, IPCA	Chairman,LOC	Organising Secretary,LOC	Organising Secretary,LOC



IPC Registration Number: 1847575

72nd INDIAN PHARMACEUTICAL CONGRESS

IPC

NAGPUR

NITIKA

Theme:
"Access to Quality & Affordable Medical Products"

72nd Indian Pharmaceutical Congress, Nagpur

January 20-22, 2023

आज़ादी का अमृत महोत्सव

Harman

Emcure
SUCCESS THROUGH INNOVATION

CERTIFICATE OF PARTICIPATION

DELEGATES

It is our pleasure to certify that **DIPTI PATIL** of **Shankarrao Ursal College of Pharmaceutical sciences and Research centre Kharadi** has participated as delegate in the 72nd Indian Pharmaceutical Congress held at Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur January 20-22, 2023.

Dr. V. G. Somani	Mr. Atul Mandlekar	Prof. Milind Umekar	Prof. Prakash Itankar
President, IPCA	Chairman,LOC	Organising Secretary,LOC	Organising Secretary,LOC



IPC Registration Number: 1808068

10

367

72nd INDIAN PHARMACEUTICAL CONGRESS

IPC

NAGPUR

NITIKA

Theme:
"Access to Quality & Affordable Medical Products"

72nd Indian Pharmaceutical Congress, Nagpur

January 20-22, 2023

आज़ादी का अमृत महोत्सव

Harman

Emcure
SUCCESS THROUGH INNOVATION

CERTIFICATE OF PARTICIPATION

DELEGATES

It is our pleasure to certify that **KAMLESH DESHMANE** of **PDEA's Shankarrao Ursal COPS and Research Center** has participated as delegate in the 72nd Indian Pharmaceutical Congress held at Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur January 20-22, 2023.

Dr. V. G. Somani	Mr. Atul Mandlekar	Prof. Milind Umekar	Prof. Prakash Itankar
President, IPCA	Chairman,LOC	Organising Secretary,LOC	Organising Secretary,LOC



IPC Registration Number: 8431332

72nd INDIAN PHARMACEUTICAL CONGRESS

IPC

NAGPUR

NITIKA

Theme:
"Access to Quality & Affordable Medical Products"

72nd Indian Pharmaceutical Congress, Nagpur

January 20-22, 2023

आज़ादी का अमृत महोत्सव

Harman

Emcure
SUCCESS THROUGH INNOVATION

CERTIFICATE OF PARTICIPATION

DELEGATES

It is our pleasure to certify that

PRATIKSHA AVHAD of **Shankar Rao ursal college of pharmaceutical science and research centre kharadi** has participated as delegate in the 72nd Indian Pharmaceutical Congress held at Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur January 20-22, 2023.

Dr. V. G. Somani	Mr. Atul Mandlekar	Prof. Milind Umekar	Prof. Prakash Itankar
President, IPCA	Chairman,LOC	Organising Secretary,LOC	Organising Secretary,LOC



IPC Registration Number: 5073155

Operant Pharmacy Federation

GENBA SOPANRAO MOZE COLLEGE OF PHARMACY
Baif Road, Pune -Nagar Road, Wagholi, Pune - 412 207. MS. India. Website: www.gsmozecop.com
Recognised by DTE, Govt. of Maharashtra, AICTE, Approved by PCI & Affiliated to MSBTE & SPPU (Pune University)

AICTE SPONSORED GOC Scheme

Two-Days National Conference

"Innovations and Opportunities in Drug Discovery & Delivery Approaches"

Organized By

GENBA SOPANRAO MOZE COLLEGE OF PHARMACY

Certificate

of Participation

This is to certify that Prof./Dr./Mr./Ms. Shaikh Almisba Faruk

has participated as **Delegate/ Organizing Committee Member in AICTE**, New Delhi Sponsored Two Days National Conference "**Innovations and Opportunities in Drug Discovery & Delivery Approaches**" organized by **Genba Sopanrao Moze College of Pharmacy, Wagholi, Pune.** on **03rd & 04th February 2023**.

His / Her contribution in the conference is immensely appreciated.

Co-ordinator	Convener	Patron
Prof. Mugdha Mudvikar	Dr. Rajesh Oswal	Hon.Shri Rambhau Moze
HOD & Co-Coordinator	Principal & Coordinator	Founder President

Dr. Vithalrao Vikhe Patil Foundation
Ahmednagar

ICCR 2023

Certificate of Participation

This is to certify that Mangesh Rode has participated as Delegate / Student in International Conference on Clinical Research-2023 (ICCR-2023) "World of Clinical Research and Digital Technologies - Know what you do not know" held on 13th February 2023 at Dr. Vithalrao Vikhe Patil Foundation's College of Pharmacy, Vilad Ghat, Ahmednagar, India.

CONVENER
Prof. Dr. Ramesh L. Sawant
Vice-Principal & Senior Professor

CONFERENCE CHAIR
Prof. Dr. Pratap Y. Pawar
Principal

"We Pharmacist ca[illegible] the people globally"

Pharmanecia 3.E

Operant Pharmacy Federation

DPU

Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pimpri, Pune

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN PHARMACEUTICAL RESEARCH

~ 25 February 2023 ~

CERTIFICATE OF PARTICIPATION

This is to certify that

Pranali Vasant Pinjari of **PDEA's Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre, Kharadi, Pune** has participated as delegate in **Pharmanecia 3.E International Conference** on **Emerging Trends in Pharmaceutical Research** organised by Jointly organised by DPU Pharmacy & Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pune and hosted by Operant Pharmacy Federation on 25 February 2023.

Sohan Chitlange

Dr. Sohan Chitlange
Convener, **Pharmanecia 3.E**
Principal, DPU Pharmacy

Dr. J. S. Bhawalkar
Convener, **Pharmanecia 3.E**
Dean, **DPU Medical College**

Dr. Vikram Choudhary
Founder & Director
Operant Pharmacy Federation

Registration No:P-868

DPU PHARMACY
DPU
PIMPRI

Pharmanecia 3.E

Operant Pharmacy Federation

DPU
Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pimpri, Pune

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN PHARMACEUTICAL RESEARCH

~ 25 February 2023 ~

CERTIFICATE OF PARTICIPATION

This is to certify that
Komal Anand Kendre of **PDEA's Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre, Kharadi, Pune** has participated as delegate in **Pharmanecia 3.E International Conference** on **Emerging Trends in Pharmaceutical Research** organised by Jointly organised by DPU Pharmacy & Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pune and hosted by Operant Pharmacy Federation on 25 February 2023.

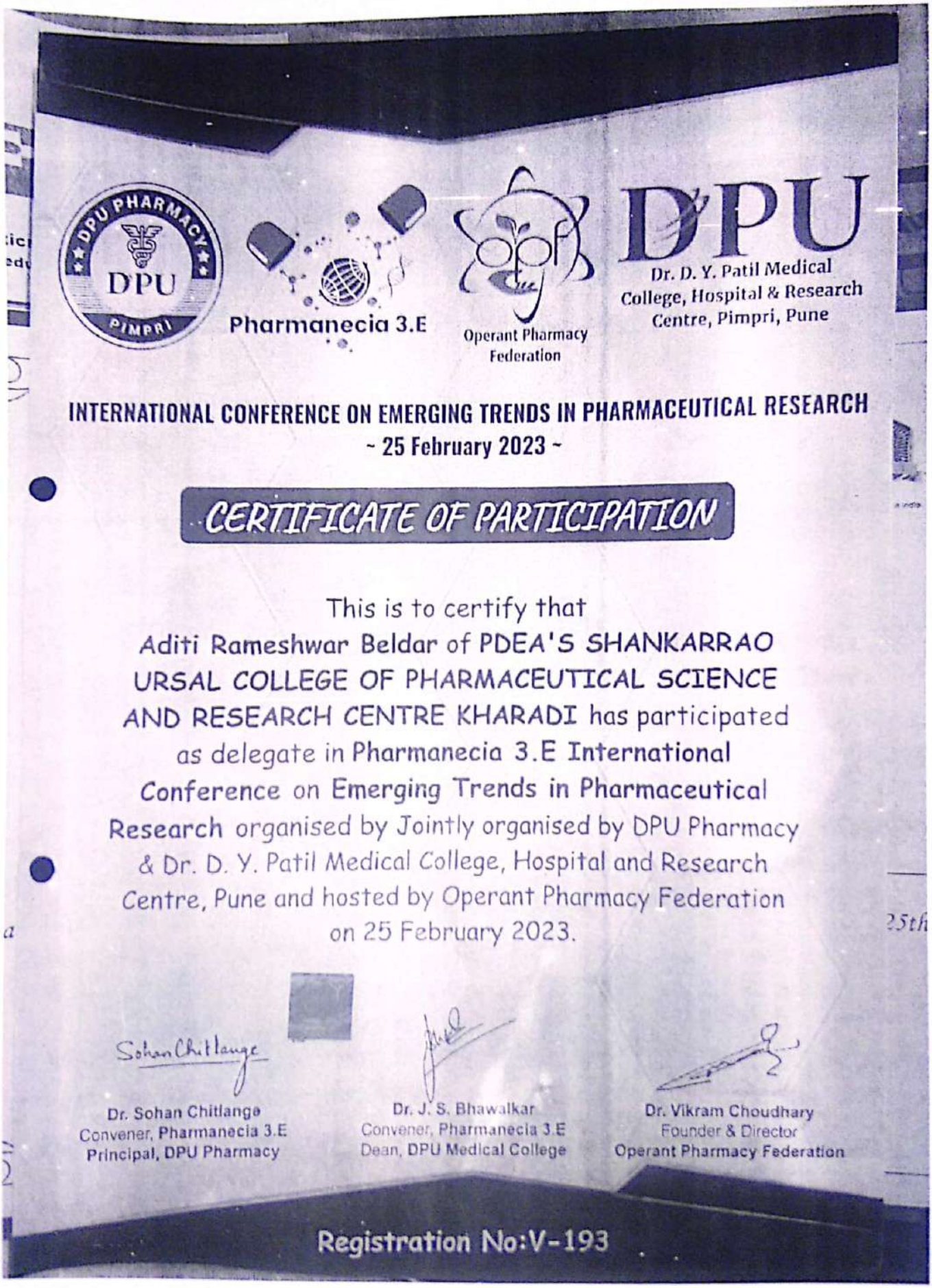
Sohan Chitlange

Dr. Sohan Chitlange
Convener, **Pharmanecia 3.E**
Principal, DPU Pharmacy

Dr. J. S. Bhawalkar
Convener, **Pharmanecia 3.E**
Dean, **DPU Medical College**

Dr. Vikram Choudhary
Founder & Director
Operant Pharmacy Federation

Registration No:P-869


DPU PHARMACY
DPU
PIMPRI
Pharmanecia 3.E
Operant Pharmacy Federation
DPU
Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pimpri, Pune
INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN PHARMACEUTICAL RESEARCH
~ 25 February 2023 ~
CERTIFICATE OF PARTICIPATION
This is to certify that
Aditi Rameshwar Beldar of PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCE AND RESEARCH CENTRE KHARADI has participated as delegate in Pharmanecia 3.E International Conference on Emerging Trends in Pharmaceutical Research organised by Jointly organised by DPU Pharmacy & Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pune and hosted by Operant Pharmacy Federation on 25 February 2023.
Dr. Sohan Chitlange
Convener, Pharmanecia 3.E
Principal, DPU Pharmacy
Dr. J. S. Bhawalkar
Convener, Pharmanecia 3.E
Dean, DPU Medical College
Dr. Vikram Choudhary
Founder & Director
Operant Pharmacy Federation
Registration No:V-193

CamScanner

NIRMA UNIVERSITY

INSTITUTE OF PHARMACY

NAAC ACCREDITED 'A+' GRADE

2nd NIRMA e-CONFERENCE FOR INTERNATIONAL CONNECT (NCIC) – 2023

"Recent Advances in Nanotechnology: Drug Discovery & Therapeutics"

January 24 - 25, 2023

CERTIFICATE

Prof./Dr./Mr./Ms. ***Aditi Beldar*** *has participated as a Delegate in the* ***2nd Nirma e-Conference for International Connect (NCIC) – 2023*** *on* ***"Recent Advances in Nanotechnology: Drug Discovery & Therapeutics"*** *organized by* ***Institute of Pharmacy, Nirma University*** *during January 24-25, 2023.*

Dr. Mayur Patel	**Prof. Tejal Mehta**	**Dr. Shital Butani**
Organizing Secretary, NCIC 2023	Convenor, NCIC 2023	Scientific Committee, NCIC 2023

CamScanner

D Y PATIL DEEMED TO BE UNIVERSITY SCHOOL OF PHARMACY NAVI MUMBAI

D Y Patil Deemed to be University
School of Pharmacy

Sector-7, Nerul (E) , Navi Mumbai 400706

Certificate of Participation



Ms. Aditi Rameshwar Beldar

has participated as delegate in
International Conference on
"Advances in Pharmaceutical Medicinal Chemistry-2022"
Organized in Online Mode by
D Y Patil Deemed to be University School of Pharmacy, Navi Mumbai,
Maharashtra, India,
held on **21st and 22nd April 2022**

Dr. Harish Kundaikar
Coordinator

Prof. (Dr.) Rakesh Somani
Principal & Convenor

CamScanner

DPU Dr. D. Y. Patil B-School

(Program Approved by AICTE, Ministry of Education, Govt. of India)

Pharma Scope 2023

Caring for your dream.....

A National Conference on

"Challenges and Advancement in Pharmaceutical Industry".

This is to certify that Ms./Mr. Aditi R. Beldar

attended A National conference ***"Pharma Scope 2023"*** *organised by Dr.D.Y. Patil B School on 25th Feb 2023.*

Dr. Amol Gawande
Director

DR. D. Y. PATIL B-SCHOOL TATHAWADE PUNE-33.

Dr. Ketaki Phatak
Deputy Director

CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY, SASWAD

CERTIFICATE

This is to certify that, Dr./Mr./Mrs./Ms. Aditi Rameshwar Beldar from PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCE AND RESEARCH CENTRE attended a National Webinar on **"Current Trends in Regulation and Export of Herbal Medicines"** held on 23rd December 2022.

Mr. V.C. Shilimkar

Co-ordinator



Our Patron: Padmavibhushan Hon. Sharadchandraji Pawarsaheb, Ex. Agriculture Minister, Govt. of India.

Dr. R.S. Chavan

Principal

Made for free with Certify'em

CamScanner

Shree Chanakya Education Society's

Indira College of Pharmacy, Pune

"Redefining Pharmacy Education"

(Approved by AICTE , PCI & Affiliated to Savitribai Phule Pune University & MSBTE)

NAAC Accredited B++ Grade

CERTIFICATE

This is to certify that Aditi Rameshwar Beldar has participated as Delegate in AICTE sponsored online National Conference on "Good Pharmacy Educational Practices" organized by IQAC of SCES's Indira College of Pharmacy, Pune from 21st March to 24th March 2022.

Dr. Suvarna Ingale
(Co- ordinator)

Dr. Dayanand Kannur
(Co-ordinator)

Dr. Anagha Joshi
(Convenor)

Made for free with Certify'em

CamScanner

Dst
Department of Science & Technology
(Government of Gujarat)

GUJARAT COUNCIL ON SCIENCE AND TECHNOLOGY
GOVERNMENT OF GUJARAT

Marwadi University

FoP
Faculty of Pharmacy

Certificate of Participation

This is to certify that

Prof./Dr./Mr./Ms. ADITI RAMESHWAR BELDAR

has actively participated as delegate in GUJCOST Sponsored National webinar on "Intellectual Property Rights: Encourage, Innovation and Entrepreneurship." organized by the Faculty of Pharmacy, Marwadi University, Rajkot, Gujarat, INDIA, on Saturday, March 26, 2022.

FoP/MU/2022/IPR/007

Dr. Ramesh Parmar
Coordinator

Baldania

Dr. Lalji Baldaniya
Convener & Principal

CamScanner

NIRMA UNIVERSITY

INSTITUTE OF PHARMACY

NAAC ACCREDITED 'A+' GRADE

2nd NIRMA e-CONFERENCE FOR INTERNATIONAL CONNECT (NCIC) – 2023

"Recent Advances in Nanotechnology: Drug Discovery & Therapeutics"

January 24 - 25, 2023

CERTIFICATE

Prof./Dr./Mr./Ms. Ruchita Bhalerao *has participated as a Delegate in the* ***2nd Nirma e-Conference for International Connect (NCIC) – 2023*** *on* ***"Recent Advances in Nanotechnology: Drug Discovery & Therapeutics"*** *organized by* ***Institute of Pharmacy, Nirma University*** *during January 24-25, 2023.*

Dr. Mayur Patel	**Prof. Tejal Mehta**	**Dr. Shital Butani**
Organizing Secretary, NCIC 2023	Convenor, NCIC 2023	Scientific Committee, NCIC 2023

CamScanner

CERTIFICATE

OF PARTICIPATION

Ruchita Arvind Bhalerao

has participated in the 03rd International Faculty Development Program **"Emerging Trends in Phyto-Pharmaceutical Research"** organized by Dr. D. Y. Patil Institute of Pharmaceutical Sciences and Research, Pimpri, Pune - 411 018 (MH) INDIA from 11 March to 28 May 2023. His / Her participation in this programme is highly appreciated.

Dr.Asha Thomas
Chief Coordinator

Dr. Sohan Chitlange
Principal

www.pharmacy.dypvp.edu.in

CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY, SASWAD

CERTIFICATE

This is to certify that, Dr./Mr./Mrs./Ms. Ruchita Arvind Bhalerao from P. D. E. A's Shankarrao ursal college of pharmaceutical sciences and research centre, kharadi, pune-14. attended a National Webinar on **"Current Trends in Regulation and Export of Herbal Medicines"** held on 23rd December 2022.

Mr. V.C. Shilimkar

Co-ordinator



Our Patron: Padmavibhushan Hon. Sharadchandraji Pawarsaheb, Ex. Agriculture Minister, Govt. of India.

Dr. R.S. Chavan

Principal

Made for free with Certify'em

CamScanner

DPU Dr. D. Y. Patil B-School

(Program Approved by AICTE, Ministry of Education, Govt. of India)

Top 100 Private B-School in India

Private B-School in the West Zone

Pharma Scope 2023

Caring for your dream.....

A National Conference on

"Challenges and Advancement in Pharmaceutical Industry".

This is to certify that Ms./Mr. Ruchita Arvind Bhaleroo.

attended A National conference ***"Pharma Scope 2023"*** *organised by Dr.D.Y. Patil B School on 25th Feb 2023.*

Dr. Amol Gawande
Director

DR. D. Y. PATIL B-SCHOOL TATHAWADE PUNE-33.

Dr. Ketaki Phatak
Deputy Director

CamScanner



Genba Sopanrao Moze Trust's
GENBA SOPANRAO MOZE COLLEGE OF PHARMACY

Bait Road, Pune -Nagar Road, Wagholi, Pune - 412 207. MS. India. Website: www.gsmozecop.com

Recognised by DTE, Govt. of Maharashtra, AICTE, Approved by PCI & Affiliated to MSBTE & SPPU (Pune University)

AICTE SPONSORED GOC Scheme

Two-Days National Conference

"Innovations and Opportunities in Drug Discovery & Delivery Approaches"

Organized By

GENBA SOPANRAO MOZE COLLEGE OF PHARMACY

Certificate

of Participation

This is to certify that Prof./Dr./Mr./Ms. Ruchita Arvind Bhalerao has participated as **Delegate/ ~~Organizing~~ Committee Member in AICTE**, New Delhi Sponsored Two Days National Conference **"Innovations and Opportunities in Drug Discovery & Delivery Approaches"** organized by **Genba Sopanrao Moze College of Pharmacy, Wagholi, Pune.** on **03rd & 04th February 2023.**

~~His~~ / Her contribution in the conference is immensely appreciated.

Co-ordinator	Convener	Patron
Prof. Mugdha Mudvikar	**Dr. Rajesh Oswal**	**Hon.Shri Rambhau Moze**
HOD & Co-Coordinator	Principal & Coordinator	Founder President

CamScanner

Pharmanecia 3.E

Operant Pharmacy Federation

DPU

Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pimpri, Pune

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN PHARMACEUTICAL RESEARCH

~ 25 February 2023 ~

CERTIFICATE OF PARTICIPATION

This is to certify that
Riya Rahul Bhondve of **PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCE AND RESEARCH CENTRE KHARADI** has participated as delegate in **Pharmanecia 3.E International Conference** on **Emerging Trends in Pharmaceutical Research** organised by Jointly organised by DPU Pharmacy & Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pune and hosted by Operant Pharmacy Federation on 25 February 2023.

ORIGINAL

Sohan Chitlange

Dr. Sohan Chitlange
Convener, **Pharmanecia 3.E**
Principal, DPU Pharmacy

Dr. J. S. Bhawalkar
Convener, **Pharmanecia 3.E**
Dean, **DPU Medical College**

Dr. Vikram Choudhary
Founder & Director
Operant Pharmacy Federation

Registration No:V-195

CamScanner

NIRMA UNIVERSITY

INSTITUTE OF PHARMACY

NAAC ACCREDITED 'A+' GRADE

2nd NIRMA e-CONFERENCE FOR INTERNATIONAL CONNECT (NCIC) – 2023

"Recent Advances in Nanotechnology: Drug Discovery & Therapeutics"

January 24 - 25, 2023

CERTIFICATE

Prof./Dr./Mr./Ms. Riya Bhondve *has participated as a Delegate in the* ***2nd Nirma e-Conference for International Connect (NCIC) – 2023*** *on* ***"Recent Advances in Nanotechnology: Drug Discovery & Therapeutics"*** *organized by* ***Institute of Pharmacy, Nirma University*** *during January 24-25, 2023.*

Dr. Mayur Patel	**Prof. Tejal Mehta**	**Dr. Shital Butani**
Organizing Secretary, NCIC 2023	Convenor, NCIC 2023	Scientific Committee, NCIC 2023

CamScanner

D Y PATIL
DEEMED TO BE
UNIVERSITY
SCHOOL OF
PHARMACY
NAVI MUMBAI

D Y Patil Deemed to be University
School of Pharmacy

Sector-7, Nerul (E) , Navi Mumbai 400706

Certificate of Participation



Ms.Riya Rahul Bhondve

has participated as delegate in
International Conference on
"Advances in Pharmaceutical Medicinal Chemistry-2022"
Organized in Online Mode by
D Y Patil Deemed to be University School of Pharmacy, Navi Mumbai,
Maharashtra, India,
held on **21st and 22nd April 2022**

Dr. Harish Kundaikar
Coordinator

Prof. (Dr.) Rakesh Somani
Principal & Convenor

CamScanner

DPU Dr. D. Y. Patil B-School

(Program Approved by AICTE, Ministry of Education, Govt. of India)

Rank — Top 100 Private B-School in India

Rank — Private B-School in the West Zone

Pharma Scope 2023

Caring for your dream.....

A National Conference on

"Challenges and Advancement in Pharmaceutical Industry".

This is to certify that Ms./Mr. Riya R. Bhondve

attended A National conference ***"Pharma Scope 2023"*** *organised by Dr.D.Y. Patil B School on 25th Feb 2023.*

Dr. Amol Gawande
Director

DR. D. Y. PATIL B-SCHOOL TATHAWADE PUNE-33.

Dr. Ketaki Phatak
Deputy Director

CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY, SASWAD

CERTIFICATE

This is to certify that, Dr./Mr./Mrs./Ms. Riya Rahul Bhondve from PDEA's Shankarrao ursal college of pharmaceutical sciences and research centre attended a National Webinar on **"Current Trends in Regulation and Export of Herbal Medicines"** held on 23rd December 2020



Mr. V.C. Shilimkar
Co-ordinator

Our Patron: Padmavibhushan Hon. Sharadchandraji Pawarsaheb, Ex. Agriculture Minister, Govt. of India.

Dr. R.S. Chavan
Principal

Made for free with Certify'

CamScanner

Shree Chanakya Education Society's

Indira College of Pharmacy, Pune

"Redefining Pharmacy Education"

(Approved by AICTE , PCI & Affiliated to Savitribai Phule Pune University & MSBTE)

NAAC Accredited B++ Grade

CERTIFICATE

This is to certify that RIYA RAHUL BHONDVE has participated as Delegate in AICTE sponsored online National Conference on "Good Pharmacy Educational Practices" organized by IQAC of SCES's Indira College of Pharmacy, Pune from 21st March to 24th March 2022.

Dr. Suvarna Ingale
(Co- ordinator)

Dr. Dayanand Kannur
(Co-ordinator)

Dr. Anagha Joshi
(Convenor)

Made for free with Certify'em

CamScanner

CERTIFICATE NO.16

Dr.SSN Government College Malanjkhand Dist.Balaghat(M.P.)

National Workshop
on
"RESEARCH METHODOLOGY"
(Sponsored by MPHEQIP & World Bank Project "Academic Excellence")

CERTIFICATE OF PARTICIPATION

This is to certify that Riya Rahul Bhondve, Postgraduate Student, PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE has actively participated in the Two Days Online National Workshop organized by Department of Political Science & IQAC, Dr.SSN Government College Malanjkhand, Dist.Balaghat (M.P.) on the topic "Research Methodology" held on 21 March,2022 to 22 March,2022 .

Dr. M.K.Dhurwey
Patron
Principal

CamScanner

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS | GEOGRAPHICAL INDICATIONS

सत्यमेव जयते

NIPAM
NATIONAL IP AWARENESS MISSION

Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

CERTIFICATE

This is to certify that, **MS. RIYA RAHUL BHONDVE** of **PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE** has successfully participated in IP Awareness/Training program under

NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION

on March 11,2022

Organized by
Intellectual Property Office, India

Date:March 21,2022

(RAJENDRA RATNOO, IAS)
CONTROLLER GENERAL OF
PATENTS, DESIGNS & TRADE MARKS

CamScanner

CERTIFICATE OF PARTICIPATION

This certifies that

Prof./Dr./Mr./Ms. Pramod Sanjay Biradar.

Has participated in the

17TH INDO-MALAYSIAN INTERNATIONAL CONFERENCE

"Recent Scenario of Pharmacy and Pharmacological Sciences"

Organized By Association Of Pharmacy Professional Maharashtra State Branch And App Malaysian & West Indies International Branch in collaboration with APP Molecular Pharmacology division & SBSPM's B. Pharmacy College & Institute of Pharmacy Modi learning center, Ambajogai, Beed(MS), India, in commemoration of 'International Day of Peace 2022'. on 23rd day of September 2022.

He / She has presented the paper titled

DR. MRUNAL K. SHIRSAT
Convener & Principal
SBSPM's B. Pharmacy College
Modi learning center, Ambajogai
Beed(MS), Imdia

DR. SUNITA DAHIYA
General Secretary APP
School of Pharmacy,
University of Puerto Rico
San Juan, Puerto Rico, USA

CamScanner

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS | GEOGRAPHICAL INDICATIONS

सत्यमेव जयते

NIPAM
NATIONAL IP AWARENESS MISSION

Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

CERTIFICATE

This is to certify that, **MR. PRAMOD SANJAY BIRADAR** of **PDEA'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE KHARADI PUNE-14** has successfully participated in IP Awareness/Training program under **NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION**

on April 03,2023

Organized by
Intellectual Property Office, India

Date:April 10,2023

(Prof. (Dr) Unnat P. Pandit)
CONTROLLER GENERAL OF
PATENTS, DESIGNS & TRADE MARKS

CamScanner

INSTITUTE OF PHARMACY

Bhujbal Knowledge City

Adgaon, Nashik-422003

THE MET LEAGUE OF COLLEGES

MET

AS SHARP AS YOU CAN GET

Certificate Of Attendance

This is to certify that

Pramod Sanjay Biradar has attended **'APTI Maharashtra State Organized One Day National Level Online Seminar' on "Commercial Product Development in Academic Institute"** In Association with MET's Institute Of Pharmacy, Bhujbal Knowledge City, Adgaon, Nashik , held on 10th April 2023.

Dr. Nilima Thombre
Co-Ordinator

Dr. Sanjay J. Kshirsagar
Secretary APTI (MS)
Principal

CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY, SASWAD

CERTIFICATE

This is to certify that, Dr./Mr./Mrs./Ms. Pramod Sanjay Biradar from PDEA'S Shankarrao Ursal college of pharmaceutical sciences and research centre,Kharadi, Pune, Maharashtra, India attended a National Webinar on **"Current Trends in Regulation and Export of Herbal Medicines"** held on 23rd December 2022.



Mr. V.C. Shilimkar
Co-ordinator

Our Patron: Padmavibhushan Hon. Sharadchandraji Pawarsaheb, Ex. Agriculture Minister, Govt. of India.

Dr. R.S. Chavan
Principal

Made for free with Certify'em

CamScanner

CERTIFICATE OF PARTICIPATION

This certifies that

Prof./Dr./Mr./Ms. Amol Bhausheb Rokade.

Has participated in the

17TH INDO-MALAYSIAN INTERNATIONAL CONFERENCE

"Recent Scenario of Pharmacy and Pharmacological Sciences"

Organized By Association Of Pharmacy Professional Maharashtra State Branch And App Malaysian & West Indies International Branch in collaboration with APP Molecular Pharmacology division & SBSPM's B. Pharmacy College & Institute of Pharmacy Modi learning center, Ambajogai, Beed(MS), India, in commemoration of 'International Day of Peace 2022' on 23rd day of September 2022.

He / She has presented the paper titled

DR. MRUNAL K. SHIRSAT
Convener & Principal
SBSPM's B. Pharmacy College
Modi learning center, Ambajogai
Beed(MS), Imdia

DR. SUNITA DAHIYA
General Secretary APP
School of Pharmacy,
University of Puerto Rico
San Juan, Puerto Rico, USA

CamScanner

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY, SASWAD

CERTIFICATE

This is to certify that, Dr./Mr./Mrs./Ms. Rokade Amol Bhausaheb from Shankarrao Ursal College of Pharmaceutical sciences and research center kharadi attended a National Webinar on **"Current Trends in Regulation and Export of Herbal Medicines"** held on 23rd December 2022.



Mr. V.C. Shilimkar
Co-ordinator

Our Patron: Padmavibhushan Hon. Sharadchandraji Pawarsaheb, Ex. Agriculture Minister, Govt. of India.

Dr. R.S. Chavan
Principal

Made for free with Certify'em

CamScanner

INTELLECTUAL PROPERTY INDIA

NiPAM
NATIONAL IP AWARENESS MISSION

सत्यमेव जयते

Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

CERTIFICATE

This is to certify that, **MR. AMOL BHAUSAHEB ROKADE** of **SHANKAR RAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCE AND RESEARCH CENTER** has successfully participated in IP Awareness/Training program under

NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION

on April 03,2023

Organized by
Intellectual Property Office, India

Date:April 10,2023

(Prof. (Dr) Unnat P. Pandit)
CONTROLLER GENERAL OF
PATENTS, DESIGNS & TRADE MARKS

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune 411 014

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

CamScanner

B. Participatory learning

7. Presentations are made by the students

Class: F. Y. Ph. D. (Dept. of Pharmaceutics)
Subject: Seminar on Research Work
Date: 22.05.2023
Year of the study: 2023





Ms. Poonam Jadhav presenting a seminar on Ph. D. Research Work on the topic of Formulation and evaluation of Gastro retentive Drug Delivery System of Antidiabetic Drugs

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: F. Y. Ph. D. (Dept. of Pharmaceutical Chemistry)
Subject: Seminar on Research Work
Date: 22.05.2023
Year of the study: 2023



Ms. Shubhangi Karkhile presenting a seminar on Ph. D. Research Work on the topic of Stability Indicating Bioanalytical Method Development and Validation of Drugs and their Dosage Forms.



Mrs. Tejaswini Kande presenting a seminar on Ph. D. Research Work on the topic of Stability Indicating Analytical Method Development and Validation of APIs and its Dosage Forms.

Dr. Vijaya Barge
Coordinator-Research Centre

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences

Class: S. Y. M. Pharm. (Dept. of Pharmaceutical Quality Assurance)

Semester: III (2019 Pattern)

Subject: Seminar on Research Work

Date: 14/09/2022

Topic: Formulation Development and Analytical Method Development and Validation for Mouth Dissolving Tablet Containing Bromelain



Mr. Kamlesh Deshmane presenting a seminar on Research Work

Dr. Vijaya Barge
Research Guide

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: S. Y. M. Pharm. (Dept. of Pharmaceutical Quality Assurance)

Semester: III (2019 Pattern)

Subject: Seminar on Research work

Date: 16/09/2022

Topic: Analytical Method Development and Validation of Econazole Nitrate by using RP-HPLC



Ms. Pranali Pinjari presenting a seminar on Research Work

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: Final. Y. B. Pharm.

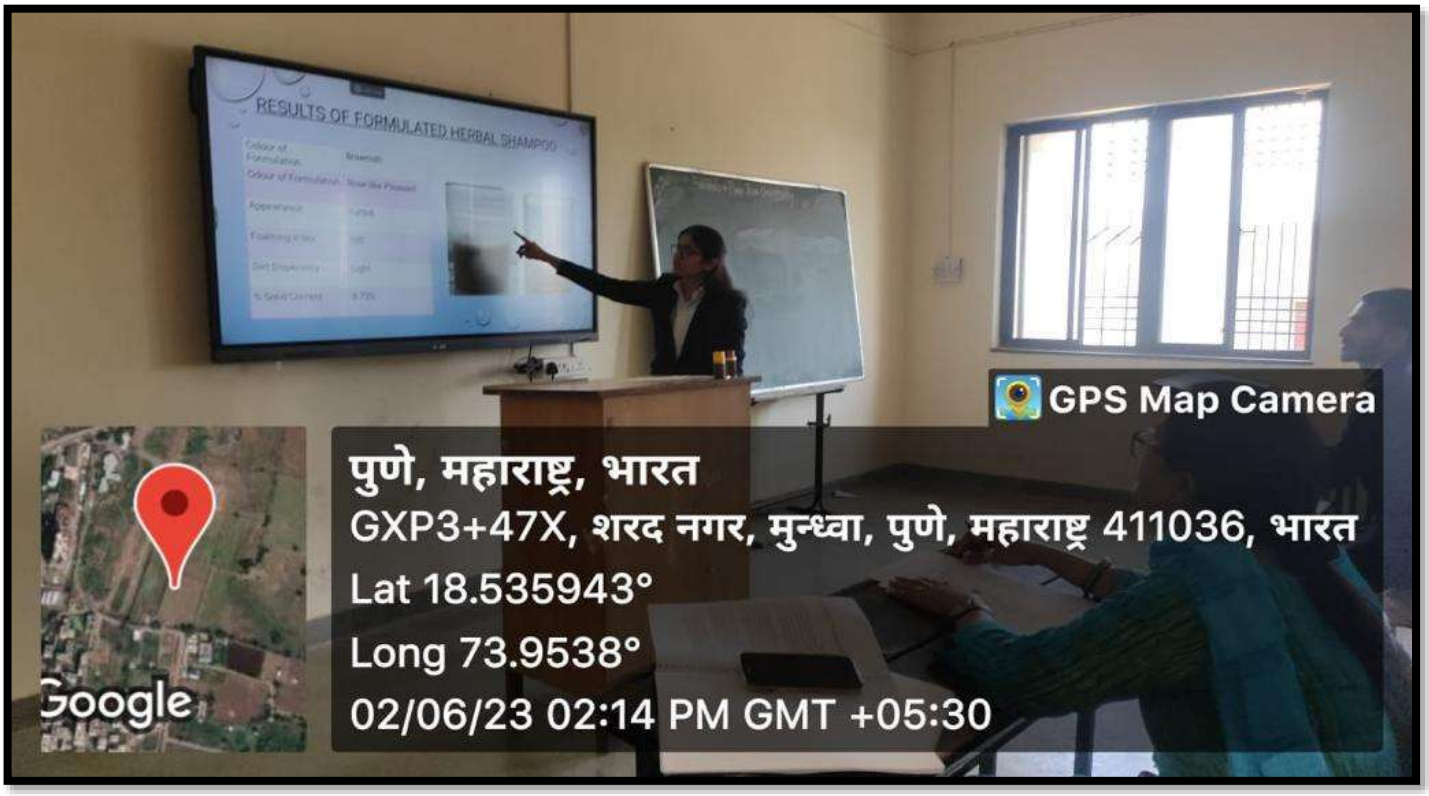
Semester: VIII (2019 Pattern)

Subject: Seminar on Research Project Work

Academic Year: 2022-23

Date: 02/6/2023

Topic: Formulation and evaluation of Herbal Shampoo



Presentation by Ms. Gaware Sonali on the topic of Formulation and Assessment of Herbal Shampoo

Dr. Vijaya Barge
Research Guide

Class: Final. Y. B. Pharm.

Semester: VIII (2019 Pattern)

Subject: Seminar on Research Project Work

Academic Year: 2022-23

Date: 02/06/2023

Topic: Formulation and evaluation of Herbal Hair Oil



Presentation by Ms. Hake Neha on the topic of Formulation and evaluation of Herbal Hair Oil

Dr. Vijaya Barge
Research Guide

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: S. Y. M. Pharm.

Semester: III (2019 Pattern)

Subject: Seminar on Selection of Research Topic

Date: 17/01/2023

Topic: Formulation and Evaluation of Solid Self Microemulsifying Drug Delivery System of Olmesartan Medoxomil.



Miss. Bhondve Riya Presenting Seminar on Selection of Research Topic

Mr. Sujit Kakade
Research Guide

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: S. Y. M. Pharm.

Semester: IV (2019 Pattern)

Subject: Seminar on Predissertation

Date: 16/06/2023

Topic: Formulation and Evaluation of Solid Self Micro Emulsifying Drug Delivery System of Valsartan



Miss. Beldar Aditi Presenting Seminar on her Research Work

Dr. Sujit Kakade
Research Guide

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

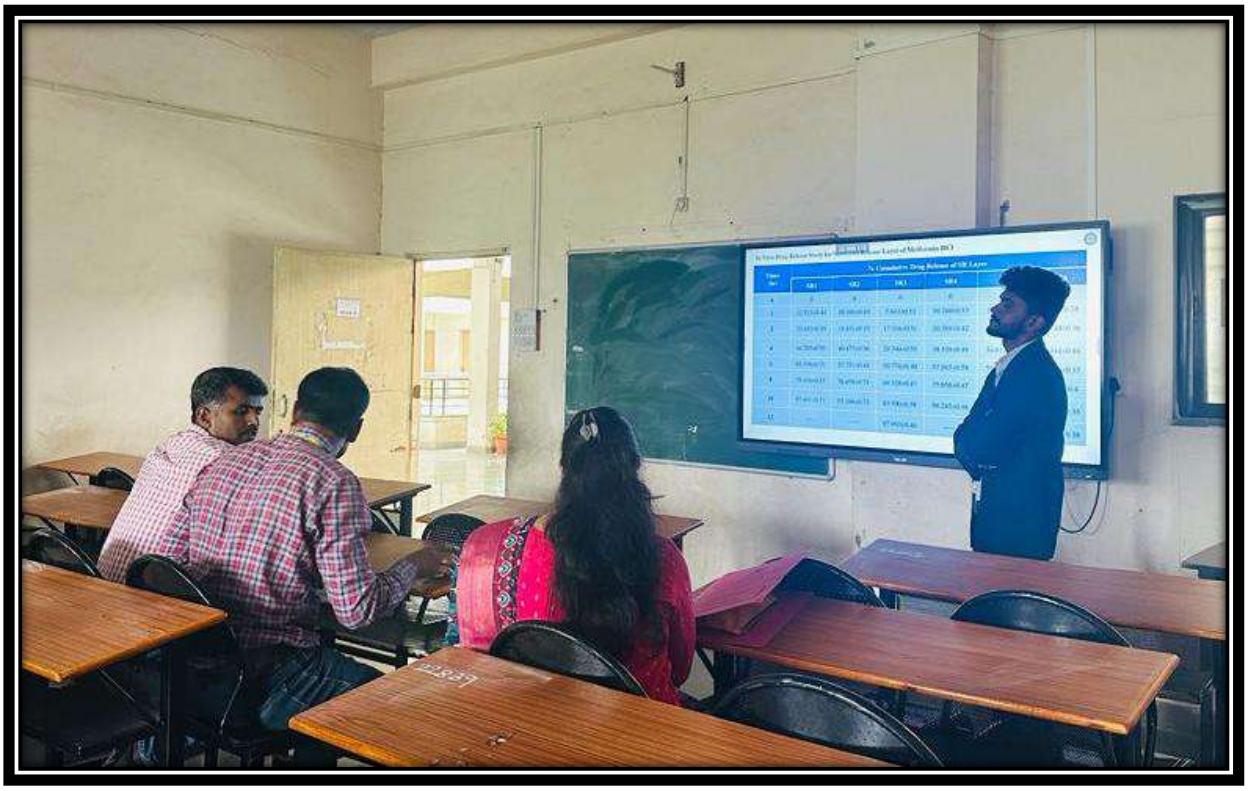
Class: S. Y. M. Pharm.

Semester: IV (2019 Pattern)

Subject: Seminar on Predissertation

Date: 16/06/2023

Topic: Formulation and Evaluation of Bilayer Tablet of Enalapril Maleate and Metformin HCl



Mr. Biradar Pramod Presenting Seminar on her Research Work

Dr. Sujit Kakade
Research Guide

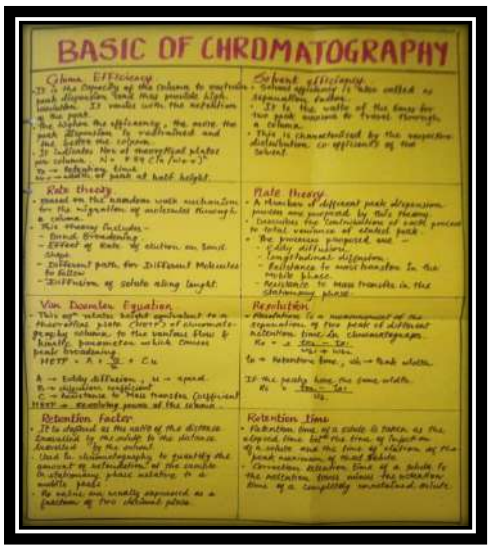
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

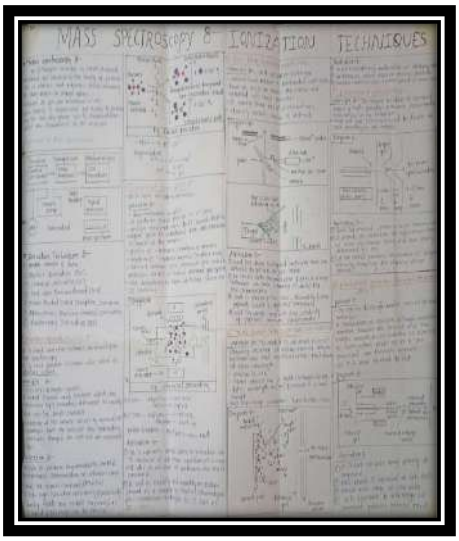
B. Participatory learning

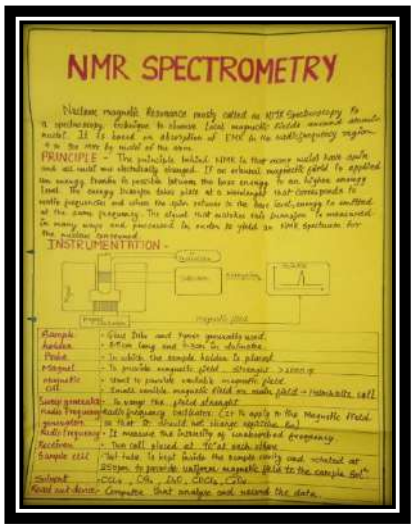
8. Student-made charts, displays, and posters

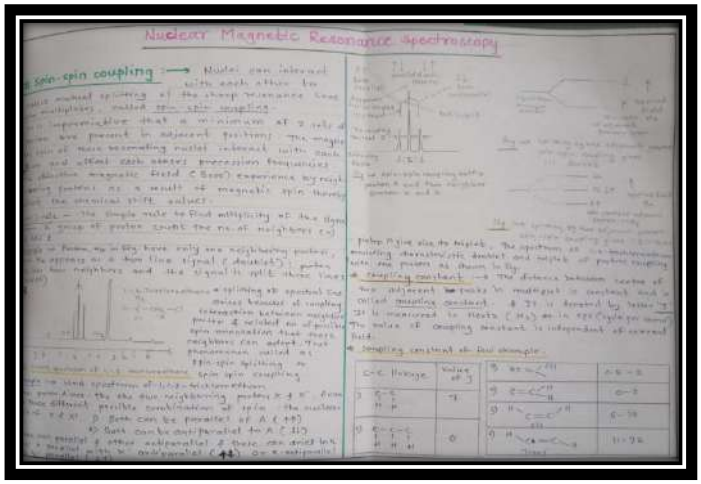
Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Date: 05/02/2022

Chart Preparation Activity









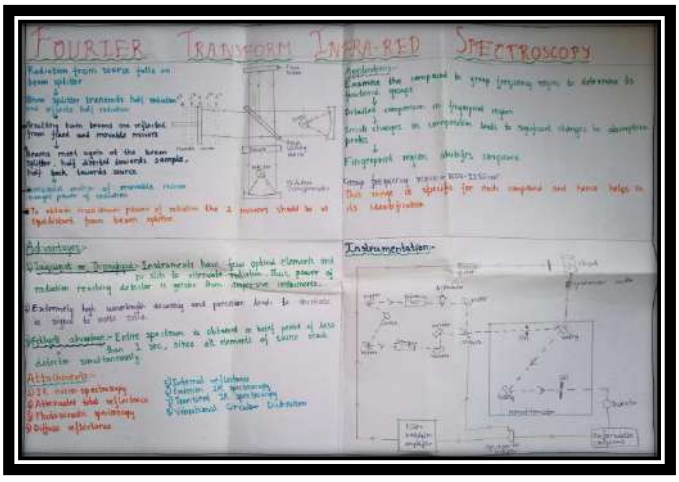


Chart on various topics prepared by F. Y. M. Pharm. Students

Dr. Vijaya Barge
Subject Teacher

Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Date: 05/02/2022

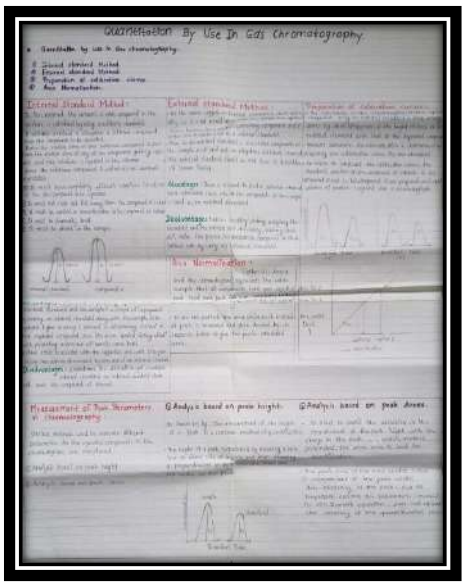
List of Students Participated in Chart Preparation Activity

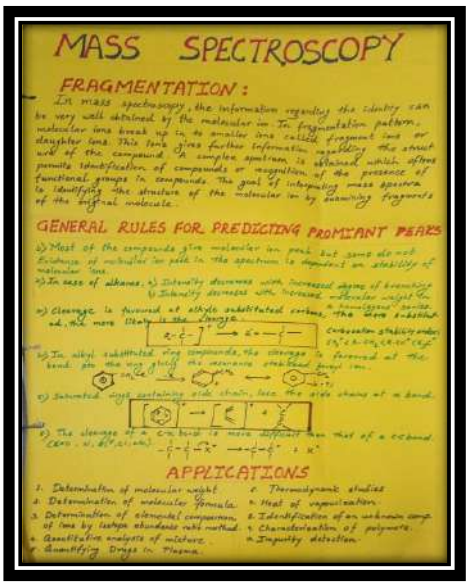
Sr. No.	Roll No.	Candidate Name
1.	**2**	Beldar Aditi Rameshwar
2.	**4**	Bhondve Riya Rahul
3.	**10**	Mahajan Vishal Bhimashankar
4.	**13**	Pawar Ajay Shivaji
5.	**17**	Avhad Pratiksha Bhagwan
6.	**18**	Borase Pallavi Sarjerao
7.	**19**	Deshmane Kamlesh Ravindra
8.	**20**	Gaikwad Rajratna Deepak
9.	**26**	Kalamkar Tanmayi Dattatray
10.	**27**	Kendre Komal Anand

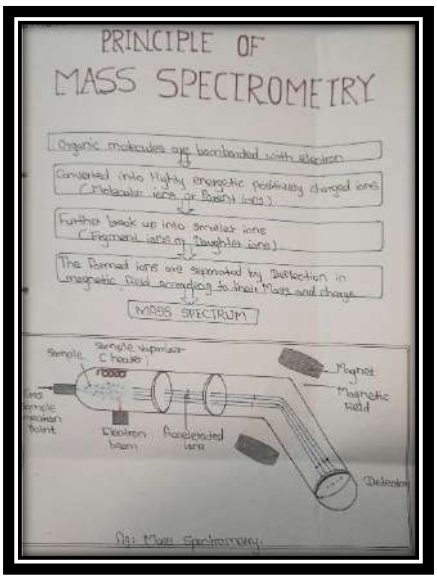
Dr. Vijaya Barge
Subject Teacher

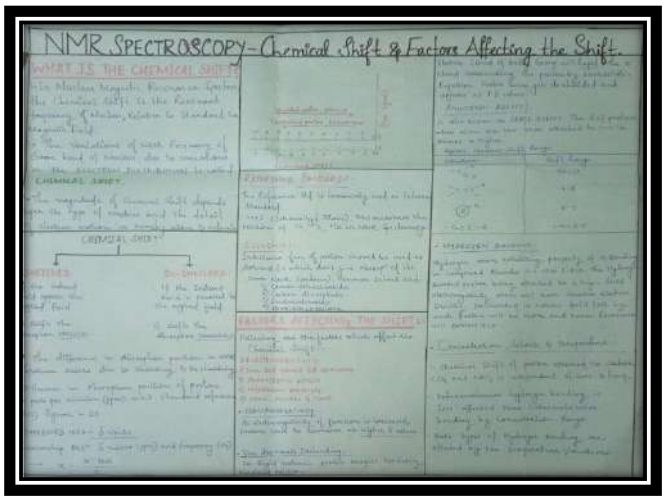
Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Date: 16/02/2023

Chart Preparation Activity









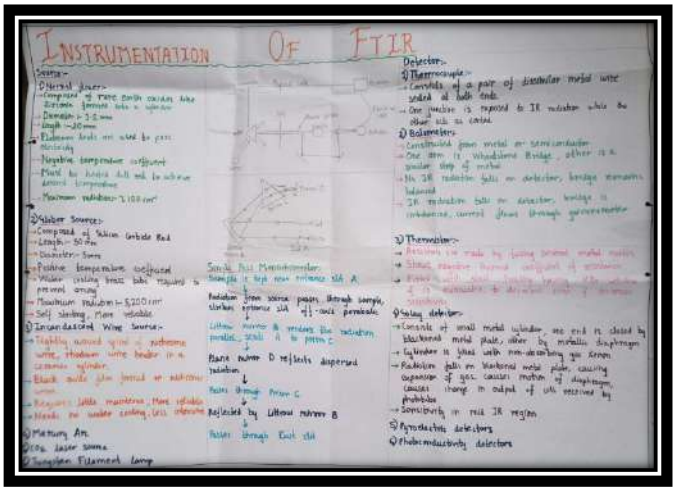


Chart on various topics prepared by F. Y. M. Pharm. Students

Dr. Vijaya Barge
Subject Teacher

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Date: 16/02/2023

List of Students Participated in Chart Preparation Activity

Sr. No.	Roll No.	Candidate Name
1.	**1**	Dagadgave Sudhir Prakash
2.	**8**	Jaiswal Vishakha Dhiraj
3.	**11**	Nigade Abhimanyu Sanjay
4.	**15**	Virkar Prathamesh Ravindra
5.	**16**	Waster Komal Balaji
6.	**17**	Yewale Nirmala Sunil
7.	**25**	Makude Payal Kishor
8.	**27**	Mirgudwad Jyoti Marotrao
9.	**28**	Nalawade Avantika Dhananjay
10.	**33**	Shinde Trupti Bapu

Dr. Vijaya Barge
Subject Teacher

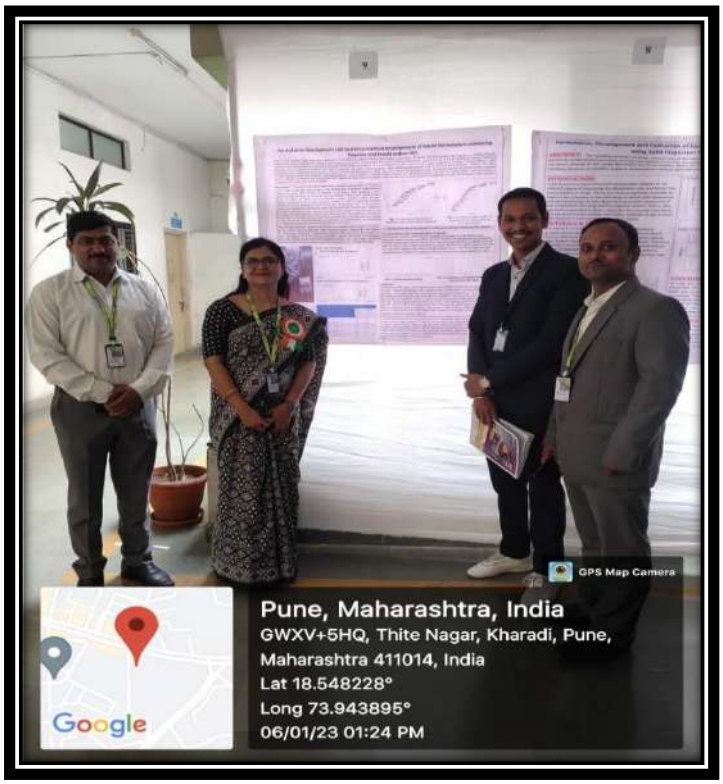
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

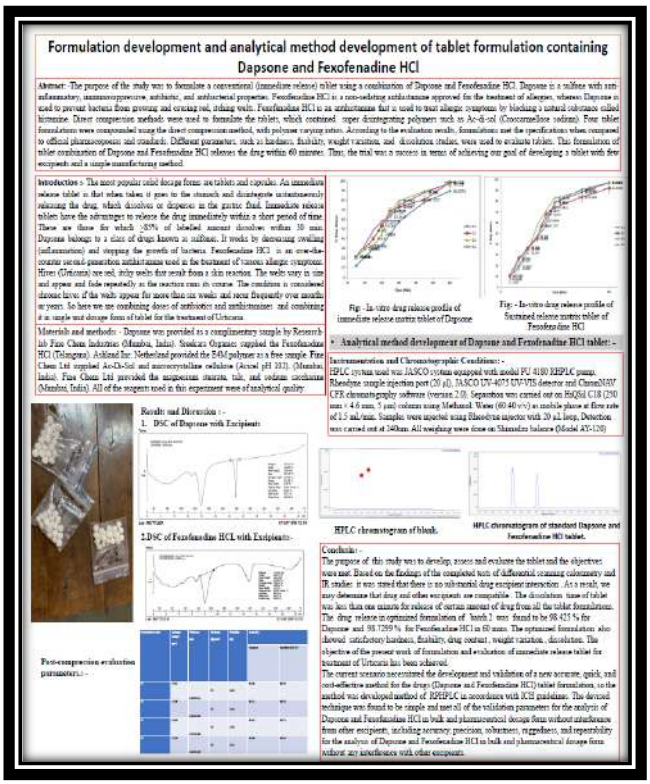
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. M. Pharm.
Semester: III (2019 Pattern)
Subject: Research Poster Presentation
Date: 06/01/2022

Poster Presentation

Topic: Formulation Development and Analytical Method Development of Tablet Formulation Containing Dapsone and Fexofenadine HCl





Mr. Rajratna Gaikwad Presenting Research Poster on formulation development and analytical method development of tablet formulation containing Dapsone and Fexofenadine HCl

Dr. Vijaya Barge
Subject Teacher

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. M. Pharm.
Semester: III (2019 Pattern)
Subject: Research Poster Presentation
Date: 06/01/2022

Poster Presentation

List of Students Participated in Poster presentation on
the topic of Formulation Development and Analytical Method Development of Tablet Formulation Containing Dapsone and Fexofenadine HCl

Sr. No.	Roll No.	Candidate Name
1.	**17**	Avhad Pratiksha Bhagwan
2.	**18**	Borase Pallavi Sarjerao
3.	**19**	Deshmane Kamlesh Ravindra
4.	**20**	Gaikwad Rajratna Deepak

Dr. Vijaya Barge
Subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: F. Y. B. Pharm.
Semester: I (2019 Pattern)
Subject: Pharmaceutics-I (BP103T)
Date: 02/02/2023

Chart Preparation

Topic: Classification of Dosage Forms

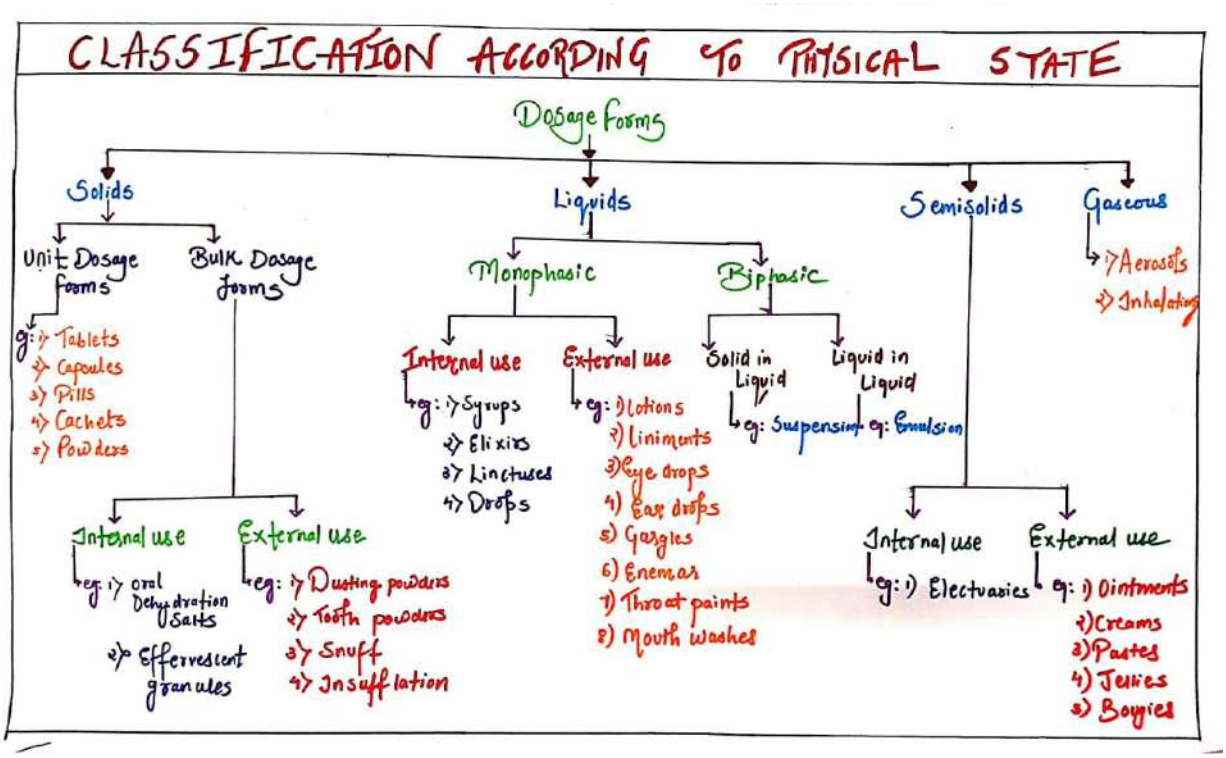


Chart of Classification of Dosage Forms prepared by F. Y. B. Pharm. Students

Mr. Sujit Kakade
Subject Teacher

Pune District Education Association's
Sankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. B. Pharm.
Semester: I (2019 Pattern)
Subject: Pharmaceutics-I (BP103T)
Date: 02/02/2023

List of Students Participated in Chart Preparation on the Topic of Classification of Dosage Forms

Sr. No.	Roll No.	Candidate Name
1.	**4**	Chauhan Aklesh Bachhulal
2.	**5**	Chavan Payal Shivaji
3.	**6**	Chavan Shubham Nandkumar
4.	**7**	Choudhary Rekha Bhavarlal

Mr. Sujit Kakade
Subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: F. Y. M. Pharm.
Semester: III (2019 Pattern)
Subject: Research Poster Presentation
Date: 12/12/2022

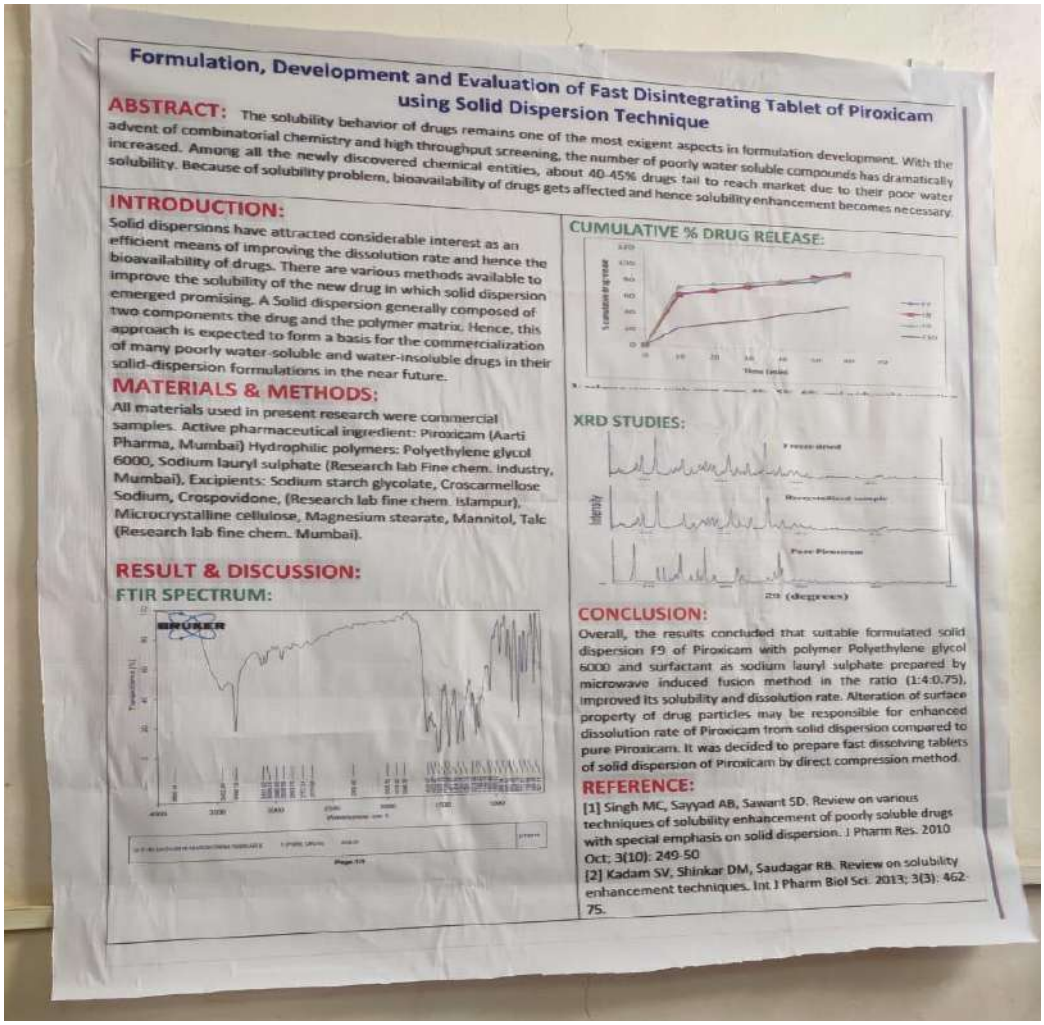
Poster Presentation

Topic: Formulation, Development & Evaluation of Fast Disintegrating Tablet of Piroxicam Using Solid Dispersion Technique



Miss. Bhondve Riya Presenting Research Poster on Formulation, Development & Evaluation of Fast Disitnegrating Tablet of Piroxicam Using Solid Dispersion Technique

Mr. Sujit Kakade
Subject Teacher



Formulation, Development and Evaluation of Fast Disintegrating Tablet of Piroxicam using Solid Dispersion Technique

ABSTRACT: The solubility behavior of drugs remains one of the most exigent aspects in formulation development. With the advent of combinatorial chemistry and high throughput screening, the number of poorly water soluble compounds has dramatically increased. Among all the newly discovered chemical entities, about 40-45% drugs fail to reach market due to their poor water solubility. Because of solubility problem, bioavailability of drugs gets affected and hence solubility enhancement becomes necessary.

INTRODUCTION:
Solid dispersions have attracted considerable interest as an efficient means of improving the dissolution rate and hence the bioavailability of drugs. There are various methods available to improve the solubility of the new drug in which solid dispersion emerged promising. A Solid dispersion generally composed of two components the drug and the polymer matrix. Hence, this approach is expected to form a basis for the commercialization of many poorly water-soluble and water-insoluble drugs in their solid-dispersion formulations in the near future.

MATERIALS & METHODS:
All materials used in present research were commercial samples. Active pharmaceutical ingredient: Piroxicam (Aarti Pharma, Mumbai) Hydrophilic polymers: Polyethylene glycol 6000, Sodium lauryl sulphate (Research lab Fine chem. Industry, Mumbai), Excipients: Sodium starch glycolate, Croscarmellose Sodium, Crospovidone, (Research lab fine chem. Islampur), Microcrystalline cellulose, Magnesium stearate, Mannitol, Talc (Research lab fine chem. Mumbai).

RESULT & DISCUSSION:
FTIR SPECTRUM:

CUMULATIVE % DRUG RELEASE:

XRD STUDIES:

CONCLUSION:
Overall, the results concluded that suitable formulated solid dispersion F9 of Piroxicam with polymer Polyethylene glycol 6000 and surfactant as sodium lauryl sulphate prepared by microwave induced fusion method in the ratio (1:4:0.75), improved its solubility and dissolution rate. Alteration of surface property of drug particles may be responsible for enhanced dissolution rate of Piroxicam from solid dispersion compared to pure Piroxicam. It was decided to prepare fast dissolving tablets of solid dispersion of Piroxicam by direct compression method.

REFERENCE:
[1] Singh MC, Sayyad AB, Sawant SD. Review on various techniques of solubility enhancement of poorly soluble drugs with special emphasis on solid dispersion. J Pharm Res. 2010 Oct; 3(10): 249-50
[2] Kadam SV, Shinkar DM, Saudagar RB. Review on solubility enhancement techniques. Int J Pharm Biol Sci. 2013; 3(3): 462-75.

Pune District Education Association's
Sankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: F. Y. M. Pharm.
Semester: III (2019 Pattern)
Subject: Research Poster Presentation
Date: 12/12/2022

Poster Presentation

List of Students Participated in Group Discussion
on the Topic Gastro-Retentive Drug Delivery Systems

Sr. No.	Roll No.	Candidate Name
1.	2	Beldar Aditi Rameshwar
2.	3	Bhalerao Ruchita Arvind
3.	4	Bhondve Riya Rahul

Mr. Sujit Kakade
Subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: F. Y. B. Pharm.
Semester: I (2019 Pattern)
Subject: Pharmaceutical Inorganic Chemistry (BP110P)
Academic Year: 2022-23

Chart Preparation

Topic: Limit Test of Arsenic Apparatus

Reaction and apparatus involve in limit test of Arsenic

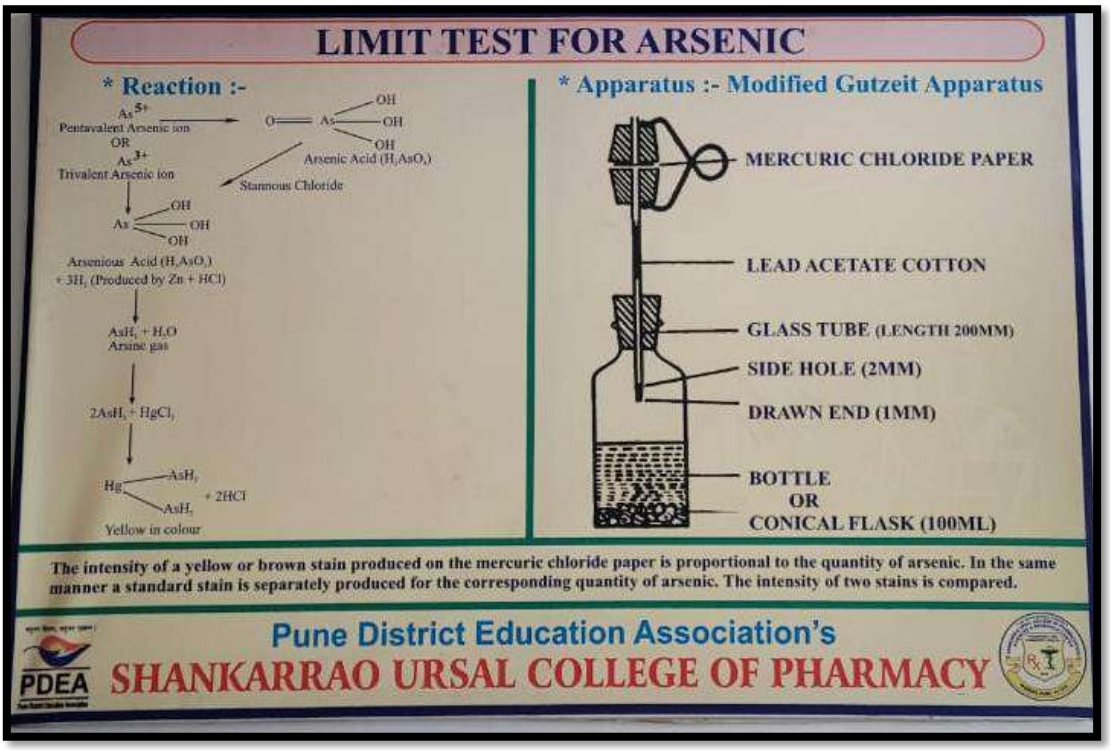


Chart: Reaction and apparatus involve in limit test of Arsenic

List of Students Participated in Chart Preparation on the
Topic: Limit Test of Arsenic

Sr. No.	Roll No.	Candidate Name
1.	55	Shinde Tanvee Uday
2.	56	Shivale Gauri Vikas
3.	57	Sonawane Bhagyashree Rajesh
4.	58	Sonkamble Dheeraj Jivan
5.	59	Sonnad Khushi Jagannath

Dr. Amit Kasabe
Subject Teacher

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCE & RESEARCH CENTRE

KHARADI, TALUKA -HAVELI ,DISTRICT -PUNE -411014

A

Report On

Propellants - Aerosol

Academic Year - 2022-2023

Third Year B.Pharma -Sem v

Prepared by

Mr. Shubham Biru Kaspate

Guided By

Mrs. Trusha P. Shangrapawar

M Pharma (Pharmaceutics)

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Propellant

Aerosol



The compounds which are responsible for maintaining proper pressure within the container to expell the product on opening the valve are known as Propellants.

As liquefied propellant exists in equillibrium with the propellant in the vapor phase in an aerosol container, constant pressure is maintained within the pressurised aerosol container. Upon activation of valve, the pressure exerted by the propellant is distributed equally in all direction inside aerosol container,

forcing the product concentrate up the dip tube and out of the aerosol container.

As the vapour pressure of the propellant in air is lower than inside the aerosol container, the propellant evaporates on reaching the air and product concentrates dries up as dry particles.

★ Types of Propellant ★

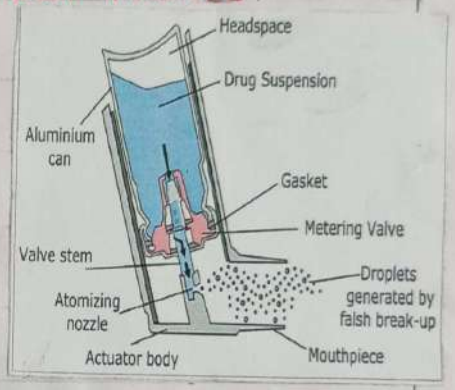
A] Depending on the route of Administration and Use:

1) Propellant for oral and nasal inhalers:

a) Di-chloro di-fluro methane

b) Tri-chloro mono-fluro methane

c) Di-chloro tetra-fluro ethane



2) Propellants for topical aerosols

a) Propane

b) Butane

c) Isobutane



3) Compound gases

a) Nitrogen

b) Carbon dioxide

c) Nitrous oxide

3/11

B] Based upon nature of gas:

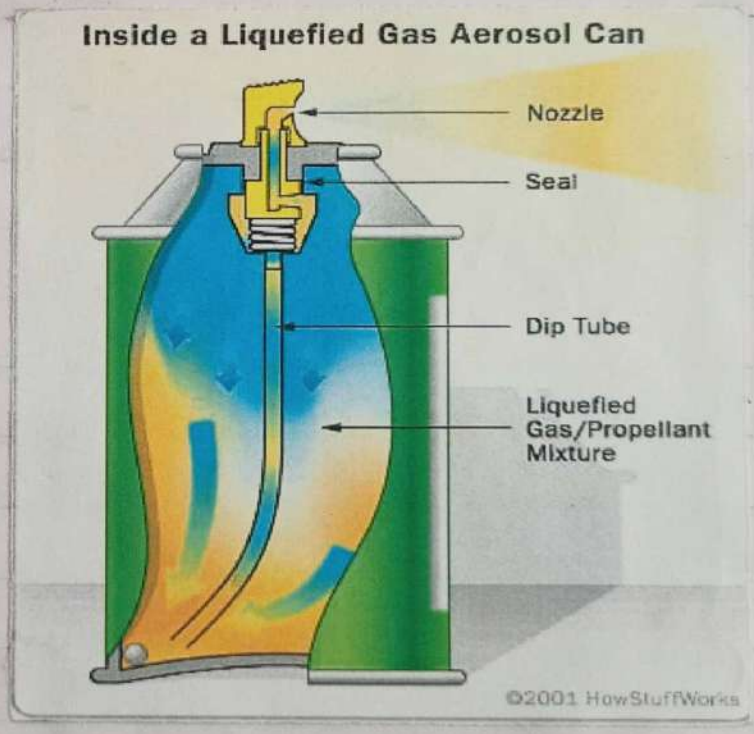
1) Liquefied Gas:

Liquefied propellants are gases that exists as liquids under pressure.

Because the aerosol is under pressure propellant exists mainly as a liquid. but it will also be in the head space as a gas.

The product is used up as the valve is opened some of the liquid propellant turns to gas and keep the head space full of gas.

In this way the pressure in the can remains essentially constant and the spray performance is maintained throughout the life to the aerosol



a] Chlorofluorocarbons

They are non-polar with boiling point less than 24°c and density more that 1 g/mL. They are non-toxic, non-inflammable and are used for Oral and inhalation aerosol.

Due to presence of this characteristics propellant 11, propellant 12, propellent 13 are initially widely used in pharmaceutical aerosols.

4/11

The propellants P-134a and P-227a are now being developed and are incorporated in aerosol formulation in place of P-12. Many of CFCs undergo hydrolysis reaction and stable in alcohol. All propellant of this type are chemically stability except P-11. The CFCs are most popular when are used in combination as blend.

Advantages	Disadvantages
• Chemical inertness	• High cost
• Lack of toxicity	• It deplets the ozone layer
• Non flammability	
• Lack of explosiveness.	

* Examples: Trichloro monofluoromethane [propellant-11]
Dichloro difluoromethane [propellant-12]
Dichloro tetrafluoroethane [propellant-114]

>) Hydrocarbons

The environmental acceptance, low toxicity and non-reactivity are the characteristics of hydrogencarbon propellant that allow them to be used as the propellant. Hydrocarbon due to absence of chlorine in them are used in the preparation of water based aerosols as they are not susceptible to hydrolysis.

Being immiscible with water, they remain on the top of water and provide force to

5/11

push the contents out of the container.
They are flammable and explosive which can be reduced by using blend of propellant.
In addition, use of vapor tap valve also help to reduce flammability.

Advantages
- Inexpensive
- Excellent solvents
- It does not cause ozone depletion

Disadvantages
- Inflammable
- Unknown toxicity produced.

Examples :- Propane [propellent A-108]
Isobutane [propellent A-31]
Butane [propellent A-17]

:) Hydrofluro Carbons & Hydro chloro fluroCarbons
These compound breaks down in the atmosphere at faster rate than CFCs
Lower ozone destroying effect.

Advantages
- Low inhalation toxicity
- High chemical stability
- High purity
- Not ozone depleting

Disadvantages.
- poor solvent
- High cost.

Examples :- Heptafluro propane [HFA-227]
tetrafluroethane [HFA-134a], propellant 152a.

2) Compressed Gas:

Compressed gas propellants occupy the head space above the liquid in the can. When the aerosol valve is opened the gas 'pushes' the liquid out of the can.

. The amount of gas in the headspace remains the same but it has more space and as a result the pressure will drop during the life of the can.

The spray is maintained however by careful choice of the gas selection. The use of compressed gases such as nitrogen, Nitrogen dioxide and carbon dioxide as propellent dispence product in the form of fine mist, foams or semisolid.

These gases produce fairly wet sprays and the foams are not as stable as produced by the liquified gas propellent.

There is no propellant reservoir when compressed gases are employed.

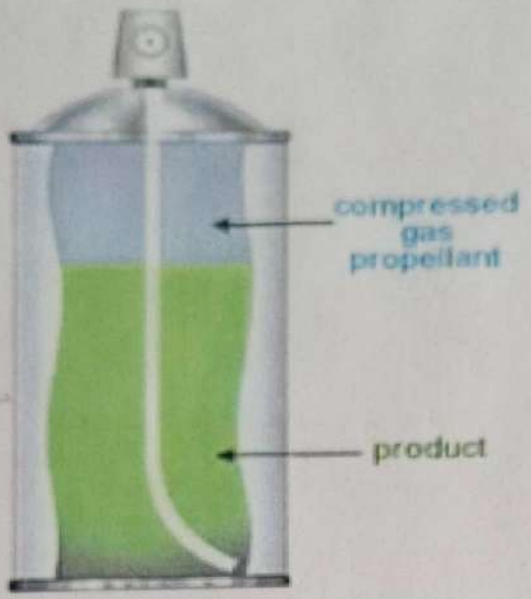
Examples:

a) Nitrogen

b) Nitrogen oxide

c) Carbon dioxide

7/11



★ Nomenclature of Propellants ★

- All propellants are designated by three digits [000]. When the 1st digit is Zero, the propellant is designated by the last two digits and Zero is assumed to be the first digit

  [eg: propellant 011 is propellant 11]

- The first digit is one less than number of Carbon atoms in the compound

  [When there is only two digit, (0) is understood to be the first digit and indicate a methane, when first digit is (1), the propellant is ethane derivative]

- The Second digit is one more than number of Hydrogen atoms in the compound

- The last digit represents the number of fluorine atoms

8/11

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune 411014.

. The number of chlorine atoms [for CHF_3] in the compound is found by substracting the sum of the flourine and the hydrogen atoms from the total number of atoms that can be added to saturate the carbon atom

. In the case of isomers, each has the some number, and the most symetrical one is indicoted by the number alone. As the isomer become more and more asymmetrical, the letter a, b, c etc follows the number

Aerosols Advantage

- Easily withdrawn of drug
- Easy and convenient to apply
- Faster onset of action
- No direct contact with the medicament
- Avoid first pass metabolism
- A specific amount of dose or drug can be removed
- No microorganism can enter,
- Release the contents in controlled and uniformly.
- provides efficacy of a drug
- Irritation can be reduced

DisAdvantage

- costly
- Difficult disposal of empty aerosol container
- Allergic in some cases
- Explosive
- some formulation is difficult.
- sometimes propellent may cause low reaction

9/11

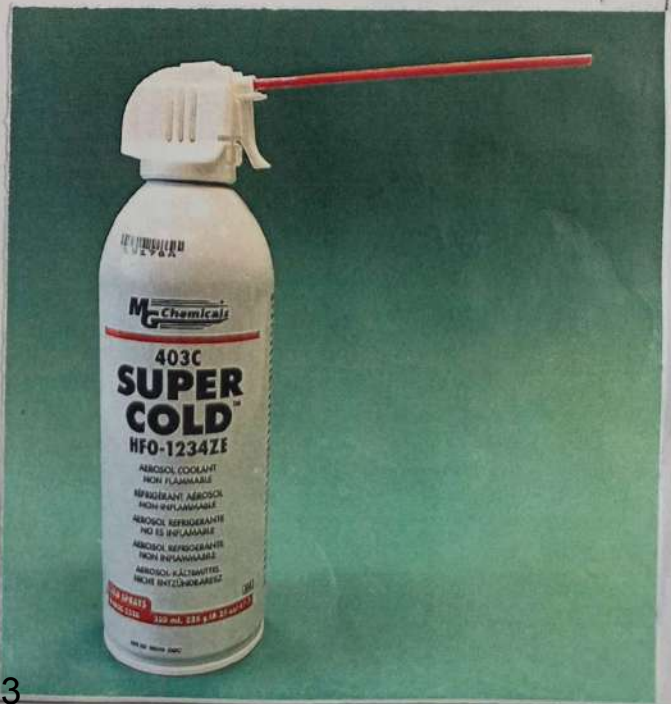
The market has been segmented on the basis of type and application

Major type of aerosol propellant includes DME, HFC, HFO, other hydrocarbon etc.

Aerosol propellent are majorly consumed in the manufacturing of personal care product, such as deodorants, antiperspirants, hair mousse, hair sprays, and many other products. They are also used in household product, such as insecticides, fabricare, air freshner and others. They are also used in the manufacturing of metered close inhalers [MDI].



DME Aerosol Propellent



HFO Aerosol Propellent

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.

10/11



Pharmaceutical Aerosols



11/11

Varieties of Aerosols.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Class: Final Y. B. Pharm
Subject –Practise School
Semester: VII (Pattern 2019)
Year of the study: 2021 -2022



Poster presentation on topic **Formulation and Evaluation of Herbal Emugel of Hydroalcoholic Extract of *Agave Tiquilana* for Antifungal Activity**

Students presenting poster of their Practise school project in Avishkar Competition at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Dr.R.Y.Patil
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Class: Final Y. B. Pharm
Subject –Practise School
Semester: VII (Pattern 2019)
Year of the study: 2021 -2022



Poster presentation on topic **Formulation and Evaluation of Herbal Emugel from *Coccina grandis* Linn. Fruit Extract for Antifungal activity**

Students presenting poster of their Practise school project in Avishkar Competition at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Dr.R.Y.Patil
Staff Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

B. Participatory learning

9. Student involvement in the Wall Magazine/ Pharma Tab Activity

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

WALL MAGAZINE/ PHARMA CORNER

A.Y. 2022-2023



SAMPLE COPIES OF WALL MAGAZINE FILE.

T.R.hands

Name & Signature of Wall Magazine Secretary:

(T.R.hande)

Scanned with OKEN Scanner

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Wall Magazine Committee

Academic Year 2022-2023

SR.NO	NAME OF THE MEMBER	DESIGNATION	MOBILE NUMBER	EMAIL-ID
1.	Mr.Vipul Dhasade	Chairman(Asst Prof.)	9970526436	vipuldhsade2009@gmail.com
2.	Dr.Amit Kasabe	Member (Asst.Prof.)	7709366816	amit9590@gmail.com
3.	Mr. Prashant Khade	Member (Asst.Prof.)	8888872264	phkhade@gmail.com
4.	Mr.Krunal Kanse	Member (Asst.Prof.)	7666445759	krunal.kanase@gmail.com
5.	Mrs.Naziya Sayyad	Member (Asst.Prof.)	9561515849	mullanaziya800@gmail.com
6.	Ms.Rutuja Jadhav	Member (Student Second Year B pharmacy)	7028325172	Rutuja2963@gmail.com
7.	Rutuja Lawande	Member (Student Final Year B pharmacy)	7719816809	lawanderutujavikas@gmail.com
8.	Ms. Bhakti Todmal	Member (Student Third Year B pharmacy)	8459046582	bhaktitodmal01@gmail.com
9.	Ms.Mrunali Tade	Member (Student Second Year B. Pharmacy)	9370491505	tadebapu1967@gmail.com
10.	Ms.Tejaswini Kande	Member Secretory (Asst Prof.)	8669062889	tejukande1214@gmail.com

T.R.Kande

Tejaswini Kande

Wall Magazine Secretary

Dr. Ashok Bhosale

Principal

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Details of Display for Wall Magazine

Academic Year 2022-2023

Student Contribution

Sr. no.	Particulars	Name of students	class	source	signature of secretary
1.	Poem	Gade Bhakti A.	S.Y.B.Pharm.	self generated	T.R.Wande
2.	Poem.	Jadhav Ananya	S.Y.B.Pharm	self generated	
3.	Sketch	Chavan Divya	S.Y.B.P.	self generated.	
4.	Drawing	Todmal Bhakti	T.Y.B.P.	self generated.	
5.	Drawing	Avhale Vaishnavi	S.Y.B.P.	self generated.	
6.	Poem.	Thokal Sakshi	T.Y.B.P	self generated.	
7.	Drawing	Bhoye Shweta	S.Y.B.P	self generated	T.R.Wande
8.	Drawing.	Ghorad sheetal	S.Y.B.P	self generated	
9.	Poem.	Badhe payal	T.Y.B.P.	self generated.	
10.	Poem.	Holkar Nikita	T.Y.B.P	self generated.	
11.	Essay.	Jadhav Ananya	S.Y.B.P.	self generated.	
12.	Drawing.	Awhale Vaishnavi	S.Y.B.P.	self generated.	
13.	Drawing	Todmal Bhakti	T.Y.B.P.	self generated	

Scanned with OKEN Scanner

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Notice No: 353 **Date:** 16/09/2022

ACADEMIC YEAR 2022-2023

All the members of wall magazine committee are hereby informed that the meeting is scheduled on 20.09.2022 at 2:30 p.m. in board room. All the members should remain present for the same.

Agenda of the meeting:

1. To review minutes of previous meeting.
2. To assign responsibilities to committee members for A.Y. 2022-2023
3. To decide rules for wall magazine.
4. To discuss the new ideas for wall magazine activity for A.Y. 2022-2023
5. Any matter with prior permission of chairperson.

T.R.kande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale

Principal

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

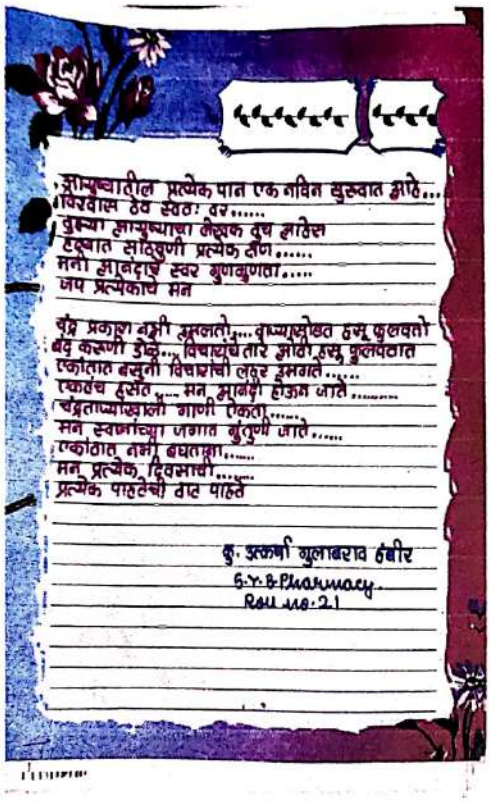
Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

WALL MAGAZINE/ PHARMA CORNER

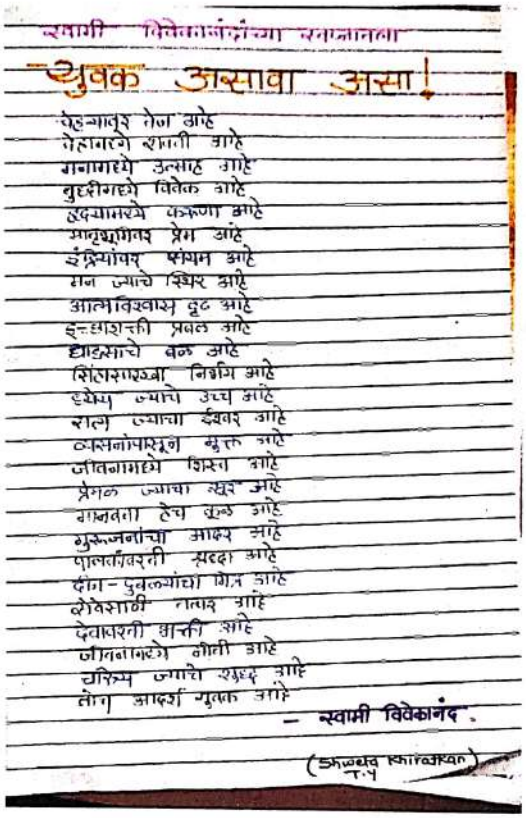
A.Y. 2021-2022



आयुष्यातील प्रत्येक पान एक नविन सुरुवात आहे...
विश्वास ठेव स्वतः वर.....
पुस्तक आयुष्याचा लेखक तुच आहेस
शब्दात साठवुणी प्रत्येक क्षण.....
मनी आनंदाचे स्वर गुणगुणता.....
जप प्रत्येकाचे मन

पंख प्रकाश नभी मुसलतो... वृध्यासोबत हम्मू फुलवतो
बंद करुणी डोळे... विचारांचे तार जोडी हसू फुलवतात
एकांतात बसुनी विचारांची लहर उमगते.....
एकटंच दुसरं... मन आनंदी होऊन जाते.....
चंद्रताऱ्यांसोबती गाणी ऐकता.....
मन स्वप्नांच्या जगात गुंतुणी जाते.....
एकांतात नभी बघताना.....
मन प्रत्येक दिवसाची.....
प्रत्येक पाहतेची वाट पाहते

कु. उत्कर्षा गुलाबराव ठबीर
S.Y.B.Pharmacy.
Roll no. 21



स्वामी विवेकानंदांच्या स्मरणातला

युवक असावा असा!

देहात तेज आहे
नेहमीच शक्ती आहे
मनामध्ये उत्साह आहे
बुद्धीमध्ये विवेक आहे
हृदयामध्ये करुणा आहे
मानवांमध्ये प्रेम आहे
इंद्रियांवर संयम आहे
मन ज्याचे स्थिर आहे
आत्मविश्वास दृढ आहे
इच्छाशक्ती प्रबल आहे
ध्यासाचे बन आहे
शिवशक्ती निष्ठा आहे
ध्येय ज्याचे उच्च आहे
सत्य ज्याचा ईश्वर आहे
व्यसनांपासून मुक्त आहे
जीवनामध्ये शिस्त आहे
प्रेमळ ज्याचा स्वर आहे
मानवता हेच कुळ आहे
गुरूजनांचा आदर आहे
पालकांवरती श्रद्धा आहे
दीन-दुबळ्यांचा मित्र आहे
लोकेसाठी मरण आहे
देवासारखी शक्ती आहे
जीवनामध्ये नीती आहे
चरित्र ज्याचे शुद्ध आहे
तोच आदर्श युवक आहे

— स्वामी विवेकानंद.

(Sanjay Kharatkar)
T.Y.

SAMPLE COPIES OF WALL MAGAZINE FILE.

T.R.hands

Name & Signature of Wall Magazine Secretary:

(T.R.handle)

Scanned with OKEN Scanner

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-14.

Details of Display for Wall Magazine

Academic Year 2021-2022

Student Contribution

Sr.no.	Particulars	Name of students	class	source	signature
1.		Shweta . J. Khirtkar	T.Y.B.	Essay	Shkhirtkar
2.		Ajay Wackchaure	T.Y.B	Poem	Ajay
3.		Patil Aunja	T.Y.B.		Anuja
4.		Lawande Rutuja	T.Y.B.	Mandala	Rutuja
5.		Vaishnavi Madure	T.Y.B.	Rangoli	
6.		Prachi Raipure	T.Y.B.	Poem	Prachi Raipure
7.		Utkarsha Hambir	S.Y.B	Essay	
8.		Shaikh Afiya	T.Y.B	Poem	Afiya
9.		Bhakti Todmal	S.Y.B	Mandala	Bhakti
10.		Onkar Zalte	S.Y.B	Sketch	Onkar
11.		Aarati Sawant	S.Y.B.	Poem	Aarti
12.		Bharat Rathod	S.Y.B	Drawing	Bharat
13		Tejal Kale	F.Y B	Drawing	Tkale
14		Shweta khirtkar	T.Y.B	SP. Day Slides	
15		Aarati Sawant	S.Y.B	Drawings	
16		Rutuja			
17		Sonali Wawage	T.Y.B	Drawing	
18.		Ghule Vaibhavi D.	S.Y.B.	Drawing.	Ghule
19.		Ghule Vaibhavi D.	S.Y.B.	Rangoli	Ghule
20.		Jadhav Anannya.	F.Y.B.	Article	Anan
21.		Avhad Pratiksha	F.Y.M.	Drawing	

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2021-2022

Meeting No.1

It is hereby informed that all the wall magazine committee member, meeting at board room at 3:30 p.m. On 23rd December of 2021 all committee members are requested to be present for meeting.

Agenda of the meeting:

1. To take review on wall magazine of 2020-2021.
2. To assign responsibilities to committee members.
3. To select student's coordinators.
4. Decide rules for wall magazine.
5. Identification of area for wall magazine for wall magazine.

T.R kande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale

Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2021-2022

Meeting No. 02

It is hereby informed that All the wall magazine committee member, meeting at board room at 3:30 p.m. on 17th March 2022 all committee members are requested to be present for meeting.

Agenda of the meeting:

1. To take review of highlighted articles on wall magazine
2. Following table contains data of articles received for wall magazine

1. Poems
2. Drawings
3. Essay
4. Mandala Images
5. Scientific Article

T.R.kande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale

Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2021-2022

Meeting No. 03

It is hereby informed that All the wall magazine committee member, meeting at board room at 12:30 p.m. on11th April 2022 all committee members are requested to be present for meeting.

Agenda of the meeting:

1. Selection process of best articles best drawings

2.As per previous meeting second meeting we discuss on selection of Best article 8 articles and drawings

3.We decide to give the best drawing award to student of Bhakti Todmal on the occasion of Tarang 2022 on 13th April venue Annabhau Sathe Sabhagruh Yervada pune students S.Y. B. Pharm student Bhakti Todmal she has drawn 7 numbers of Mandala designs for wall magazine we upload this images on our college website.

5. All wall magazine committee members give their vote to S.Y. B. Pharm student Bhakti Todmal Mandala sketches.

6. This award is only for encouraged the student performance towards extracurricular activities.

T.R.kande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale
PRINCIPAL
Principal
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

30

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

Wall Magazine Committee

Academic Year 2021-2022

Sr.no	Name of the member	Designation	Email-ID
1.	Mr.Vipul Dhasade	Chairman(Assistant Professor)	vipuldhsade2009@gmail.com
2.	Dr.Amit Kasabe	Member (Assistant professor)	amit9590@gmail.com
3.	Mr. Prashant Khade	Member (Assistant professor)	phkhade@gmail.com
4	Mr.Krunal Kanse	Member (Assistant professor)	krun[illegible]nse@gmail.com
5.	Mrs.Naziya Sayyad	Member (Assistant professor)	mullanazi[illegible]a800@gmail.com
6.	Ms.Anuradha Doundkar	Final year B pharmacy	anuradhadaunkar0186@gmail.com
7.	Ms. Bhakti Todmal	Second year B pharmacy	bhaktitodmal01@gmail.com
8.	Ms.Tejaswini Kande	Member Secretory	tejukande1214@gmail.com

T.R. kands

Tejaswini kande

Secretary

Dr.Ashok Bhosale

T.R. kands

Principal

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

WALL MAGAZINE/ PHARMA CORNER

A.Y. 2020-2021



Shivani Bhosale T.Y. BPharm

पाऊस पडुन गेला.....

पाऊस पडुन गेला
छान गार वारा सुटला
सगळीकडे आनंदी वातावरण झाले
लहान एक चिमणी शहारुन आली
झाडे आनंदाने डुलु लागली
कुठेही आनंदाने नाचु लागली.
पुर्वेकडुनी सप्तरंगी छटा दिसु लागल्या
दिनमणीचा लालसर उजेडही मोहतोषेकडु
उडत उडत आले कुलपाखरु
सगळ्या कुळांना लागले ओढु
तयावरचे पाणी लागले टप-टप पडु
आजुबाजु सगळा- सप- सप झाले
लहान मोठी, चौथ्यात- अंघोळ झाली.

T.Y. B-pharm
(Puja Sanjay Male)

SAMPLE COPIES OF WALL MAGAZINE FILE.

Name & Signature of Wall Magazine Secretary:

Mr. Vipul Dhasade/Nikita Kolte.

Scanned with OKEN Scanner

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Wall Magazine Committee

Academic Year 2020-21

Sr.no	Name of the member	Designation	Mobile no	Email.ID
1.	Mr.Vipul Dhasade	Chairman(Assistant Professor)	9970526436	vipuldhasade2009@gmail.com
2.	Mr.Krunal Kanase	Member (Assistant Professor)	9890705873	krunal.kanase@gmail.com
3.	Mr.Prashant Khade	Member (Assistant Professor)	8888872264	phkhade@gmail.com
4.	Dr.Amit Kasabe	Member (Assistant Professor)	8788191384	Amit9590@gmail.com
5.	Mr.Rajpurohit Rajvirsing	Second Year B.Pharm (Student representative)	7020308457	rajvirrajpurohit71@gmail.com
6.	Ms.Snehal Kshirsagar	Third Year B.Pharm (Student representative)	7038952518	snehalkshrsgr@gmail.com
7.	Ms.Nikita Kolte	Member Secretory	8380933252	94nikitakolte@gmail.com

Principal

Dr.Ashok Bhosale

PRINCIPAL
P. D. E. A's.
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune- 411014.

Scanned with OKEN Scanner

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,Kharadi,Pune-14.

Details of Display for wall magazine

A.Y.2020-2021

Students Contribution

Sr.no	Particulars	Name of Student	Class	Source	Signature
1.	Poem	Sejal Walanj	S.Y.B. Pharm	Self generated	Sejal
2.	Drawing	Gaware Sonali	S.Y.B. Pharm	Self generated	Sonali
3.	Drawing	Utkarsha Khade	T.Y.B. Pharm	Self generated	Ukhade
4.	Poem	Aishwarya Bhange	T.Y.B. Pharm	Self generated	ABhange
5.	Poem	Aarti Sawant	F.Y.B. Pharm	Online	ASawant
6.	Poem	Bhamare Mansi	S.Y.B. Pharm	Self Generated	Bhmj
7.	Drawing	Yadav Tejaswini	T.Y.B. Pharm	Self generated	TYadav

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2020-2021

Meeting No. 01

All the staff members hereby informed that there will be meeting of wall magazine committee and boardroom at 13th March 2021. all committee members are requested to be present for meeting.

Agenda of the meeting:

1. To take review on wall magazine of 2019 - 2020 to assign responsibilities to committee members.

2.To select student coordinators to decide rules for wall magazine identification of area for all magazine

T.R.kande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale
PRINCIPAL
Principal's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2020-2021

Meeting No. 01

All the staff members are hereby informed that there will be meeting of wall magazine committee and boardroom at. 13th March 2021.all committee members are requested to be present for meeting.

Agenda of the meeting:

1.To decide rules for wall magazine.

2.To select student coordinator from each class identification of area of wall magazine

T.R.Kande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale
PRINCIPAL
Principals
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2020-2021

Meeting No. 02

the staff members are hereby informed that there will be meeting of wall magazine committee and boardroom at. 20th May 2021.all committee members are requested to be present for meeting.

Agenda of the meeting:

1.To decide rules for wall magazine.

2.To select student coordinator from each class identification of area of wall magazine

3. To take review of highlighted articles on wall magazine

4. Following table contains data of articles received for wall magazine

1. Poems

2. Drawings

3.Essay

4.Mandala Images

5.Scientific Article

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale
PRINCIPAL
Principal's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

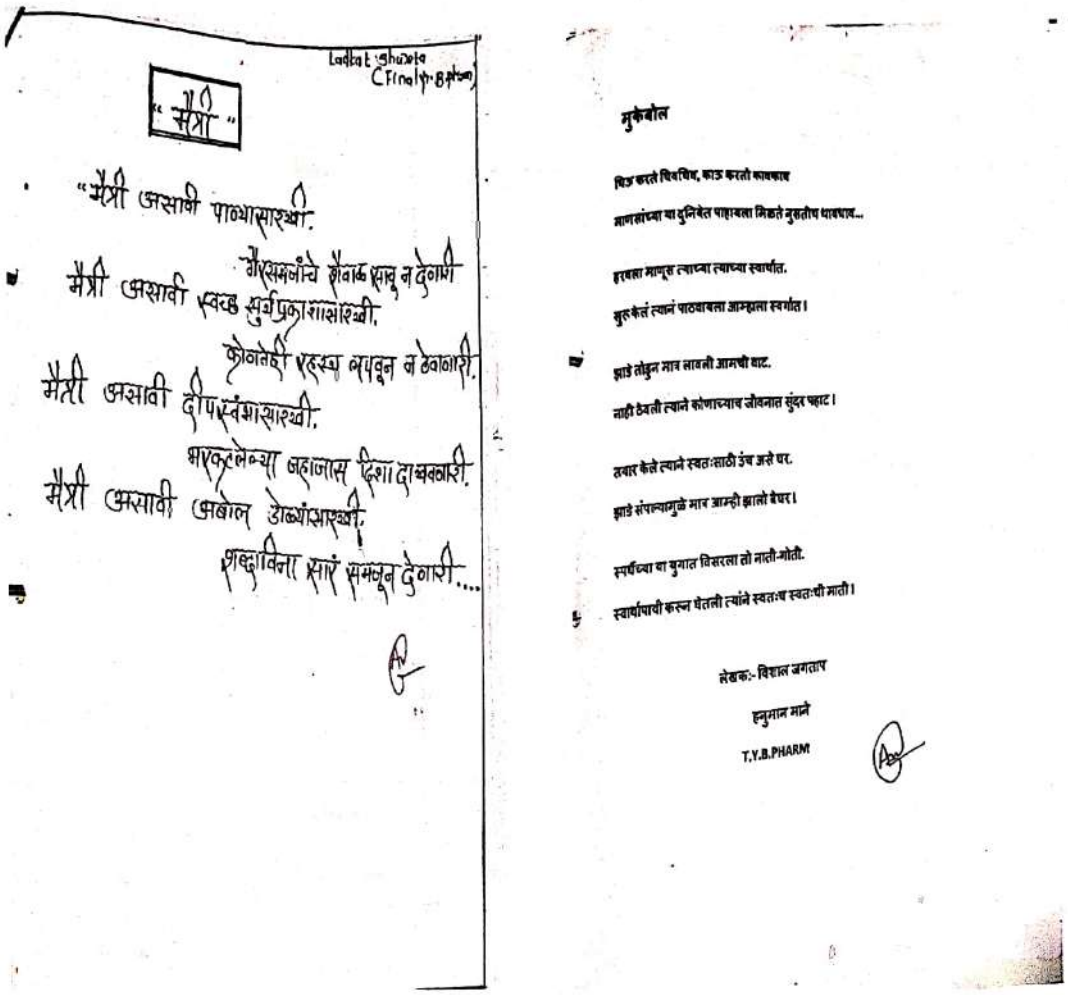
Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

WALL MAGAZINE / PHARMA CORNER

A.Y. 2019-2020



Lalita Ghuate
(Final yr. B.Pharm)

"मैत्री"

"मैत्री असावी पाण्यासारखी.
गैरसमजांचे शैवाल क्षणू न देणारी
मैत्री असावी स्वच्छ सूर्यप्रकाशासारखी.
कोणतेही रहस्य लपवून न ठेवणारी.
मैत्री असावी दीपस्तंभासारखी.
भरकटलेल्या जहाजास दिशा दाखवणारी.
मैत्री असावी अबोल ओल्यांसारखी.
शब्दांविना सारं समजून देणारी....

मुकेबोल

चित्र करते विचित्र, काउ करतो कावकाव
माणसांच्या या दुनियेत पाहायला मिळते नुसतीच धावधाव...

हरवला माणूस त्याच्या त्याच्या स्वार्थात.
मुक्केलं त्यानं पाठवताना आम्हाला स्वर्गात।

झाडे तोडुन गाव लावली आमची वाट.
नाही ठेवली त्याने कोणाच्याच जीवनात सुंदर पहाट।

तयार केले त्याने स्वतःसाठी उंच उंच घर.
झाडे संपल्यामुळे गार आम्ही झालो बेघर।

स्वार्थाच्या या चुनात विसरला तो नाती-गोती.
स्वार्थापायी करून घेतली त्यांने स्वतःच स्वतःची माती।

लेखक:- विशाल जगताप
हनुमान माने
T.Y.B.PHARM

SAMPLE COPIES OF WALL MAGAZINE FILE.

Name & Signature of Wall Magazine Secretary:

mr Amit kasabe

Scanned with OKEN Scanner

Pune District Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,

Kharadi, Pune-411 014.

Magazine committee

Academic Year 2019-20

Sr. No.	Name of the Members	Designation
1.	Dr. Ashok Bhosale	Chairman (Principal)
2.	Dr. Vijaya Barge	Member (Vice Principal)
3.	Mr. Prashant Khade	Member (Asst. Professor)
4.	Mr. Amit Kasabe	Member (Asst. Professor)
5.	Mrs. Savita Sonawane	Member (Librarian)
6.	Mr. Dolas Siddharth	Member (Boys Representative)
	Ms. Mrunalini More	Member (Girls Representative)
7.	Mr. Vipul Dhasade	Member-Secretary (Asst.Professor)

Mr. Vipul Dhasade
Member-Secretary

Dr. Ashok Bhosale
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune-411014.

Scanned with OKEN Scanner

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical sciences and research Centre
Kharadi Pune-14

Wall Magazine Committee

Academic Year 2019-20

Sr. No.	Name of the Member	Designation
1	Mr. Vikram Veer	Chairman (Assistant Professor)
2	Mr. Kanase Krunal	Member (Assistant Professor)
3	Mrs. Trusha Shangrapwar	Member (Assistant Professor)
4	Mr. Vipul Dhasade	Member (Assistant Professor)
5	Mrs. Anjali Pande	Member (Assistant Professor)
6	Mr. Rohit Kamble	Third Year B. Pharm (Student representative)
7	Miss. Kalbhor Prajakta	Third Year B. Pharm (Student representative)
8.	Mrs. Archana Yadav	Member Secretory (Assistant Professor)

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2019-2020

Meeting No. 02

All the staff members hereby informed that there will be meeting of wall magazine committee and boardroom at 3:30 p.m. on 15 th January 2020. all committee members are requested to be present for meeting.

Agenda of the meeting:

1.to take review of highlighted articles of wall magazine.

following table contains data particles drawings displayed in academic year 2019 2020

selection of best articles writing sketches for annual Prize Distribution it was decided to give best write up award and best drawing award to this this student

T.R.hande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale
PRINCIPAL
Principals
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2019-2020

Meeting No. 01

All the staff members hereby informed that there will be meeting of wall magazine committee and boardroom at 3:30 p.m. on 26 th November 2019. all committee members are requested to be present for meeting.

Agenda of the meeting:

1.To decide rules and regulations of wall magazine committee.

2 To select student coordinator from each class.

3.Select teacher coordinator identification of article or area of wall magazine.

T.R.Kande

Tejaswini kande

Wall Magazine Secretary

Dr. Ashok Bhosale
PRINCIPAL
Principal
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Scanned with OKEN Scanner

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Center,
Kharadi, Pune-14.

Details of Display for Wall magazine

A. Y. 2019-20

A. Contribution of Students

Sr. No.	Particulars	Name of Student	Class	Date of display	Source	Signature of Chairman
1.	Drawing	Kamble Ashlesha	F.Y. B.Pharm	1/10/19	Self-generated	
2.	Drawing	Bhosale Shivani	F.Y. B.Pharm	7/10/19	Self-generated	
3.	Poem	Ladkat Shweta	F.Y. B.Pharm	15/10/19	Sakal newspaper	
4.	Poem	Hanuman Mane	T.Y. B.Pharm	15/10/19	Writer- Vishal Jagtaap	
5.	Drawing	Kunal Deshmukh	F.Y. B.Pharm	1/11/19	Self-generated	
6.	Poem	Yogita Sopan	T.Y. B.Pharm	8/11/19	Sakal newspaper	
7.	Essay	Prajakta Pandurang	T.Y. B.Pharm	15/11/19	Online + self	
8.	Poem	Lekurwale Yogita Sopan	T.Y. B.Pharm	19/11/19	Online	
9.	Poem	Kunal Deshmukh	F.Y. B.Pharm	03/12/19	Online	
10.	Drawing	Pratiksha Jadhav	S.Y. B.Pharm	12/12/19	Self-generated	
11.	Poem/Powada	Kunal Deshmukh	F.Y. B.Pharm	26/12/19	Self-generated	
12.	Drawing	Kamble Ashlesha	F.Y. B.Pharm	10/01/20	Self-generated	

Scanned with OKEN Scanner

13.	Drawing	Kunal Deshmukh	F.Y. B.Pharm	17/01/20	Self-generated	
14.	Inspirational quotes	Anjali pande	Assistant proffessor	2/02/20	Online	
15.	Drawing	Pratiksha Jadhav	S.Y. B.Pharm	16/02/20	Self-generated	
16.	Drawing	Kamble Ashlesha	F.Y. B.Pharm	23/02/20	Self-generated	
17.	Historical Article	Kunal Deshmukh	F.Y. B.Pharm	5/03/20	Online	
18.	Drawing	Kunal Deshmukh	F.Y. B.Pharm	23/03/20	Self-generated	
19.	Drawing	Kamble Ashlesha	F.Y. B.Pharm	15/04/20	Self-generated	
20.	Historical Article	Kunal Deshmukh	F.Y. B.Pharm	25/04/20	Online	

Scanned with OKEN Scanner

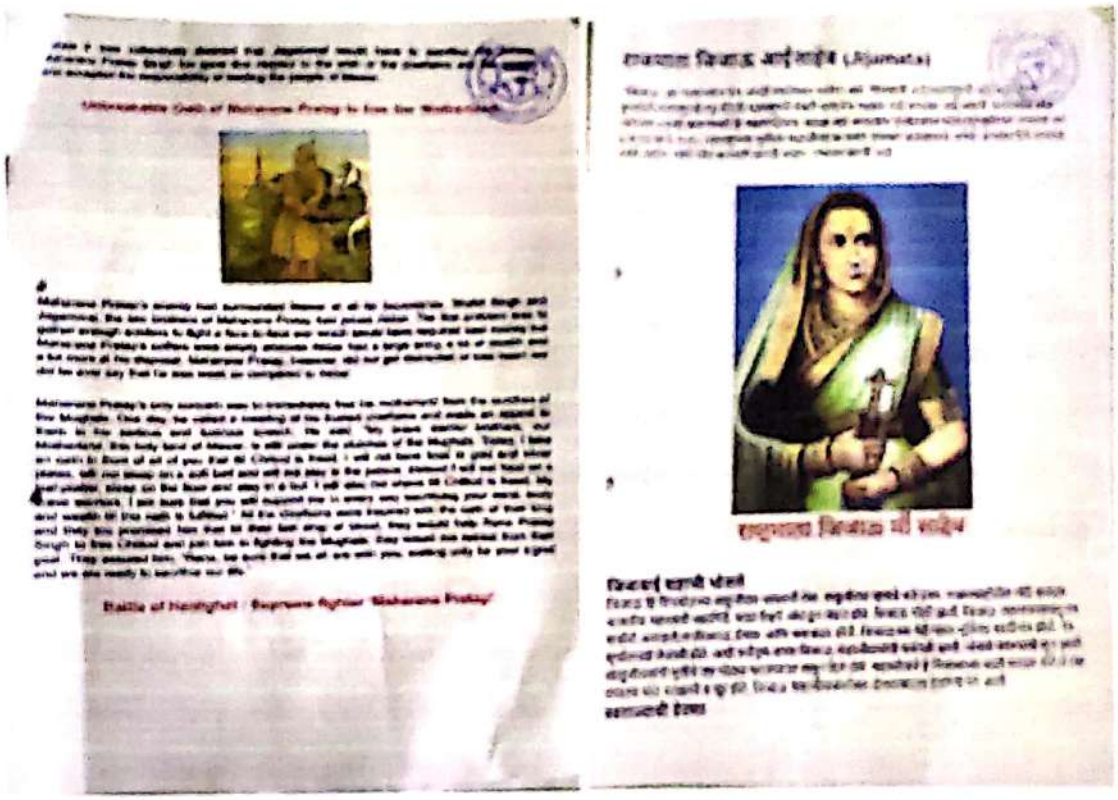
Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014

WALL MAGAZINE/ PHARMA CORNER

A.Y. 2018-2019



SAMPLE COPIES OF WALL MAGAZINE FILE.

Name & Signature of Wall Magazine Secretary:

(Miss V. S.) (S. Khatal)

Scanned with OKEN Scanner

Pune District Education Association's

Shankarrao Ursal college of Pharmaceutical Sciences & Research Centre,

Kharadi, Pune-14

Wall Magazine Committee

Academic Year-2018-2019

Sr.no.	Name of Member	Designation
1	Dr. Vijaya Barge	Chairman (Vice-Principal)
2	Mr. Sujit Kakade	Member (Assistant Professor)
3	Mr.Vipul Dhasade	Member (Assistant Professor)
4	Mrs. Shangrapawar Trusha	Member (Assistant Professor)
5	Ms. Archana Yadav	Member (Assistant Professor)
6	Mr. Krunal Kanase	Member (Assistant Professor)
7	Mr. Indrajit Pawar	Member (Student Representative M.Pharm.)
8	Mr. Tushar Humbe	Member (Student Representative Final Year B. Pharm.)
9	Ms. Pragati Kadam	Member (Student Representative T. Y. B. Pharm.)
10	Ms. Rutuja Kokate	Member (Student Representative S. Y. B. Pharm.)
11	Ms. Anuradha Doundkar	Member (Student Representative F. Y. B. Pharm.)
12	Ms.Supriya Khatal	Member Secretary (Assistant Professor)

Dr. Vijaya Barge
Chairman

Ms. Supriya Khatal
Secretary

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune - 411014.

Scanned with OKEN Scanner

Pune Districts Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Details of Display for Wall Magazine

Academic Year 2018-2019

Student Contribution

no.	Particulars	Name of students	class	source	signature
1	Poem	Anuradha S. Daundkar	f Y B. pharm	self genera	
2.	slowgun	Pratiksha Jadhar	f Y B. pharm	self-genera	
3	~~swet quote~~	sweta Garud	f.Y.B pharm	self-generated	
4.	Poem	Amrapali Jai kadam	T Y B. pharm	self. generated	
5.	Poem	Puja Sanjay Nale	T Y B pharm	self generated	
6.	Drawing	A.J.K.	T Y. B. pharm	self generated	
7.	Drawing	kadam pragati	T Y B pharm	self generated	
8.	Drawing	Priyanka Gaysamudre	T Y B. pharm	self generated	
9.	Poem	Prachi Telgote	S Y B pharm	self. generated	
10	Poem	Trupti khedkar	final yr.	self. generated	
11.	Drawing	shivani Bhosale	T Y B. pharm	self. generated	
12.	Poem	Trupti Thakur	final yr.	self generated.	
13	Poem	Divya Thakur	final yr.	self. generated	
14.	Essay	Tushar Humbe	final yr.	Google.	
15.	Drawing	kajal kamble.	final yr.	Website.	
16.	Drawing	Sayli kor.	B pharm	self. generated.	

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2018-2019

Meeting No. 01

All the staff members hereby informed that there will be meeting of wall magazine committee and boardroom at 3:30 p.m. on 12 th November 2018 all committee members are requested to be present for meeting.

Agenda of the meeting:

1. Decide rules and regulation of wall magazine committee.

2.To select student coordinator from each class.

3 To select teacher coordinator.

4 Identification of article and area of wall magazine

Scanned with OKEN Scanner

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE-14

ACADEMIC YEAR 2018-2019

Meeting No. 02

All the staff members hereby informed that there will be meeting of wall magazine committee and boardroom at 3:30 p.m. on 5 th January 2019. all committee members are requested to be present for meeting.

Agenda of the meeting:

1 To take review of highlighted articles on wall magazine

2. To take measures to increase participants of students in The Wall magazine activity carried out throughout the year.

Scanned with OKEN Scanner

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune 14

Magazine Committee
Academic Year: 2022-2023

Sr. No.	Name of the member	Designation	Contact Number	Email. ID
01	Dr. Ashok Bhosale	Chairman (Principal)	9850890093	profavbhosale@yahoo.co.in
02	Dr. Vijaya Barge	Member (Vice Principal)	9834378576	bargevijaya2016@gmail.com
03	Mr. Prashant Khade	Member (Asst. Prof.)	8888872264	phkhade@gmail.com
04	Mr. Amit Kasabe	Member (Asst. Prof.)	7709366816	amit9590@gmail.com
05	Mr. Vipul Dhasade	Secretary (Asst. Prof.)	9970526436	vipuldhasade2009@gmail.com
06	Mrs. Savita Sonawane	Member (Librarian)	9860310556	savitasonawane2213@gmail.com
07	Ms. Riya Bhondve	Member (Student, S. Y. M. Pharm.)	9146099979	riyabhondve96@gmail.com
08	Ms. Saniya Pandkar	Member (Student, T. Y. B. Pharm.)	9822909021	manupandkar179@gmail.com

Mr. Vipul Dhasade
Member Secretary

Dr. Ashok Bhosale
Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Pune District Education Associations

Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune-14

Magazine Committee

Academic Year: 2021-2022

Sr. No.	Name of the member	Designation
01	Dr. Ashok Bhosale	Chairman (Principal)
02	Dr. Vijaya Barge	Member (Vice Principal)
03	Mr. Prashant Khade	Member (Asst. Prof.)
04	Dr. Amit Kasabe	Member (Asst. Prof.)
05	Mr. Vipul Dhasade	Secretary (Asst. Prof.)
06	Mrs. Savita Sonawane	Member (Librarian)
07	Mr. Shubham Gaike	Member (Student, S. Y. M. Pharm.)
08	Miss. Shweta Khiratkar	Member (Student, T. Y. B. Pharm.)

Mr. Vipul Dhasade
Magazine Incharge

Dr. Ashok Bhosale
Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Magazine Committee

Academic Year: 2020-2021

Sr. No.	Name of the member	Designation	Contact Number	Email. ID
01	Dr. Ashok Bhosale	Chairman (Principal)	9850890093	profavbhosale@yahoo.co.in
02	Dr. Vijaya Barge	Member (Vice Principal)	9834378576	bargevijaya2016@gmail.com
03	Mr. Prashant Khade	Member (Asst. Prof.)	8888872264	phkhade@gmail.com
04	Mr. Amit Kasabe	Member (Asst. Prof.)	7709366816	amit9590@gmail.com
05	Mr. Vipul Dhasade	Secretary (Asst. Prof.)	9970526436	vipuldhasade2009@gmail.com
06	Mrs. Savita Sonawane	Member (Librarian)	9860310556	savitasonawane2213@gmail.com
07	Mr. Tushar Humbe	Member (Student, S. Y. M. Pharm.)	7743805617	tusharhumbe111@gmail.com
08	Miss. Anuradha Daundkar	Member (Student, T. Y. B. Pharm.)	9922447687	auradhasdaundkar@gmail.com

Mr. Vipul Dhasade
Member Secretary

Dr. Ashok Bhosale
Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune-14

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

Magazine Committee
Academic Year: 2019-2020

Sr. No.	Name of the member	Designation
01	Dr. Ashok Bhosale	Chairman (Principal)
02	Dr. Vijaya Barge	Member (Vice Principal)
03	Mr. Prashant Khade	Member (Asst. Prof.)
04	Mr. Amit Kasabe	Member (Asst. Prof.)
05	Mr. Vipul Dhasade	Secretary (Asst. Prof.)
06	Mrs. Savita Sonawane	Member (Librarian)
07	Kokate Suraj Rajabhau	Member (Student, T. Y. B. Pharm.)
08	More Mrunalini Sanjiv	Member (Student, T. Y. B. Pharm.)

Mr. Vipul Dhasade
Member Secretary

Dr. Ashok Bhosale
Principal

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI

Tal. Haveli, Dist. Pune - 411014 E-mail : sucopsrc_2009@yahoo.co.in web : www.pdea-sucopsrc.org

Affiliated to : Savitribai Phule Pune University, Pune (PU/PN/Pharm/384/2009) Code 1235























PHARMA TAB

2020

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Desk of Student Editors



Kokate Suraj Rajabhau
(T.Y.B.Pharm)



More Mrunalini Sanjiv
(T.Y.B.Pharm)

Welcome! it gives us immense pleasure for being appointed as the student editorial board for college magazine Pharma Tab 2020.

The leadership of our principal, Dr. Ashok Bhosale emphasis on mastery of basic skills, clean, orderly and secure college environment makes us all feel like home.

Our college has arranged number of activities for us throughout the year while the aim of not only letting us study but making us indulge in other programs as well and really has made us all do the excellent in competitions, whether sports, debates, National Pharmacy Week competitions or organizing cleanliness drives, funds for flood relief, National Level Seminars and the list goes on. We have done it all!!! All these activities do make us think outside the box and elaborate our ideas and put forward those in front of others.

It is truly said by Nelson Mandela "Education is the great engine of personal development; it is through education that the daughter of a peasant can become a doctor. That the son of a mine worker can become the head of the mine and the child of a farm worker can become a president of a great nation".

At the end we would like to thank all the writers for their articles and creativity in bringing out "Pharma Tab 2020". We would lastly like to thank our Principal, staff for giving us the opportunity of writing the editor's letter for the magazine this year.

Thank you.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Editorial Board

Editor in Chief : Principal Dr. Ashok Bhosale
Staff Editors : Mr. Vipul Dhasade
Staff Representative : Dr. Vijaya Barge
Mr. Prashant Khade
Student Editors : Mr. Suraj Kokate
Ms. Mrunalini More

Declaration

Place of Publication : Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Tal. Haveli, Dist. Pune - 411 014..
Publicity : Annual
Publisher : Principal Dr. Ashok Bhosale
Editor(s) : Mr. Vipul Dhasade
Nationality : Indian
Address : Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Tal. Haveli, Dist. Pune - 411 014.
Design & Printing : PDEA's Sevak Sah. Patsanstha's
SAHAKARI MUDRANALAYA, Paud Road, Erandwana, Pune-411038

I, Principal Dr. Ashok bhosale hereby declare that particulars given above are true to the best of my knowledge and belief. Whatever the views of authors are not necessarily those of the editorial board.

Acknowledgement

College Magazine committee of ' Pharma Tab 2020 ' is extremely thankful to our Principal Dr. Ashok Bhosale for his constructive criticism and constant encouragement in the making of this issue of college magazine.

We also express our deep sense of gratitude to all teachers for strong support throughout the year. We sincerely thank for the help extended by supporting staff from time to time.

This acknowledgement would be incomplete without the mention of all the students and well wishers whose contribution is valuable in making this issue a grand success.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

"Mulakkaram" The Breast Tax

She was bold, beautiful and devout. She was strong enough to lay down the injustice underneath her feet. She didn't cow down before the feudal casteist hierarchy or the vulgar male gaze of the upper caste. Her name was 'NANGELI'. She rose her rebellion against the ruthless law of paying 'mulakkaram'. She cut off her own breast and offered them on the plantain leaf as the 'mulakkaram'. She lost her life during her brave fight against the caste discrimination due to excessive blood loss. The great love stories has great sacrifices as 'CHIRUKANDAN' sacrificed his life by jumping into her pyre. He is the first man to undergo Sati for his beloved wife. Her story has disappeared from the ancient history. Thousands of people like this young couple lost their life due to this evil rule. Blood was flowing as like rivers under the name of caste system. I thank god that the birds flying high in the sky don't know their caste or else everyday the earth would have witnessed blood fall from sky. The voice raised by 'NANGELI' echoed into the series of people's movement and the king had to cancel law which proved that the raised voice shall bring hope into a new dawn.

She raised her voice.
She faced her fear.
She conquered the demons.
She sacrificed herself.
She won but life lost against her.

Mrunalini Sanjiv More
T.Y.B. Pharm

Pandemics and Pharmacits...

Covid-19 is the revent threat,
its not the time to cry and fret...
Let pharmaists and Dr's do their job and
Lets avoid rcoming in a mob....
Stay home, Stay safe and be cool,
finise who don't follow this are fool...
vacine production is on its way,
lets drop for the best and pray....
Thank you !! All pharmsists and future pharmsits
"You Truly Help Save Lives"

Riya Bhondve
T.Y. B. Pharm

Pharmacitsts

People in pain can be cross as a rule
However, the Pharmcist helps them keep cool
Always your friend, he often gives free advice
Remember his service when you consider price
Many years he has tgrained before he could start
And more importantly, he's got a great big heart
Certainly his is the most trusted profession
it's your health that is his obsession
So the next time you see him, give him a simle
Treat him nicely, you'll get it back by a mile
Surely, he'll keep you healthy, at least for while.

Aarti Sawant
F.Y.B.Pharm

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

Magazine Committee
Academic Year: 2018-2019

Sr. No.	Name of the member	Designation
01	Dr. Ashok Bhosale	Chairman (Principal)
02	Dr. Vijaya Barge	Member (Vice Principal)
03	Mr. Prashant Khade	Member (Asst. Prof.)
04	Mr. Amit Kasabe	Member (Asst. Prof.)
05	Mr. Vipul Dhasade	Secretary (Asst. Prof.)
06	Mrs. Savita Sonawane	Member (Librarian)
07	Mr. Shubham Gaike	Member (Student, T. Y. B. Pharm.)
08	Mrs. Aishwarya Waghmare	Member (Student, T. Y. B. Pharm.)

Mr. Vipul Dhasade
Member Secretary

Dr. Ashok Bhosale
Principal

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI

Tal. Haveli, Dist. Pune - 411014 E-mail : sucopsrc_2009@yahoo.co.in web : www.pdea-sucopsrc.

Affiliated to : Savitribai Phule Pune University, Pune (PU/PN/Pharm/384/2009) Code 1235



PHARMA TAB

(A.Y. 2018-19)

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Desk of Student Editors



Shubham Gaike



Aishwarya Waghmare

Welcome! it gives us immense pleasure for being appointed as the student editorial board for **college magazine Pharma Tab 2019.**

The leadership of our Principal, emphasis on mastery of basic skills, clean, orderly and secure college environment makes us all feel like home. High teacher's expectations of pupil performance is something that we all always look up to.

Our college has arranged number of activities for us throughout the year while the aim of not only letting us study but making us indulge in other programs as well and really has made us all do the excellent in competitions, whether sports, debates, National Pharmacy Week competitions or organizing cleanliness drives, funds for flood relief, National Level Seminars and the list goes on. We have done it all!!! All these activities do make us think outside the box and elaborate our ideas and put forward those in front of others.

We would like to quote by saying "Education is the great engine of personal development; it is through education that the daughter of a peasant can become a doctor. That the son of a mine worker can become the head of the mine and the child of a farm worker can become a president of a great nation". Said so by Nelson Mandela.

At the end we would like to thank all the writers for their articles and creativity, in bringing out "**Pharma Tab 2019".** We would lastly like to thank our Principal Dr. Ashok Bhosale and teachers for giving us the opportunity of writing the editor's letter for the magazine this year.

Thank you.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Editorial Board

Editor in Chief : Principal Dr. Ashok Bhosale
Staff Editors : Mr. Vipul Dhasade
Staff Representative : Dr. Vijaya Barge
Mr. Prashant Khade
Student Editors : Mr. Shubham Gaike
Ms. Aishwarya Waghmare

Declaration

Place of Publication : Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Tal. Haveli, Dist. Pune - 411 014..
Publicity : Annual
Publisher : Principal Dr. Ashok Bhosale
Editor(s) : Mr. Vipul Dhasade
Nationality : Indian
Address : Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre
Kharadi, Tal. Haveli, Dist. Pune - 411 014.
Design & Printing : PDEA's Sevak Sah. Patsanstha's
SAHAKARI MUDRANALAYA, Paud Road, Erandwana, Pune-411038

I, Principal Dr. Ashok bhosale hereby declare that particulars given above are true to the best of my knowledge and belief. Whatever the views of authors are not necessarily those of the editorial board.

Acknowledgement

College Magazine committee of ' Pharma Tab 2019 ' is extremely thankful to our Principal Dr. Ashok Bhosale for his constructive criticism and constant encouragement in the making of this issue of college magazine.

We also express our deep sense of gratitude to all teachers for strong support throughout the year. We sincerely thank for the help extended by supporting staff from time to time.

This acknowledgement would be incomplete without the mention of all the students and well wishers whose contribution is valuable in making this issue a grand success.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Beginning to Ending Friendzone

From fresher's party to farewell, our life changes forever.

The crazy friends. The sweet crushes, the canteen gang, the college bunks the attendance percentage, the proxy angels the photocopied notes, the night studies before exam, the hostel horror, the planned go a trip, the internship drama, the project fiasco, the placement prayers the hopes for fest, the forever promices the sity fights. the tight hugs, the genuine smiles, and the mad laughter.

College is about walking away with some friends for cafe with a million memories.

Dhairyasheel Gund
Final year - B. Pharm

Life

Life is an opportunity, benefit from it
Life is beauty, admire it
Life is dream, realise it
Life is challenge, meet it
Life is duty, complet it
Life is a game, play it
Life is a promise, fulfill it
Life is sorrow, overcome it
Life is a song, sing it.
Life is struggle, accept it
Life is tragedy, confrontit
Life is advanture, dare it
Life is luck, make it
Life is too precious, do not destroy it
Life is life, fight for it

Mahesh Mali
T.Y.B. Pharm

The Future

The future is like a flower,
planted on the green lands,
It becomes fully grown hour by hour,

In the watchful eyes of careful hands.
We should therefore cleanse our
todays for tomorrow,
There our lives will be beautiful
as we know,
And will also be fruitful and gay.

The future is like a baby which
needs a lot of care,
If you nurture it well it grows to be glant.

If you neglect it now it will
surely become a dwarf,
So make your future bright and
shiny by working hard today.

Pawan Rathod
Final year - B. Pharm

Living Concept

When you want something really bad.
and when not having in your life mates you sad,
Maybe it is time you work a little harder,
Only then will be able
to climb up the ladder.
Nothing in life comes to us easily,
We all have to give fortune a little squeeze.
But when you do, luck
will surely shine up bright.
And you will never have to see a dark night.

Ransing Monika
Final year - B. Pharm

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

B. Participatory learning

10. Participation of students in University/State/National level competitions

(A.Y. 2018-19 to 2022-23)

10. Participation of students in University/State/National level competitions (A.Y. 2018-19 to 2022-23)

Please visit this link for more information:
https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/202/Participation%20of%20Students%20in%20variety%20of%20Competiions.pdf

B. Participatory learning

11. Participation of students in extracurricular events organized by the institute and other institutes

(A.Y. 2018-19 to 2022-23)

11. 1. Participation of students in Institutional Extracurricular Activities
(A.Y. 2018-19 to 2022-23)

Please visit this link for more information:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/199/Institutional%20Cultural%20Activities%202018-19%20to%202022-23.pdf

2. Students Participation in Extracurricular Activities organized by other institutes
(A.Y. 2018-19 to 2022-23)

Please visit this link for more information:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/200/Students%20Participation%20Cultural%20Activities%20Other%20Than%20Institutional%202022-23%20to%202020-2021.pdf

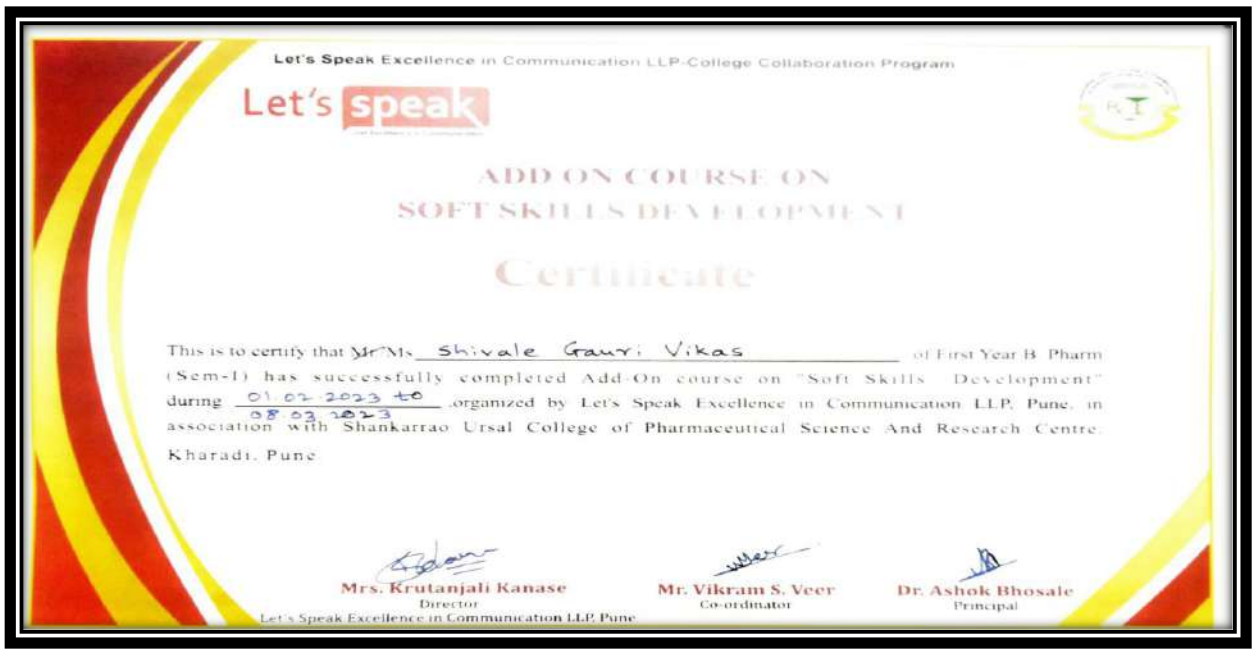
B. Participatory learning

12. Participation of students in Add-on and Certificate Courses

(A.Y. 2018-19 to 2022-23)

Participation of students in Add-on/Certificate Courses organized by the institute

Academic Year 2022-23



Let's Speak Excellence in Communication LLP-College Collaboration Program

Let's speak

ADD ON COURSE ON
SOFT SKILLS DEVELOPMENT

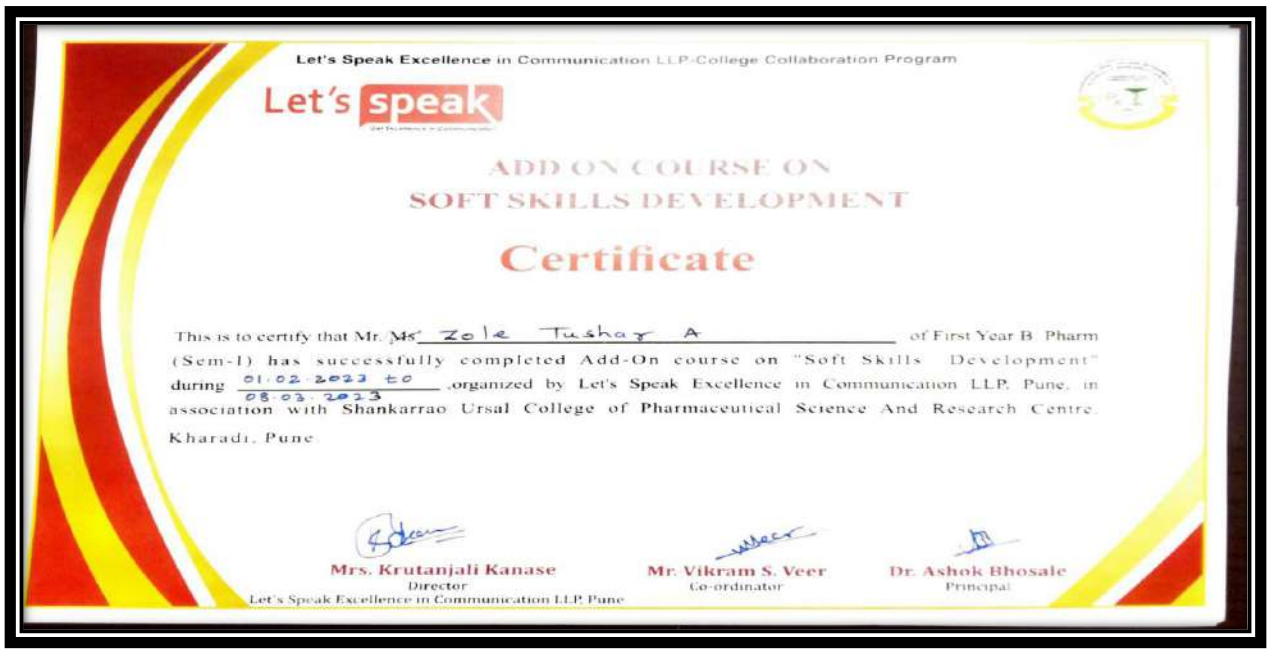
Certificate

This is to certify that Mr/Ms Shivale Gauri Vikas of First Year B Pharm (Sem-I) has successfully completed Add-On course on "Soft Skills Development" during 01.02.2023 to 08.03.2023 organized by Let's Speak Excellence in Communication LLP, Pune, in association with Shankarrao Ursal College of Pharmaceutical Science And Research Centre, Kharadi, Pune.

Mrs. Krutanjali Kanase
Director
Let's Speak Excellence in Communication LLP, Pune

Mr. Vikram S. Veer
Co-ordinator

Dr. Ashok Bhosale
Principal



Let's Speak Excellence in Communication LLP-College Collaboration Program

Let's speak

ADD ON COURSE ON
SOFT SKILLS DEVELOPMENT

Certificate

This is to certify that Mr. Ms Zole Tushar A of First Year B Pharm (Sem-I) has successfully completed Add-On course on "Soft Skills Development" during 01.02.2023 to 08.03.2023 organized by Let's Speak Excellence in Communication LLP, Pune, in association with Shankarrao Ursal College of Pharmaceutical Science And Research Centre, Kharadi, Pune.

Mrs. Krutanjali Kanase
Director
Let's Speak Excellence in Communication LLP, Pune

Mr. Vikram S. Veer
Co-ordinator

Dr. Ashok Bhosale
Principal

Sample Copy of Certificates of Add-on Course on Soft Skill Development



CERTIFICATE COURSE ON
HANDLING OF SOPHISTICATED INSTRUMENTS

Certificate

This is to certify that Mr/Ms Bhondve Riya R of F.Y. M.Pharm Class has successfully completed Certificate course on "Handling of Sophisticated Instruments" during 05.02.2022 to 06.03.2022 organized by Aster Analytics Research Institute Ltd, Pune in association with Shankarrao Ursal College of Pharmaceutical Science And Research Centre, Kharadi, Pune

Mrs. Hemlata Marsale
Director
Aster Analytics Research Institute Ltd. Pune

Mr. Vikram S. Veer
Co-ordinator

Dr. Ashok Bhosale
Principal



CERTIFICATE COURSE ON
HANDLING OF SOPHISTICATED INSTRUMENTS

Certificate

This is to certify that Mr./Ms Pawar Ajay S. of F.Y. M.Pharm Class has successfully completed Certificate course on "Handling of Sophisticated Instruments" during 05.02.2022 to 06.03.2022 organized by Aster Analytics Research Institute Ltd, Pune in association with Shankarrao Ursal College of Pharmaceutical Science And Research Centre, Kharadi, Pune.

Mrs. Hemlata Marsale
Director
Aster Analytics Research Institute Ltd. Pune

Mr. Vikram S. Veer
Co-ordinator

Dr. Ashok Bhosale
Principal

Sample Copy of Certificates of Certificate Course on Handling of Sophisticated Instruments

Academic Year 2020-21



ADD ON COURSE ON
AUTHENTICATION AND TRACEABILITY OF
MEDICINAL ACTIVES FROM NATURALS

Certificate

This is to certify that ~~Mr./~~Ms Bhamare Mansi D. of S.Y.B.Pharm
Class has successfully completed Add-On course on "Authentication And Traceability Of Medicinal Actives From Naturals" during 15.02.2021 to 24.03.2021 organized by PDEA's Shankarrao Ursal College of Pharmaceutical Science And Research Centre, Kharadi, Pune.

Dr. Ravindra Patil
HOD-Dept of Pharmacognosy
Co-ordinator

Mr. Vipul Dhasade
Asst. Professor
Dept of Pharmacognosy

Dr.Ashok Bhosale
Principal



ADD ON COURSE ON
AUTHENTICATION AND TRACEABILITY OF
MEDICINAL ACTIVES FROM NATURALS

Certificate

This is to certify that Mr./~~Ms~~ Bhapsekar Nikhil D. of S.Y.B.Pharm
Class has successfully completed Add-On course on "Authentication And Traceability Of Medicinal Actives From Naturals" during 15.02.2021 to 24.03.2021 organized by PDEA's Shankarrao Ursal College of Pharmaceutical Science And Research Centre, Kharadi, Pune.

Dr. Ravindra Patil
HOD-Dept of Pharmacognosy
Co-ordinator

Mr. Vipul Dhasade
Asst. Professor
Dept of Pharmacognosy

Dr.Ashok Bhosale
Principal

Sample Copy of Certificates of Add-on Course on Authentication and Traceability of Medicinal Actives from Naturals

B. Participatory learning

13. Memorandum of Understanding (MoU) upto A.Y. 2022-23

List of Memorandum of Understanding (MoU) upto A.Y. 2022-23

Sr. No.	Particulars	Period	Validity Status
1.	MoU with Ayurvedeey Arkashala Ltd. Satara	**27-10-2017 Onwards**	**Active**
2.	MoU with Mahalaxmi Homoeopathic Hospital and Research Center, Raygaon, Satara	**27-10-2017 Onwards**	**Active**
3.	MoU with Grinsons Phytoherb India Pvt.Ltd. Satara	**27-10-2017 Onwards**	**Active**
4.	MoU with Shree Hospital, Kharadi Pune - 411014	18-06-2018 Onwards	**Active**
5.	MoU with Dr Peter Patel of 'Saving Lives' project of Rotary Club of Birmingham, Birmingham, United Kingdom (Founder, International Director & Millennium President of the Club)	13-03-2021 Onwards	**Active**
6.	MoU with Let's Speak Institute, Kharadi, Pune	05-01-2022 to 03-01-2024	**Active**
7.	MoU with Aster Analytics Research Institute 227, SRP Road, Pandavnagar, Wadachi Wadi, 21 AA 058710 Pune, Maharashtra 411060	10.09.2022 to 09.09.2025.	**Active**
8.	MoU with Maharashtra Information Technology Support Center	**02-06-23 onwards**	**Active**

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014.



ज्या कारणासाठी ज्यांनी मुद्रांक खरेदी केला त्यांनी त्याच कारणासाठी

महाराष्ट्र MAHARASHTRA पुदांक खरेदी दिनांक 23/10/2017 अन्यथा वापरणे बंधनकारक आहे SM 035998

फक्त प्रतिज्ञा पत्रासाठी (अनुच्छेद-४)

(सदर मुद्रांक शिल्लक व्यवसायासाठी नाही.)

नोंदणीकृत कोणाकडे साठवण करावयाचे : .....

नोंदणीसाठीचे दस्ताचा प्रकार : प्रतिज्ञा पत्र

ज्या मिळकत सेवेसाठी लागू : पुणे जिल्हा शिक्षण मंडळाचे शंकरराव उरसल कॉलेज ऑफ फार्मास्युटीकल

दस्त सादर करणाऱ्याचे नाव : सायन्स ॲण्ड रिसर्च सेंटर, खराडी, पुणे.

ज्या मिळकतीचे वर्णन करणारी दस्त क्रमांक : 14660 दि. 25 OCT 2017

ते व्यक्तीचे नाव व पत्ता : डॉ. संतोषकुमार गं. पेंडेम

नाशवंतक मुद्रांक विक्रेत्याची सही व शिक्का : परवाना क्र. २२०१०८६

नवीन मुद्रांक विक्रेत्याचे विक्रेण/पत्ता:- संजयनगर, खराडी, पुणे-४११०१४

23 OCT 2017

Memorandum of Understanding
Between
Ayurvedeey Arkashala Ltd. Satara
and
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune

This memorandum of understanding is made on **Friday, 27th October 2017** and entered into by and between **Ayurvedeey Arkashala Ltd. Satara** and **PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune**; Address -Sr.No.15/2/A/1/1, Near Zensar I.T.Tower, Kharadi Taluka Haveli Dist, Raghavendra Nagar, Kharadi, Kharadi Gaon, Kharadi, Pune, Maharashtra 411014 for the purpose of co ordination as it relates to development of soft skill in ayurvedic formulations.

Whereas, The Ayurvedeey Arkashala Ltd. Satara is responsible for supporting and maintaining the Good Manufacturing Practices & It is applicable for pharmacy students.

Whereas, PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune supports the Quality Education by applying G.M.P. Regulations of Pharmaceutical Industry at the laboratory level.

Now therefore, The Ayurvedeey Arkashala Ltd. Satara and PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune have agreed to the roles and responsibilities expressed in this memorandum.

RESPOSIBILITIES:-

The Ayurvedeey Arkashala Ltd. Satara serves the lead role for training student, pertaining knowledge to them about current practices in pharmaceutical industry.

Where PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune serves as a Local Institutional Agency for the following agendas:-

1. Promotion of Industry-Institute interaction.
2. Organizing the lectures of industry Personnel on current & novel topics.

COMPLIANCE WITH APPLICABLE LAWS, REGULATION AND POLICIES:-

Both parties understand that this memorandum is intended to be in compliance with all applicable Federal, State and local laws, regulation and The Ayurvedeey Arkashala Ltd. Satara and PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune policies. Any part of this agreement that is in conflict with aforementioned laws, regulation and policies shall be deemed invalid. The balance of the agreement shall survive and shall remain in full force and effect.

DURATION OF THE AGREEMENT:-

This agreement shall remain in place until either party notifies the other in writing their desire to terminate the agreement. Termination can be with or without cause.

APPROVALS:-

Authorized Signatory

The Ayurvedeeya Arkashala Ltd

Manager

Ayurvedeey Arkashala Ltd. Satara

DR. R.Y. PATIL
Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune



महाराष्ट्र MAHARASHTRA © 2017 © SM 035999

फक्त प्रतिज्ञापत्रासाठी (अनुच्छेद-४)

(सदर मुद्रांक लिलाव लागण्यासाठी नाही.)

प्रतिज्ञा पत्र

प्राच्यार्य

पुणे जिल्हा शिक्षण मंडळाचे

शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्स ॲण्ड रिसर्च सेंटर, खराडी, पुणे.

23 OCT 2017

25 OCT 2017

श्री. संतोषकुमार गं. पेंडेम

Memorandum of Understanding Between
Mahalaxmi Homoeopathic Hospital and Research Center, Raygaon, Satara
And
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune

This memorandum of understanding is made on **Friday, 27th October 2017** and entered into by and between **Mahalaxmi Homoeopathic hospital and research center, Raigaon, Satara** and **PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune**; Address - Sr.No.15/2/A/1/1, Near Zensar I.T.Tower, Kharadi Taluka Haveli Dist, Raghavendra Nagar, Kharadi, Kharadi Gaon, Kharadi, Pune, Maharashtra 411014

for the purpose of co-operation and co-ordination as it relates to the health of society.

Whereas, Mahalaxmi Homoeopathic hospital and research center, Raigaon, Satara is responsible for providing training to the students to support public health.

Whereas, PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune will supports Mahalaxmi Homoeopathic hospital and research center, Raigaon, Satara in preparing for, and responding to the current public health issues.

Now therefore, Mahalaxmi Homoeopathic hospital and research center, Raigaon, Satara and PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune have agreed to the roles and responsibilities expressed in this memorandum.

RESPONSIBILITIES:-

The Mahalaxmi Homoeopathic hospital and research center, Raigaon, Satara serves as the lead local Homoeopathic hospital for preparedness and response to public health threats, disasters and emergencies in Saygaon village and its periphery.

Where PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune serves as a institutional agency for the following agendas:

1. Conduction of different activities like blood donation camp, blood group detection camp.
2. Arrangements of Hemoglobin Estimation, HIV detection camp.
3. Organization of different rally's and camp at different places regarding health awareness of society.

COMPLIANCE WITH APPLICABLE LAWS, REGULATION AND POLICIES.

Both parties understand that this memorandum is intended to be in compliance with all applicable federal, state and local laws, regulation and Mahalaxmi Homoeopathic hospital and research center, Raigaon, Satara and PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune policies. Any part of this agreement that is in conflict with aforementioned laws, regulations and policies shall be deemed invalid. The balance of the agreement shall survive and shall remain in full force and effect.

DURATION OF THE AGREEMENT :-

This agreement shall remain in place until either party notifies the other in writing their desire to terminate the agreement. Termination of this agreement can be with or without cause.

APPROVALS:-

Authorized Signatory

Hospital Superintendent
Mahalaxmi Homoeopathic hospital
and research center, Saigaon, Satara

Medical Superintendent
Mahalaxmi Homoeopathic Hospital & Research Center
Raigaon, Satara

DR. R.Y. PATIL
Principal
PDEA'S Shankarrao Ursal College of
Pharmaceutical Sciences and
Research Center, Kharadi, Pune



ज्या कारणासाठी ज्यांनी मुद्रांक खरेदी केला त्यांनी त्याच कारणासाठी

महाराष्ट्र MAHARASHTRA पुदांक खरेदी दिनांक 23/10/2017 अन्यथा वापरणे बंधनकारक आहे SM 035998

फक्त प्रतिज्ञा पत्रासाठी (अनुच्छेद-४)

(सदर मुद्रांक लिज्ह व्यवसेन्सासाठी नाही.)

23 OCT 2017

ज्ञापत्रक कोणाकडे सादर करावयाचे :.....

ज्ञापनकर्त्याचे नाव : प्रतिज्ञा पत्र

ज्या मिळकत सेवेसाठी ज्ञापन : पुणे जिल्हा शिक्षण मंडळाचे शंकरराव उरसल कॉलेज ऑफ फार्मास्युटीकल

ज्ञापनाची जागा : सायन्स ऑण्ड रिसर्च सेंटर, खराडी, पुणे.

ज्ञापन दिनांक : 144660 दि. 25 OCT 2017

ज्ञापन करणाऱ्या व्यक्तीचे नाव : श्री. संतोषकुमार गं. पेंडेम

ज्ञापनाचा मुद्रांक विक्रेता परवाना क्र. २२०१०८६

ज्ञापन मुद्रांक विक्रीचे ठिकाण/पत्ता :- संभाजीनगर, खराडी, पुणे-४११०१४

Memorandum of Understanding
Between
Ayurvedeey Arkashala Ltd. Satara
and
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune

This memorandum of understanding is made on **Friday, 27th October 2017** and entered into by and between **Ayurvedeey Arkashala Ltd. Satara** and **PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune**; Address -Sr.No.15/2/A/1/1, Near Zensar I.T.Tower, Kharadi Taluka Haveli Dist, Raghavendra Nagar, Kharadi, Kharadi Gaon, Kharadi, Pune, Maharashtra 411014 for the purpose of co ordination as it relates to development of soft skill in ayurvedic formulations.



महाराष्ट्र MAHARASHTRA

ज्या कारणासाठी ज्यांनी मुद्रांक खरेदी केला त्यांनी सोडा कारणासाठी मुद्रांक खरेदी केल्यापासून ६ महिन्यांत वापरणे बंधनकारक आहे

SM 036000

फक्त प्रतिज्ञापत्रासाठी (अनुच्छेद-४)

(सदर मुद्रांक लिज्ह व्यवसेन्सरसाठी नाही.)

प्रतिज्ञापत्रक कोणाकडे सादर करावयाचे :.....

प्रतिज्ञापत्रासाठीचे कारण : प्रतिज्ञा पत्र

मुद्रांक विक्री केल्याचे गाव : पुणे जिल्हा शिक्षण मंडळाचे

व संस्थेची नाव : शंकरराव उरसल कॉलेज ऑफ फार्मास्युटीकल सायन्स ॲण्ड रिसर्च सेंटर, खराडी, पुणे.

मुद्रांक विक्री दस्ताची पॉन्ट्री क्रमांक : 16646 दि. 25 OCT 2017

हस्ते व्यवसायिक नाव व पत्ता : [illegible]

परवानाधारक मुद्रांक विक्रेत्याची पत्ता व सनद : श्री. संतोषकुमार गं. पेंडेम
अनुज्ञप्ती क्र. २२०१०८६

सेच मुद्रांक विक्रीचे ठिकाण/पत्ता:- वंदननगर, खराडी, पुणे-४११०१४

23 OCT 2017

Memorandum of Understanding
Between
Grinsons Phytoherb India Pvt .Ltd. Satara
and
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune

This memorandum of understanding is made on **Friday, 27th October 2017** and entered into by and between **The Grinsons Phytoherb India Pvt. Ltd. Satara**; Registered Office- 37, Shahunagar, Godoli, Satara-415001 and **PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Center,**

SHREE HOSPITAL
We care beyond health

Shree Hospitals Criticare and Trauma Center Pvt. Ltd.

S.No 7/3/b Gulmohor Society, Kharadi, Pune 411 014 • Tel: 020 4694 1111 • Fax: 020 4694 1100 • info@shreehospital.com • www.shreehospital.com

June 18, 2018

To,
Dr. Ashok Bhosale
Principal- Shankarrao Usal
Pharmacy Collage, Kharadi
020-27013835

Sub: - Offer for Emergency Medical facility tie up.
Ref: - 1. Personal discussion regarding the same.

A. Emergency Facility Tie Up:

1. 24 hour emergency medical services in case of emergency.
2. Free Ambulance 24 hours in case of medical emergency from Shree Hospital, Kharadi.
3. 20 % (Twenty Percent) Discount of all OPD Facilities.
   (Excluding Medicines and Consumables and Diagnostic Charges).
4. 10 % (Ten Percent) Discount of all IPD Facilities (Admissions).
   (Excluding Medicines and Consumables and Diagnostic Charges).
5. Cashless facility to all your staff and dependents with Mediclaim Insurance Policy.
6. Free Health Awareness Talk .
7. Free Basic Health Check-up.
8. 50% discount on CT SCAN and MRI in Happy Hours. (Evening 06 pm to 08 pm)

MBJ FNA
20/06/18

SHREE CRITICARE & TRAUMA CENTER PVT. LTD.

M.E.A's S. U. College Of P. S. & R. C. Kharadi
INWARD NO: 237
DATE: 20/06/18

S.No 7/3/b Gulmohor Society, Kharadi, Pune 411 014 • Tel: 020 4694 1111 • Fax: 020 4694 1100 • info@shreehospital.com • www.shreehospital.com

B. Note:

- Day and time schedule to fixed as per mutual understanding and staff availability for Health talk and Health Check-up Camp.
- Examination table, Chairs and other basic facility to be provided at the site by your team.
- Blood or other investigation if required on site would be charged.
- Medicines and consumables if required would be charged.

In case of any queries please feel free to contact Marketing Department for any further details.

Your Co-operation would be highly appreciated.

We will be happy to serve your Students and staff with best of care .

Thanking you,

SHREE HOSPITALS CRITICARE & TRAUMA CENTER PVT. LTD.

Dr. Shreehari Dhorepatil,
Managing Director,
Shree Hospital,Kharadi
Pune -411014

Dr. Ashok Bhosale
Principal- Shankarrao Usal
Pharmacy Collage, Kharadi
020-27013835

Faculty of Disaster Medicine - India & Nepal

SAVING LIVES

A Rotary Club of Birmingham Project
International Director: Dr Peter Patel

NAPC | National Association of Primary Care

Public Health England

A Founder Member
CRIMEDIM – Novara, Italy. Academic Advisor Partner

Memorandum of Understanding between

Dr Peter Patel of *'Saving Lives' project of Rotary Club of Birmingham, Birmingham, United Kingdom*
(Founder, International Director & Millennium President of the Club)

and

Dr Ashok Bhosale Principal, Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre Kharadi Pune

This Memorandum of Understanding (MOU) sets out the terms and understanding between Dr Peter Patel as the representative and founder of *'Saving Lives'* Project – Rotary Club of Birmingham and Dr Ashok Bhosale Principal, Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre Kharadi Pune to become a partner of the Faculty of Disaster Medicine.

Purpose

The primary purpose of the M.O.U. is to establish a unique and visionary international partnership for the Faculty of Disaster Medicine – India and the first College of Pharmacy in India. It aims to strengthen India's health care system for disasters/catastrophes by introducing a dedicated training for disaster medicine.

The above goal will be accomplished by:

1. Becoming a full member of the Faculty and by joining our West India Faculty at Pune.
2. By introducing the concept of Disaster Medicine to Pharmacy students and other Pharmacy practitioners and education institutes.
3. Undertaking key measure to become a disaster resilient organization and contributing to UNISDR 'Sendai Framework for Disaster Risk Reduction 2015-2030' programme. (The Faculty and Saving Lives are members of this programme).
4. Leading the way for introducing Disaster Medicine in the very important sector of Pharmacy education and health security.

14 Belwell Lane, Sutton Coldfield, Birmingham B74 4AL.
E mail: peter@mpatel.co.uk; peter.patel@nhs.net; Tel & WhatsApp: +44 7711421142

Additional bi-lateral purpose:

1. Both parties shall work towards establishing dedicated training course(s) for *Disaster Medicine* for their organization and the region.

2. Both parties along with other members shall work towards establishing or supporting Pune and Haveli taluka Region Disaster Medicine Response Team(s) and strengthening the medical preparedness and response to disasters.

3. The college shall work towards building a disaster resilient organization and support regional/city resilience to disasters with focus on health.

4. Both parties shall work towards establishing a Centre of Excellence in training and research in Disaster Medicine where appropriate.

5. Dr Peter Patel and International and National Clinical leaders shall work with the institute in delivering these objectives in conjunction with the institutes appointed leads.

Reporting

The Faculty has International Advisory Board and Indian national Clinical Advisory and Development Board/Groups. All College will have representation at regional Faculty level. Via the Regional Faculty level, the College shall have support from the National Advisory and Development Board/Group. Evaluation of effectiveness will be carried out by appointing independent experts from both international and national organisations.

Funding

This MOU is not a commitment of funds. Funding for training the trainers will be raised as required by the regional Faculty leads.

A current example of financial burden sharing is shown below.

14 Belwell Lane, Sutton Coldfield, Birmingham B74 4AL
E mail: peter@mpatel.co.uk; peter.patel@nhs.net; Tel & WhatsApp: +44 7711421142

Infrastructure resources and funding:

Responsibility of 'Saving Lives' – Rotary Club of Birmingham:

'Saving Lives' has 'ring fenced' funding for developing the Faculty of Disaster Medicine – India and Nepal. The 'Saving Lives' will fund:

1. UK costs for development and resource needs of the training modules (GBP 5000-7000/module).

2. UK costs of international trainers (GBP 10,000.00 per year).

3. International transport costs and subsistence of the trainers from UK or other destinations upto the nearest airport to the training centre in India (GBP 1200 per person per visit to India – upto 4 training visits of teams of 5 max – allocated budget GBP 24,000.00).

4. Backfill costs of international trainers (GBP 2000.00 per week per person).

The above are minimum estimated development and delivery costs.

Responsibility of 'Indian Partner Institutes':

College as Institutional partners will be responsible for:

1. Arranging digital platforms such as Zoom for all training and management meetings.
2. Resources and finance for all local development and delivery of the programme.
3. Should the programme expand to face to face training in Pune or Pune District, then the partner institution shall be responsible for transport of the trainers from and return to the regional airport, train or other landing stations (eg Pune).
4. Provision of all training facilities and resources needed for training of trainers and trainees.
5. Subsistence for the period of the training programme (see above).
6. Local transport from hotel to training venue and return, any other site visits related to programme for the period of training days
7. The College has option of inviting Dr Peter Patel to become visiting Professor for Disaster Medicine. Dr Patel shall support the college in developing its curriculum for Disaster Medicine, deliver annual lecture and support

14 Belwell Lane, Sutton Coldfield, Birmingham B74 4AL
E-mail: peter@drpatel.co.uk, peter.patel@nhs.net, Tel & WhatsApp: +44 7711421142

development of dedicated programmes on Disaster Medicine with learning competitions.

Duration of the training programme:

Most training programmes shall be conducted via Zoom platform as jointly agreed timetable. Post Covid19 pandemic, face to face programme may be agreed which could run for 3 - 7 days depending on regional Faculty needs.

8. The College can opt for developing their own trainers or have access to trainers from West India Faculty. In some instances, the Faculty will provide fast track development to reduce unnecessary international travel costs.

Other costs and resources:

Regional institutional partners shall be responsible for provision of teaching and training facilities for their regional development of the programme. This will mainly include provision of lecture theatres, break-out rooms for workshops, flip-charts and audio-visual facilities. Regional institutional partners shall also be responsible for funding costs of any printing, photocopying and preparatory materials, local administration costs and provision of local support staff for the programme.

14 Belwell Lane, Sutton Coldfield, Birmingham B74 4AL.
E mail: peter@mpatel.co.uk; peter.patel@nhs.net; Tel & WhatsApp: +44 7711421142

Duration

This MOU is at-will and may be modified by mutual consent of authorized officials from *'Saving Lives'* and nominated/signatory official of the partner organization. This MOU shall become effective upon signature by the authorized officials from the partners and will remain in effect for a period of 5 years until modified or terminated by any one of the partners by mutual consent.

Contact Information

Founder Partner name: *'SAVING LIVES'* – Rotary Club of Birmingham
Address: 14 Belwell Lane, Sutton Coldfield, Birmingham B74 4AL
Telephone: +44 77 1142 1142
E-mail: peter@mpatel.co.uk; peter.patel@nhs.net

Dr Peter Patel for ***'Saving Lives'***

_____ Date:.....
(Partner signature)

Partner name: Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre Kharadi Pune

Partner representative: Dr Ashok V Bhosale.

Position: Principal

Telephone: +919850890093

E-mail: profavbhosale@yahoo.co.in

_____ Date 13 MAR 2021
(Partner signature)

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi Pune-411014

Let's speak
Get Excellence in Communication
Let's Speak Excellence in Communication LLP

8th Floor, Office No:703,
Stellar Spaces, Opp. to Zensar IT Park,
Kharadi, Pune - 411014

info@letsspeak.in
www.letsspeak.in

+91 8378 066 227
+91 7709 709 868

Letter of contract

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,
Kharadi, Pune-411 014.

Let's Speak Institute,
Kharadi, Pune

Respected Principal,

This letter serves as a formal contract between Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune and Let's Speak Institute, Pune whereby Let's Speak Institute will provide professional services of **Soft Skills Development** program for the students of First Year B.Pharm class for the academic years 2021-2022 and 2022-2023 at Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-411 014.

Let's Speak Institute in association with the Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, will conduct **Soft Skills Development** program for the above mentioned two academic years only. Please sign both copies of this contract. Retain one copy for your records and please return one copy to the above address.

Best Regards,

Principal Signature

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

05.01.2021
Date

Institute Signature

Let's Speak
Excellence in Communication LLP

Director

05.01.2021
Date

1/2

Let's speak
Get Excellence in Communication
Let's Speak Excellence in Communication LLP

8th Floor, Office No:703,
Stellar Spaces, Opp. to Zensar IT Park,
Kharadi, Pune - 411014

info@letsspeak.in
www.letsspeak.in

+91 8378 066 227
+91 7709 709 868

Acceptance Letter

To,
The Principal
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-411 014.

Let's Speak Institute,
Kharadi, Pune

Respected Principal,
We are writing to confirm our acceptance of your **Soft Skills Development** program offer and to tell you how delighted we are to be joining Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune. The work is exactly what we have prepared to perform and hoped to do. We feel confident that we can make a significant contribution to your institute, and we are grateful for the opportunity you have given us.

Our institute look forward to visit college and meet students. We appreciate your college for faith on us and we are very happy to be attending **Soft Skills Development** program

Sincerely,

Principal Signature
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

05.01.2022
Date

Institute Signature
Let's Speak
Excellence in Communication LLP

Director

05.01.2022
Date

2/2



महाराष्ट्र MAHARASHTRA ◑ 2022 ◑ 21AA 058710

02 SEP 2022

(१७७५६ दि. मु.शु.रक्कम १००

दस्ताचा प्रकार प्रतिज्ञापत्र

दस्त नोंदणी करणार आहेत का ? होय/नाही.

मिळकतीचे वर्णन P.D.E.A.'S S. U. College of Pharmaceutical Sciences & Research Centre Kharadi, Pune- 411 014.

मुद्रांक विकत घेणाऱ्याचे नांव

पत्ता

दुसऱ्या पक्षकाराचे नांव

हस्ते व्यक्तीचे नांव व पत्ता

SANGIETAA LOKANDE
परवाना क्र. २२०११२४
मोबोज हॉटेल कम्पाऊंड, वंडरगार्डन रोड, पुणे-१

मुद्रांक विकत घेणाऱ्याची सही

ज्या कारणासाठी ज्यांनी मुद्रांक खरेदी केला, त्यांनी त्याच कारणासाठी मुद्रांक खरेदी केल्यापासून ६ महिन्यात वापरणे बंधनकारक आहे

वरिष्ठ कोषागार अधिकारी पुणे

02 SEP 2022

प्रथम मुद्रांक लिपीक कोषागार पुणे करिता

Memorandum of Understanding

between

Pune District Educations Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi

Near Zensar IT Tower, Kharadi, Pune-411014, Maharashtra

and

Aster Analytics Research Institute

227, SRP Road, Pandavnagar, Wadachi Wadi,

Pune, Maharashtra 411060

ASTER ANALYTICS RESEARCH INSTITUTE PUNE 411060

for

Co-operation in the field of Research & Education

This memorandum of understanding made between Pune District Educations Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune, and Aster Analytics Research Institute, Pune, Maharashtra as follows:

- Recognizing the mutual interests in the fields of education, training, transfer of technology and dissemination of knowledge on long term noncommercial basis.
- Recognizing the importance of institutes of higher education role in promoting research.
- Hereby agree to establish collaboration according to terms and conditions set out in the articles following hereunder.
- The two institutions in the Memorandum of Understanding refer to the Pune District Educations Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi (hereafter SU) and Aster Analytics Research Institute, Pune, Maharashtra (hereafter AARI).

1. **FIELD OF CO-OPERATION:**

   Co-operation between the two institutions (SU & AARI) may be established within any field related to pharmacy and in the fields of research, development, education, training, and transfer of technology.

2. **EXCHANGE OF ACADEMIC STAFF:**
   a. SUCOPSRC and AARI will encourage collaboration in research areas of mutual interest.
   b. SUCOPSRC will welcome the faculties of AARI to visit the institute to engage in scientific research.
   c. Reciprocally, AARI will welcome faculties of SUCOPSRC to visit the Centre to engage in scientific research.

3. **SHARING OF STUDENTS FOR RESEARCH ACTIVITIES**
   a. AARI and SU institutions herewith agreed for an exchange of students nominated by the respective Institutions to carry out studies as provided for in this agreement.

b. AARI and SU institutions also encourage exchange of students in the context of professional Internship.

4. RESEARCH PROJECTS:

a. Efforts will be made to share information about on-going research activities to establish contacts and collaboration between professionals working within the same field.

b. Research Projects and the composition of research teams will be approved by the participating institutions. Efforts will be made to evaluate the need for participating staff and the location of the research activity.

5. MANAGEMENT AND ADMINISTRATION:

Implementation, and co-operation of the Memorandum of Understanding fall under the responsibility of

Pune District Educations Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi

Near Zensar IT Tower, Kharadi, Pune-411014, Maharashtra

Contact No.: +91 9850890093

Email: sucopsrc_2009@yahoo.co.in

and

Aster Analytics Research Institute,

227, SRP Road, Pandavnagar, Wadachi Wadi,

Pune, Maharashtra-411060

Contact No.: 9284746520

Email- asteranalyticspune@gmail.com

6. GENERAL PROVISIONS:

a. The two institutions will carry out research activities, as a follow up to this Memorandum of Understanding. The activities must be carried out in accordance with appropriate laws and regulation existing in the institution.

b. The two institutions shall initiate, and exchange research facilities and other relevant things required to carry out research projects.

7. DURATION OF MOU:

This MOU is valid for three years from 10.09.2022 to 09.09.2025.

For	Pune District Educations Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi	**For**	Aster Analytics Research Institute (AARI), Wadachi Wadi, Pune, Maharashtra, India
Signature with seal	PRINCIPAL P D. E. A's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre Kharadi, Pune-411014	**Signature with seal**	Director ASTER ANALYTICS RESEARCH INSTITUTE, PUNE
Designation	Principal and Professor	**Designation**	Director
Name	Dr. Ashok Bhosale	**Name**	Mrs. Hemlata Kasabe
Date	10 SEP 2022	**Date**	10.09.2022

Maharashtra Information Technology Support Center
महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र

MITSC/OUT/MAY 2023/M/237

दि.31/05/2023

प्रति,
मा. प्राचार्य,
शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटिकल सायन्सेस अँड रिसर्च सेंटर,
खराडी, पुणे

विषय : NAAC best practice साठी शैक्षणिक सामंजस्य कराराची प्रत पाठवणेबाबत...

महोदय/महोदया,

उपरोक्त विषयास अनुसरून आपणास कळविण्यात येते की, आपल्या महाविद्यालयाकडून **NAAC best practice** साठी पाठवण्यात आलेल्या शैक्षणिक **सामंजस्य कराराची प्रत** आपल्या माहितीसाठी सही शिक्क्यासह पाठवत आहोत.

कळावे,
आपला विश्वासू,

Yasswant

यशवंत शितोळे
अध्यक्ष
महाराष्ट्र माहिती तंत्रज्ञान
सहाय्यता केंद्र

02-06-2023

सोबत : कराराची प्रत.

Yashwant Shitole
Founder President
+91 73044 29777

Mahila Bank Basement,
Khasbag Maidan, Kolhapur-416 012
0231-2993950
www.mitsc.co.in
uvajagar@gmail.com

D.E.A's S. U. College Of P. S. & R. C. Kharadi
INWARD NO : 03
DATE: 2/6/23

पुणे जिल्हा शिक्षण मंडळाचे

शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस ॲन्ड रिसर्च सेंटर

खराडी, ता.हवेली, जि.पुणे-411014. महाराष्ट्र, भारत.

मान्यताप्राप्त : अखिल भारतीय तंत्रशिक्षण परिषद व भारतीय औषधनिर्माणशास्त्र परिषद, नवी दिल्ली

महाराष्ट्र शासन व तंत्रशिक्षण संचलनालय, मुंबई (डि.टी.ई.कोड नं.6385)

संलग्न : सावित्रीबाई फुले पुणे विद्यापीठ, पुणे (आयडी नं. पीयु/पीएन/फार्मा/384/2009 कोड नं.1235)

फोन नं. : 020-27013835 ई-मेल : sucopsrc_2009@yahoo.co.in वेबसाईट : www.pdeasubpharm.edu.in

Date : 19/4/2023 Ref. No. : SUCOPK/1816/2022-2023

अध्यक्ष
अजित पवार

उपाध्यक्ष
राजेंद्र घाडगे

मानद सचिव
ॲड.संदीप कदम
अधिसभा सदस्य, सा.फु.पु.वि., पुणे.

खजिनदार
ॲड. मोहनराव देशमुख

उपसचिव
एल. एम. पवार

प्राचार्य
डॉ. अशोक भोसले

सामंजस्य करार

करिअर कटटा आणि पुणे जिल्हा शिक्षण मंडळाचे शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस ॲन्ड रिसर्च सेंटर खराडी, पुणे.

पार्श्वभूमी

महाराष्ट्र राज्य उच्च व तंत्र शिक्षण विभाग व महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र यांच्या संयुक्त विदयमाने सुरू असणा-या करिअर कटटा या उपक्रमांतर्गत युवकांच्या करिअरला योग्य दिशा देण्याचा उद्योग राज्यात या महाविद्यालयोमध्ये करिअर कटटा ची स्थापना केली जाणार आहे. या पुढाकाराची महत्वपूर्ण भूमिका अशी आहे की, महाविद्यालयातील युवकांना त्यांच्या उज्ज्वल भवितव्यासाठी आवश्यक त्या दिशा दाखवून त्यावर मार्गक्रमण करून यश संपादन करण्यासाठी सर्वोतोपरी उचित मार्गदर्शन मिळावे याकरिता समर्पित कार्य करणे आवश्यक आहे. महाविद्यालय आणि महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र यांच्या समन्वयातून विद्यार्थ्यांना भवितव्याविषयी गांभिर्याने विचार करण्याकरीता प्रेरीत करावे, कौशल्य विकासित आत्मनिर्भर पिढी घडविणे स्पर्धा परिक्षा ,उद्योजकता विकास, व्यवसाय निर्मिती , व्यक्तीमत्व विकास आदी संदर्भात तज्ञ मार्गदर्शकांचे विचार प्रत्येक विद्यार्थ्यांपर्यंत पोहोचावे याकरिता सक्षमपणे नियोजन करून योग्य मार्गदर्शन देण्याची यंत्रणा उभी करणे अत्यावश्यक आहे. याबाब करिअर कटटयांतर्गत महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र

- श्री. शिवाजी विज्ञान महाविद्यालय , अमरावती यांच्यामध्ये असणा-या सामंजस्य करार पुढीलप्रमाणे
- श्री यशवंत शितोळे

अध्यक्ष
महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र
पत्ता : करिअर कटटा , महिला बँक तळमजला , खासबाग मैदानाजवळ , मंगळवार पेठ, कोल्हापूर - ४३ पार्टी नंबर २
प्राचार्याचे नाव डॉ. अशोक भोसले
महाविद्यालयाचे नाव . पुणे जिल्हा शिक्षण मंडळाचे, शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस ॲन्ड रिसर्च सेंटर ,खराडी, पुणे.
पत्ता- १५/अ/१/१ खराडी, ता.हवेली जि. पुणे

उद्देश

1/3

पुणे जिल्हा शिक्षण मंडळाचे
शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस ॲन्ड रिसर्च सेंटर
खराडी, ता.हवेली, जि.पुणे-411014. महाराष्ट्र, भारत.
मान्यताप्राप्त : अखिल भारतीय तंत्रशिक्षण परिषद व भारतीय औषधनिर्माणशास्त्र परिषद, नवी दिल्ली
महाराष्ट्र शासन व तंत्रशिक्षण संचलनालय, मुंबई (डि.टी.ई.कोड नं.6385)
संलग्न : सावित्रीबाई फुले पुणे विद्यापीठ, पुणे (आयडी नं. पीयु/पीएन/फार्मा/384/2009 कोड नं.1235)
फोन नं. : 020-27013835 ई-मेल : sucopsrc_2009@yahoo.co.in वेबसाईट : www.pdeasubpharm.edu.in

Date : / /20 Ref. No.: SUCOPK / /20 -20

अध्यक्ष
अजित पवार

उपाध्यक्ष
राजेंद्र घाडगे

मानद सचिव
ॲड.संदीप कदम
अधिसभा सदस्य, सा.फु.पु.वि., पुणे.

खजिनदार
ॲड. मोहनराव देशमुख

उपसचिव
एल. एम. पवार

प्राचार्य
डॉ. अशोक भोसले

महाराष्ट्र राज्य उच्च व तंत्र शिक्षण विभाग व महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र यांच्या संयुक्त उपक्रम करिअर कट्टा महाविद्यालयात स्थापन करणे व या उपक्रमांतर्गत विद्यार्थ्यांच्या दैदिप्यमान कारकीर्दीसाठी एकत्रित प्रयत्न करून प्रतिभावान युवक घडविणे.या ध्येयाने प्रेरित विविध्स उपक्रमांचे नियोजन करण्यात येत आहे. हे सर्व उपक्रम महाविद्यालयामध्ये राबविण्यासाठी सामंजस्य करार करण्यात येत आहे. याकरिता महाराष्ट्र राज्य उच्च व तंत्र शिक्षण विभाग व महाराष्ट्र
माहिती तंत्रज्ञान सहाय्यता केंद्र आणि महाविद्यालय परस्परपूरक भूमिका येतील आणि त्यांचे व्यापक परिणाम साधून विद्यार्थ्यांच्या स्वयंप्रकाशी कारकिर्द घडविण्यासाठी योगदान देतील.

करिअर कट्टयाची जबाबदारी –

१. करिअर विषयक विविध दिशादर्शक मार्गदर्शन सत्रांचे नियोजन करणे.
२. स्पर्धा परिक्षांच्या तयारीसाठी सर्वसमावेशक अभ्यासक्रम तयार करून त्यासाठी विशेष त व्यक्तींच्या मार्गदर्शन कोर्सेसची निर्मिती करून त्याचे डिजीटल कंटेंट उपलब्ध करून देणे.
३. महाविद्यालयीन युवा कौशल्याधिष्ठत विकासित व्हावे . यासाठी विशेष अभ्यासक्रम तयार करणे व मार्गदर्शक साहित्या उपलब्ध करून देणे.
४. उद्योजकता विकास करून व्यवसाय निर्मिती साठी आवश्यक माहिती पुरविणे व व्यवसाय उद्योग सुरू करण्यासाठी सहाय करणे.
५. २१ व्या शतकासाठी अत्यावश्यक कौशल्य धारण करणारा परिपूर्ण युवक घडविण्यासाठी व्यक्तीमत्व विकास संबंधीत विशेष उपक्रमांचे आयोजन करणे.

महाविद्यालयाची जबाबदारी -

१. महाविद्यालयातील जास्तीत जास्त विद्यार्थ्यांची करिअर कट्टा उपक्रमात नोंदणी करून घेणे –
२. करियर कट्टा द्वारानिर्मित विविध कोर्ससेची विद्यार्थ्यांना प्रवेश घ्यावा यासाठी प्रेरणा शिबिर कार्यक्रम राबविणे.
३. करियर कट्टा ऑनलाईन कोर्ससेची अमंलबजावणी करण्यासाठी व्यवस्था आणि मनुष्यबळाचे नियोजन करून अभ्यासक्रम नियमितपणे राबविणे
४. करियर कट्टा विशेष अभ्यासक्रमानिमित्त पुरविल्या जाणारे अभ्यास साहित्य प्रवेशित विद्यार्थ्यांपर्यंत पोहचविणे .
५. करियर कट्टयाच्या उपक्रमांमध्ये विद्यार्थ्यांनी सहभागी होण्यासाठी महाविद्यालय परिसर समाजामाध्यमे आणि वर्गखोल्यामध्ये जागृतीविषयक पुढाकार घेणे –
६. नोंदणीकृत विद्यार्थ्यांच्या नियमित उपस्थितीबाबत वारंवार आढावा घेऊन उपस्थितीमध्ये सातत्य राहील यासाठी प्रयत्न करणे.
७. विद्यार्थ्यांना आवश्यक असणारे स्थानिक पातळीवरची साधनासामग्री उपलब्ध करून घेणे.

2/3

पुणे जिल्हा शिक्षण मंडळाचे
शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस ॲन्ड रिसर्च सेंटर
खराडी, ता.हवेली, जि.पुणे-411014. महाराष्ट्र, भारत.
मान्यताप्राप्त : अखिल भारतीय तंत्रशिक्षण परिषद व भारतीय औषधनिर्माणशास्त्र परिषद, नवी दिल्ली
महाराष्ट्र शासन व तंत्रशिक्षण संचलनालय, मुंबई (डि.टी.ई.कोड नं.6385)
संलग्न : सावित्रीबाई फुले पुणे विद्यापीठ, पुणे (आयडी नं. पीयु/पीएन/फार्मा/384/2009 कोड नं.1235)
फोन नं. : 020-27013835 ई-मेल : sucopsrc_2009@yahoo.co.in वेबसाईट : www.pdeasubpharm.edu.in

Date : / /20 Ref. No. : SUCOPK / /20 - 20

अध्यक्ष
अजित पवार

उपाध्यक्ष
राजेंद्र घाडगे

मानद सचिव
ॲड.संदीप कदम
अधिसभा सदस्य, सा.फु.पु.वि., पुणे.

खजिनदार
ॲड. मोहनराव देशमुख

उपसचिव
एल. एम. पवार

प्राचार्य
डॉ. अशोक भोसले

८.करियर कट्टाचे उपलब्ध राबविण्यासाठी विद्यार्थ्याचे स्वतंत्र मंडळ तयार करावे.

नियम व अटी :

१. विद्यार्थ्याच्या नोंदणीसाठी करिअर कट्टाच्या विशेष ॲपद्वारे (MITSC App from Google Play Store) प्रक्रीया पूर्ण करून तीन वर्षाच्या कालावधीसाठी एकवेळ शुल्क रू ३६५ भरणे आवश्यक आहे.

सदर शुल्कामध्ये विद्यार्थ्याने ५० कोर्सस, सर्व उपक्रमांसाठी तसेच स्पर्धा परिक्षासाठी मार्गदर्शन नि:शुल्क प्रवेश

२. महाविद्यालय अथवा महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र
विद्यार्थ्याकिडून परिक्षा शुल्क वगळता कोणत्याही प्रकारचे शुल्क आकारणार नाही.

३. सदर सामंजस्य कराराचा कालावधी ०५ वर्षासाठी असेल.

४. या कालावधीसाठी महाविद्यालयाद्वारे करिअर कट्टाचे प्रभारी प्राध्यापक सामान्यत: बदलू नये. काही अपरिहार्य कारणास्तव आवश्यकता भासल्यास प्रभारी प्राध्यापक नियुक्त करताना तशी अधिकृत महाविद्यालय अथवा महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र प्रथम प्राध्यानाने कळवावी.

५. करिअर कट्टयाच्या प्रत्येक उपक्रमांची माहिती महाविद्यालयाच्या संपूर्ण कर्मचा-यांना प्राप्त होईल या दृष्टीने समाजमाध्यमावरून प्रसारित करावी. महाविद्यालयाच्या पुढाकाराने कुठलाही उपक्रम राबवित असताना त्याविषयी महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्रास तसेच करीअर कट्टाचे जिल्हा तसेच तालूका समन्वयक , प्राचार्य प्रवर्तक यांना द्यावी.

६. या सामंजस्य करारा व्यक्तीरिक्त इतर महत्वपूर्ण उपक्रमांचे स्वतंत्र करार असल्यास त्या योजनेचा समावेश या करारात राहणार नाही.

न्यायालयीन कार्यक्षेत्र

सदर सामंजस्य करारांतर्गत उदभवलेल्या कोणत्याही कायदेशीर समस्येसाठी न्यायालयीन प्रक्रीयेसाठी कोल्हापूर जिल्हा न्यायालय हे कार्यक्षेत्र असेल.

दुरुस्ती व बदल

सदर सामंजस्य करारांतर्गत नियम व अटी व कार्यपध्दतीमध्ये काळानुरून विद्यार्थी हितासाठी काही बदल करावयाचे झाल्यास दोघांच्या संमतीने स्वतंत्र परिशिष्टाचा समावेश करून बदल करता येईल

पार्टी नंबर १
श्री यशवंत शितोळे नाव
अध्यक्ष
महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र

पार्टी नं २
डॉ.अशोक भोसले
प्राचार्य,
महाविद्यालयाचे नाव पुणे जिल्हा शिक्षण मंडळाचे, शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस ॲन्ड रिसर्च सेंटर ,खराडी, पुणे.

महाविद्यालय IQAC समन्वयक
नाव डॉ. रविंद्र पाटील
महाविद्यालय

महाविद्यालय करिअर कट्टा समन्वयक
नाव डॉ. रविंद्र पाटील
महाविद्यालय

3/3

Problem solving methodologies

- Seminar/Workshops on topics like Spectroscopy in Drug Analysis, Analytical QbD, Advancement in HPLC/HPTLC, Biodegradable Polymers for Controlled Drug Delivery etc.
- Through laboratory experiments and the use of applied-level questions, problem solving skills in students are addressed.
- Laboratory practical experiments like identification of organic compounds, preparation and characterization of organic compounds, determination of chemical kinetics, stability testing of Pharmaceutical dosage forms, standardization of Ayurvedic dosage forms etc.
- Assignments on different subject topics like interpretation of IR/NMR/Mass Spectra, mechanism involved in synthesis of drugs, quality control of herbals etc.
- UG, PG and Ph. D. students do research projects that increase their ability to recognize problems and find solutions.

C. Problem Solving Methodologies

1. Organizing Seminars with Complex Topics

Seminar on

"From materials and microbes to molecules: Interface between pharma, bio-imaging, bio-remediation, drug-delivery, and virology"

Date:- 11th May 2022



Dr. Pankaj Poddar, Senior Scientist (E-1), National Chemical Laboratory, Pune, Delivering Seminar.



Dr. Pankaj Poddar, Senior Scientist (E-1), National Chemical Laboratory, Pune, Delivering Seminar.

Dr. Pankaj Poddar, Senior Scientist (E-1), National Chemical Laboratory, Pune, delivered seminar on the topic “From materials and microbes to molecules: Interface between pharma, bio-imaging, bio-remediation, drug-delivery, and virology”.

He emphasized on process of drug discovery. Drug discovery and development involve screening hits, iterative medicinal chemistry, and optimization of hits to reduce potential drug side effects (increasing affinity and selectivity). Additionally, he mentioned that efficacy or potency, metabolic stability (half-life), and oral bioavailability are also improved during these steps of the drug development process. Seminar was very interactive & informative.

Mr. Sujit Kakade
Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences
& Research Centre, Kharadi, Pune- 411014.

Seminar on

"Referencing & Avoiding Plagiarism in Scientific Writing"

Date:- 11th May 2022





Dr. Vijaya Barge, Professor, P.D.E.A's SUCOPSRC, Kharadi, Pune, Delivering Seminar on "Referencing & Avoiding Plagiarism in Scientific Writing".

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Dr. Vijaya Barge, Professor, P.D.E. A's SUCOPSRC, Kharadi, Pune, delivered seminar on the topic "Referencing & Avoiding Plagiarism in Scientific Writing".

She stressed the significance of citing and the various reference systems and styles and by using numerous examples, she instructed the participants on several strategies to prevent plagiarism in research papers. Seminar was very interactive & informative.

Mr. Sujit Kakade
Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Seminar on

"Research: From conceiving ideas to communicating research articles"

Date:- 11th May 2022



Dr. Vidya Avasare, Professor & Head, Department of Chemistry, SP College, Pune, delivering seminar.



Felicitation of Dr. Vidya Avasare with the hands of Dr. Ashok Bhosale, Principal of College.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Dr. Vidya Avasare, Professor & Head, Department of Chemistry, SP College, Pune, she delivered seminar on the topic “Research: From conceiving ideas to communicating research articles”.

She explained in detail research process. She guided the participants that the research process identifies the research problem, sets the research design and sample size, collects and analyzes the data, and reports on the findings.

Seminar was very interactive & informative. Seminar was concluded with the vote of thanks by Mr. Sujit Kakade, H.O.D. Pharmaceutics.

Mr. Sujit Kakade
Coordinator

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Seminar on " Advancement in HPTLC"
(20th September 2018)



Dr. S. B. Wankhede, Principal, JSPM's Charak College of Pharmacy, Wagholi guiding students and faculty

Dr. Wankhede emphasised hyphenated HPTLC as one of the analytical advancements with a lot of potential for answering difficult questions. He mentioned use of hyphenated HPTLC to get quick information on the impact of specific substances separated in parallel in complex or natural samples. He also stated that chromatographic separation is paired with effect-directed detection using enzymatic or biological tests, which aids in identifying the key chemicals in a sample among the many that must be characterised further using high-resolution mass spectrometry. The benefits of its super-hyphenation, minimal sample preparation requirements, detection of multi-modulating chemicals or agonistic vs antagonistic effects, and miniaturised on-surface metabolization were all thoroughly discussed.

Dr. V. U. Barge
Coordinator &Vice-Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune- 411014.

Seminar on " Analytical Quality by Design"
(19th September 2018)



Dr. P. Ramlingam, Director, Research, Raghvendra Institute of Pharmnaceutical education & Research, Anantpur guiding students and faculty

During his speech, Dr. P. Ramlingam emphasised how Quality by design (QbD) is a scientific approach to product manufacturing that can improve performance, provide regulatory relief and versatility, and deliver significant business benefits throughout the product life cycle.

He also stated that the benefits of applying QbD principles to analytical methods include identifying and minimising sources of variability that may lead to poor method robustness, as well as ensuring that the method meets its intended performance requirements throughout the product and method lifecycle.

He discussed various analytical scientists' perspectives on the implementation of AQbD in the pharmaceutical quality system, as well as how it relates to product quality by design and pharmaceutical analytical technology (PAT).

Dr. V. U. Barge
Coordinator &Vice-Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune- 411014.

Seminar on "Spectroscopy in Drug Analysis"
(19th September 2018)



Dr. P. D. Lokhande, Professor in Organic Chemistry, Savitribai Phule Pune University, Pune guiding students and faculty

Dr. P. D. Lokhande discussed how spectroscopic analysis has been critical in pharmaceutical development for examining drug identity and purity, drug crystalline structures, interactions between active ingredients and excipients, antibiotic patents, and many other topics during his speech.

He emphasised the importance of NMR spectroscopy in drug discovery and development because it can shed light on the molecular structure of biomolecules, elucidate and verify drug structure, and provide structural information on biomolecule-target interaction.

Dr. V. U. Barge
Coordinator &Vice-Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune- 411014.

Seminar on "Biodegradable Poymers for Controlled Drug Delivery"
(19th September 2018)



Dr. Bhaskar Idage, Research Scientist, National Chemical laboratories, Pune guiding students and faculty

Dr. Bhaskar Idage talked about how biodegradable polymers are widely used in nanobiotechnology applications like drug delivery, diagnostics, and other clinical and biomedical research areas like cardiovascular disease, diabetes, osteogenesis and cancer.

He also stated that polymeric nanoparticles have recently revolutionised the field of nanobiotechnology by opening up new avenues for medical science and disease treatment.

He provided up-to-date information on various biodegradable polymers, methods for preparing biodegradable polymeric nanoparticles, and their use in therapeutic and diagnostic strategies for a variety of diseases. The seminar was beneficial to research students and scientists interested in the development and application of biodegradable polymeric nanoparticles as potential therapeutic delivery systems.

Dr. V. U. Barge
Coordinator &Vice-Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune- 411014.

Seminar on "Quality Testing and Quality Control"
(19th September 2018)



Dr. Uday Deshmukh, Senior Manager, Quality Control, Cipla Ltd., MIDC Kurkumbh guiding students and faculty

Dr. Uday Deshmukh, Senior Manager, Quality Control, Cipla Ltd., MIDC, Kurkumbh, elaborated on the topic "Quality Control and Quality Assurance in Pharmaceutical Industry" with a particular focus on the quality, efficacy, and safety attributes of products that must be ensured so that consumer health is not compromised.

He discussed Quality control testing, Quality control laboratory, Quality control department, Work flow of quality control lab, and Documentation right from the start of the pharmaceutical industry overview. All queries of the students were addressed by him.

Dr. V. U. Barge
Coordinator &Vice-Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune- 411014.

Seminar on "Trouble shooting in HPLC**"**
(20th September 2018)



Mr. Rajendra Bande, Director, D. M. Scientific Services, Mumbai guiding students and faculty

Mr. Rajendra Bande mentioned that there are many areas in a HPLC instrument that give rise to system and Chromatographic problems.

He discussed troubleshooting issues as well as detailed remedies for pressure, leaks, baseline irregularities, chromatogram problems, injection problems, and other problems detected by smell, sight, and sound. He also discussed other major issues and preventive measures.

Dr. V. U. Barge
Coordinator &Vice-Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

C. Problem Solving Methodologies

2. Question Bank for Day to Day Interaction with students during Practical Classes

Question Bank

Course: Pharmaceutics-I (PATTERN 2019)
Course code: BP109P
Class: F. Y. B. Pharm
Semester: I

1. Define drug. Give different sources of drug.
2. What is rationale for development of dosage form?
3. Define dosage forms and give its classification with examples.
4. Discuss advantages and disadvantages of different dosage forms
5. Define prescription. Explain different parts of prescription.
6. Explain handling of prescription.
7. Discuss different errors in prescription.
8. Write a note on:
   i) Compounded and non-compounded prescriptions
   ii) Medicated errors
9. Define Posology. Explain different factors affecting posology.
10. How pediatric dose is calculated on the basis of age, body weight and body surface area.
11. Write a note on: (i) Young's rule (ii) Fried's rule (iii) Clarks rule
12. Classify systems of measurements.
13. Discuss various ways to express solution strengths.
14. Discuss alligation method with suitable example.
15. What is proof spirit?
16. Calculate proof strength of 75 % v/v and 25 % v/v alcohol.
17. what are isotonis solutions? Diferentiate between hypotonic and hypertonic.
18. Discuss freezing point method to calculate amount of isotonicty adiusting substance.
19. Enlist methods of isotonicity adjustments.
20. Discuss molecular weight method to calculate amount of isotonicity adiusting

substance.

21. Write a note on:

    (i) Alligation method.

    (ii) Proof spirit.

(iii) Isotonic solutions.

22. Define and classify powders. Give advantages and disadvantages of powder dosa, form.

23. Define and give example of simple and compound powder.

24. Give preparation of dusting powders and effervescent powder.

25. Explain methods of preparation of powder.

26. Explain problems encountered in powder formulation.

27. Write a note on

    i) Hygroscopic powders

    ii) Eutectic mixtures

    iii) Geometric dilutions

28. Give advantages and advantages liquid dosage form.

29. Explain vehicles and solubilizers used in liquid dosage form.

30. Why pH modifier and buffering agents are used in liquid dosage form?

31. Explain different excipients used in liquid dosage form.

32. Define Monophasic liquid dosage form. Give its classification.

33. Define gargles. Give formulation of gargles.

34. Give formulation of mouthwashes.

35. Define and give advantages and disadvantages of nasal drops and eardrops.

36. Define and give classification of syrup. Explain method of preparation of syrup.

37. What is the difference betveen liniment and lotion?

38. Write a note on:

    i) Enema ii) Invert syrup iii) Elixir

39. What are disperse systems?

40. What are various tvpes of disperse systems?

41. What are colloidal and coarse dispersions?

42. What are Suspension? and give classification of suspension.

43. What are advantages/disadvantages of suspensions?

44. Give difference between flocculated and deflocculated suspensions.



2/4

45. Explain different components used for preparation of suspension.

46. Give methods of preparation of suspension.

47. What are various stability problems of suspensions?

48. How suspensions are stabilized?

49. Write a note on stability of suspension.

50. Differentiate between flocculated and deflocculated suspension.

51. Define and classify emulsion.

52. What is emulsifying agents?

53. Give mechanism of emulsifying agents.

54. Give theories of emulsification.

55. Explain different identification tests for emulsion.

56. Explain different methods of preparation of emulsion.

57. Elaborate different stability problems in emulsion.

58. How emulsion stability is assessed? Explain different remedies for instability of emulsion

59. Write a note on:

    i) Multiple emulsion

    ii) Nano-emulsion

    iii)Emulsifying agents

60.Define suppository. Give advantages and disadvantages of suppository.

61. Explain different types of suppositories.

62. Which are different actors affecting absorption of drug from suppository?

63.What are suppository bases? Give ideal properties of suppository base.

64. Explain different types of suppository base.

65. Define displacement value, Why and how it is calculated?

66. Explain different methods for preparation of suppository.

67. Explain evaluation/quality control tests of suppository.

68. Write a note on:

    i) Calibration of suppository mould

    ii) Cocoa butter as a suppository base

    iii) Recent development in suppository

    iv) Packaging of suppositories

Pune District Education Association's
Annasaheb Dange College of Pharmaceutical Sciences & Research Centre

69. What is incompatibility? What are various reasons of incompatibilities?

70. Explain physical incompatibility with suitable examples.

71. List various remedies to avoid physical incompatibility.

72. Explain chemical incompatibility with suitable examples.

73. List various remedies to avoid chemical incompatibility.

74. Discuss reasons for therapeutic incompatibility.

75. Write a short note on:

i) Therapeutic incompatibility. ii) Overdosing and under dosing.

76. Define semisolid dosage form. Give its advantages and disadvantages.

77. Classify and define various semisolid dosage forms.

78. Discuss mechanisms of dermal penetration of drug.

79. Discuss factors affecting dermal penetration of drug.

80. Classify various excipients used in semisolid dosage form.

81. Define and classify various types of ointments.

82. Classify and discuss various ointment bases.

83. Give advantages and disadvantages of ointment.

84. Comment on advantages and disadvantages of water soluble bases.

85. Comment on mechanism of penetration enhancers.

86. Discuss various methods of ointment preparation.

87. What are pastes? Give its silent features. Comment on preparation of paste.

88. Comment on preparation of paste.

89. What are creams. Classify them with suitable examples.

90. What are gels? What is principle behind gel formation?

91. Classify gels and enlist components used in preparation of gels.

92. Explain formulation of throat paint.

93. Discuss in detail various tests used to evaluate semisolid dosage forms.

94. Write a short note on:

i) Fusion method ii) Trituration method iii) Aqueous and oily creams

iv) Pastes v) Creams vi) Gels

Dr. Sujit Kakade
Subject Teacher

Question Bank

Course: Pharmaceutical Inorganic Chemistry (PATTERN 2019)
Class: F. Y. B. Pharm
Semester: I

1. Give principle involved in limit test arsenic.
2. What are acidifiers.
3. Enlist sources of impurities in pharmaceutical substances.
4. Give classification of Antacids.
5. Give any four pharmaceutical applications of inorganic chemistry.
6. Define- 1. Protectives 2. Adsorbent
7. Draw neat labelled diagram of Arsenic apparatus.
8. Explain in detail sources and types of impurities.
9. Define antacid, classify and give ideal properties antacids. Give monograph of Aluminum hydroxide gel.
10. Give different types of water. Give Q.C. test for any type of water.
11. Explain Cathartics. Give monograph of Magnesium sulphate.
12. Why water is called as Universal Solvent.
13. What are emetics.
14. Explain Astringents in detail. Give monograph of Copper sulphate.
15. Explain in functions and role of major extra and intra cellular electrolytes.
16. Define antidote and classify them with the suitable examples. Give monograph of sodium thiosulphate.
17. Give different sources of impurities in pharmaceuticals. Explain Limit test for Arsenic and Chlorides in detail.

18. Describe in detail Anticaries agents. Explain the role of Fluoride as anticaries agent along with monograph of Sodium Fluoride.
19. Give contents of Monograph. List different volume of Indian Pharmacopoeia.
20. Define acidifying agents. Explain classification along with examples.
21. Discuss ORS.

Dr. Amit Kasabe
Subject Teacher

Use of Question Bank for daily interaction with students during practical classes

Class: S. Y. B. Pharm, Sem IV

Subject: Pharmacognosy and Phytochemistry I, (2019P)

Subject code: BP405T

1. Define Pharmacognosy?
2. Define crude drugs with example?
3. What are the types of crude drugs?
4. Name the natural sources of crude drugs with examples?
5. Explain quantitative microscopic method in evaluation of crude drugs?
6. List the various sources of crude drugs with examples?
7. Differentiate organized and unorganised crude drugs?
8. Define Chemotaxonomy. Classify with examples?
9. Define adulteration. Explain the four methods of adulteration of crude drugs?
10. Explain organoleptic evaluation of crude drugs with examples.
11. Enumerate physical method in evaluation of crude drugs.
12. Define stomata with example
13. Define ash value with example
14. Write the determination and significance of Extractive values.
15. Define stomatal number
16. Define and classify unorganised drugs.
17. Define stomatal index
18. Write the determination and significance of Ash value.
19. Explain the different methods to determine the moisture content of crude drugs.
20. Define foaming index
21. Define extractive value
22. Explain the determination of swelling and foaming index of crude drugs.
23. Give the B.S, Chemical nature and uses of Cotton and Jute.

18. Write the B.S, Chemical nature and uses of Jute and Hemp.
19. What are the types of stomata
20. Define vein islet number
21. Write the short note on Natural allergens.
22. Hallucinogens and teratogens.
23. Give the Biological source, Chemistry and method of preparation of Agar.
24. Define Lipids.
25. Give the Biological source, Chemistry and method of preparation of Beeswax.
26. Write principle of moister content determination
27. Write the preparation, storage and therapeutic uses of Castor oil.
28. Write principle of ash value determination
29. Write principle of acid insoluble ash value determination
30. Give the chemical tests for Gelatin and Tragacanth.
31. Give the Biological source, Chemistry and method of preparation of Papain.
32. Write principle of extractive value determination
33. Give the Biological source, Chemistry and method of preparation of Bromelain
34. Write principle of starch grain determination
35. Give the Biological source, Chemistry and method of preparation of streptokinase.
36. Give the Biological source, Chemistry and method of preparation of seratiopeptidase.
37. Quantitative analysis of fixed oils.
38. List out the various types of plant constituents.
39. Give the general tests for the identification of carbohydrates.
40. Give the chemical tests for the identification of proteins
41. Give the chemical tests for the identification of tannins.
42. Define primary metabolites with examples.
43. Define secondary metabolites with examples.
44. Enumerate the cell wall constituents.

45. List out different living cell inclusions.
46. Explain with examples non-living cell inclusions.
47. Write the chemical test for starch and mucilage.
48. Give the chemical tests for plant fibres.
49. What is extraction of crude drugs
50. Differentiate between organized and un-organized drugs with suitable examples.

Prof. Vipul Dhasade
(Assistant Professor in Pharmacognosy)
Name and sign subject teacher

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and
Research Centre, Kharadi

Question Bank

Subject Pharmacognosy and Phytochemistry –II (BP 504T) (2019 Pattern)

Class T.Y.B.Pharm. (Sem.V)

1. The term crude drug applies to drugs obtained from a) Animal origin b) Mineral c) Plant origin d) All of the above

2. Who is regarded as first Pharmacist a) Hippocrates b) Galen c) Sertuerner d) Aristotle

3. Who is credited for isolation of Morphine from Opium a) Derosene b) Sertuerner c) Pelletier d) Stass and Otto

4. Stass and Otto are known for the development for extraction process of a) Glycosides b) Alkaloids c) Tannins d) Flavonoids

5. The term Materia Medica is used for a) Pharmacology b) Pharmacognosy c) Pharmacy d) Pharmaceutics

6. The term Pharmacognosy was coined in 1815 by a) Sertuerner b) Stass & Otto c) C.A. Sydler d) Dhanvantri

7. Which inhabitants are related to making of clay models of human body a) Voodoo tribes b) Babylonians c) Both d) None

8.Which of the following herbal is in the tomb of mummy in University of Leipzig Dr. Nisha Sharma, Qu

estion bank Unit I Page 2 a) Pen-t-sao b) Papyrus Ebers c) De material medica d) Charak samhita

9.The types of stomata with 2 guard cells covered with 3 subsidiary cells with 1 extremely smaller than other 2 is : a) Diacytic b) Anisocytic c) Anomocytic d) Paracytic

10. Covering trichomes are also known as a) Glandular b) Non glandular c) Hydathodes d) None

11. Which one the following is an example of unorganized crude drug? a) Aloe b) Cinchona c) Fennel d) Tobacco

12. The uneven projecting points at fractured surface of barks is described as a) Granular b) Laminated c) Splintery d) Fibrous

13. Organized crude drug means a) Acellular b) Cellular c) Both d) None

14. Which one of the following is an example of bulk laxative: a) Gentian b) Isapgula c) Licorice d) Senna

15. Which on eof the following can be used as anti tussive? a) Ephedra b) Opium c) Tea d) All of the above

16. Cell theory was given in 1838 by a) Stass and Otto b) Mendel c) Schleiden and Schwann d) None

17. Presence of large vacuole and cell wall is a characteristic feature of a) Animal Cell b) Plant cell c) Bacteria d) All of the above

18. Example of flat shaped bark is a) Cinnamon b) cassia c) Arjuna d) Chinchona

19. Which one is man made shape for bark? a) Flats b) curved c) Quilled d) Compound quills

20. If the exposed surface of the fractured bark exhibits small rounded appearance, it is a) Short fracture b) Granular Fracture c) Splintery Fracture d) Fibrous Fracture

21. Which one of the following is produced as pathological product is growing under unfavourable conditions or is injured? a) Mucilages b) Gums c) Tannins d) a & b

22. Following are known as balsams a) Balsam of peru b) Balsam of Tolu c) Canada balsam d) Both a & b

23. Adulteration due to impairment in the equality of the drug is known as a) Spoliage b) Substitution c) Sophistication d) Deterioration

24. Disc shape is a feature of a) Liquorice b) Nux vomica c) Clove d) Nutmeg

25. Stomata present in the lower surface of epidermis only in a) Senna b) Belladona c) Coca d) Datura

26. Which of following stomata is of diagnostic significance? a) Gramineous b) Gymnospermous c) Dicotyledonous d) Moss type E All of the above

27. When the guard cells are covered by two subsidiary cells, and subsidiary cells are arranged at right angle to that of stoma is a) Rubiacious b) Caryophyllaceous c) Cruciferous d) Ranunculaceous

28. When Stoma is surrounded by varying number of subsidiary cells resembling other epidermal cells it is a) Paracytic b) Anomocytic c) Anisocytic d) Diacytic

29. Example of drug with Anisocytic stomata is a) Digitalis b) Datura c) Vasaka d) Mentha

30. Following fruit contains trichomes a) Nux vomica b) Ladies finger c) Senna d) Digitalis

31. Which one are also called the clothing trichomes? a) Glandular b) Non globular c) Covering d) Both b & c

32. Example of drug with lignified trichomes is a) Tea b) Lobelia c) Nux vomica d) Cannabis

33. Sandy crystals of calcium oxalate are also known as a) Conglomerate b) Rosette c) Acicular d) Microsphenoidal

34. Generally Lycopodium spores are uniform in size with a) 250µ b) 25µ c) 50µ Dr. Nisha

35. To determine the moisture content of crude drug, the temperature used usually is a) 121°C b) 105°C c) 500°C d) None

36. Physiological ash is derived from a) Sand b) Soil c) Plant tissues d) None

37. The part of total ash that is insoluble in dilute HCl is known as a) Acid soluble ash b) Acid insoluble ash c) Water soluble ash d) Ether soluble ash

38. 1 mg powder of Lycopodium contains as per established records a) 95000 spores b) 96000 spores c) 90000 spores d) 94000 spores

39. Water soluble extractive of Aloe should not be less than a) 10% b) 5% c) 2% d) 25%

40. Alcohol soluble extractive is used as an official method for the assay of a) Senna b) Myrrh c) Asafoetida d) Both b & c

41. Discuss different types of ash values and extractive values.

42. Define adulteration. What are different types of adulterants

.43. A powdered drug can be evaluated quantitatively by Lycopodium spore method. Describe.

44. Classify the crude drugs on the basis of their morphology,

45. Write the history of Pharmacognosy. 46. Classify unorganized drugs.

47. Name various types of stomata.

48. Classify glandular trichomes

49. Classify the different calcium oxalate crystals found in Plants with diagrams.

50. Define: Biological evaluation, Palisade ration, Vein islet number, stomatal index, vein termination number

Dr R Y Patil

Subject Incharge

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Question Bank

Subject- Herbal Drug Technology (BP603T) (Pattern 2019)

Class –III B.Pharm.(Sem VI)

1)What is biodynamic Farming

2) What is meant by organic farming

3) Give different alternative systems of medicine

3) Name saptadhatu

4) Name Panchmahabuta

5) Name tridosha

6) Give the principal of Homeopathy

7) What is mean by Excipients

8) What are nutraceuticals

9) Name natural Binders

10)Name natural Sweeteners

11) what is herbal Drugs

12) What is processing of Drugs

13) What are different Ayurvedic formulations

14) Name ayurvedic formulations which generates alcohol

15) What is evaluation of Formulations

16 name the different parameters of evaluation of basm

17) Evaluation of Asava

18) What is herbal drug interaction

19) Name nutraceuticals used for anticancer

16)What is mean by aunthication of crude drugs

17) Different parameters for evaluation of Turmeric cream

18)) Different parameters for evaluation of herbal Tablets

19) Name natural Binders

20) Role of Aloe in Herbal cosmetics

21) Name the different sources of Herbal raw material

22) Classify natural Excipients

23) Define patents

24) Define Bioprospecting.

25) What is mean by CITES

26) What is mean by TRAFFIC

27) Role of DGFT

28) What is breeders right

29)1echniques for Isolation of phytoconstituents

30) What is Schedule T

31) What is DTAB

32) What is Schedule Z under Drugs and cosmetics act.

33) Define natural colorants

34) Role of Wax in Herbal Cosmetics

35) Importance of Documentation in Import and export of crude drugs /formulation.

Dr R.Y Patil

Subject Incharge

Pune District Education Association SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE 2009

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune- 411014.

Class: Third Year B. Pharm (Sem-V 2019 P)

Subject: Industrial Pharmacy-I

Academic Year: 2022-23

Question Bank

Chapter -1

1. What is preformulation? Write about its goals and objectives.

2. Enlist various physical properties to be tested in preformulation of solid dosage forms.

3. Enlist various chemical properties to be tested in preformulation of solid dosage forms.

4. Discuss physical forms of a drug and excipients to be formulated into dosage form. How physical form of solids is tested?

5. Explain particle size and size distribution studies in preformulation testing.

6 What is significance of particle shape and surface area in formulation development? Explain with example how these properties affect performance of drug and excipients in dosage form.

7. Enlist and explain various flow properties and their significance in preformulation testing.

8. What is compressibility index and Hausner ratio? Discuss their roles in achieving product uniformity.

9. How solubility profiling is important in preformulation studies? What is effect of pH, pka and common ion effect and partition coefficient on product bioavailability?

10 What is polymorphism? Discuss with examples its importance in preformulation testing.

11. Explain effect of hydrolysis on stability of formulation components.

12. What is oxidation? With suitable example discuss oxidative degradation and its significance in product stability.

13. How hydrolysis and oxidation could be prevented to produce stable dosage form?

14. What is importance of studying reduction in components of a formulation? How it can be avoided?

15. What is racemization and polymerization? What is its significance in preformulation testing?

16. What is BCS classification? Discuss it's objectives. What is its significance in preformulation testing?

Pune District Education Association
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTER
2009
KHARADI PUNE 411 014

17. Discuss with examples applications of preformulation testing.
18. Discuss preformulation testing in liquid dosage forms.
19. Write about preformulation testing of parenteral dosage forms.
20. Elaborate upon impact of preformulation studies on stability of dosage form.
21. How solid state and liquid state stability testing is performed under preformulation testing?
22. What is drug-excipient interaction? What is its significance in preformulation testing?
23. Discuss analytical methods used to investigate drug-excipient interactions.

Chapter -2

1. What is tablet? Classify them with examples of each.
2. What are advantages and disadvantages of tablets over other dosage forms?
3. Give ideal characteristics of tablet dosage forms.
4. Define following terms:

a) Compressed tablet
b) Chewable
c) Dispensing tablet
d) Immediate release tablet
e) Sugar coated tablet
f) Buccal tablet
g) Gelatin coated tablet
h) Sustain release tablet
i) Film coated tablet
j) Layered tablet
k) Multicompressed tablet
l) Controlled release tablet
m) Effervescent tablet
n) Tablet triturate
o) Lozenge
p) Rapid-release tablets
q) Enteric coated tablet
r) Inlay tablet
s) Hypodermic tablet

2/14

t) Extended- release tablets

5. Describe various excipients used in manufacturing of compressed tablets.

6. Write short note on formulation of a tablet.

7. What is granulation? Write its objectives, advantages and limitations.

8. Discuss various methods of granulation.

9. Discuss in detail dry granulation.

10. Discuss in detail wet granulation.

11. Discuss in detail direct compression method of granulation.

12. What are advantages and limitations of dry granulation?

13. Discuss mechanisms involved in dry and wet granulation.

14. What are advantages and limitations of wet granulation?

15 Discuss stages of multistation tablet compression process.

16 Discuss problems encountered in tableting. Give reasons and causes and suggest remedies for the same.

17. Discuss various machines used to compress tablets.

18. Discuss working principle, construction and operation of single press tablet machine.

19. Discuss in detail working principle, construction and operation of multi-station press tablet manufacturing machine.

20. Discuss various tools of tablet compression machine.

21. Write about meanings of various tablets tooling terms.

22. What is tablet coating? Give its objectives.

23. Discuss various types of tablet coatings.

24. Elaborate on formulation of tablet coating compositions.

25. Discuss various excipients used in tablet coating compositions. 26. Write note on solvent system for making coating compositions.

27. Enlist and elaborate on various equipments employed in tablet coating.

28. Write in detail about tablet coating process.

29. Elaborate upon quality of a tablet for coating applications.

30 Discuss various defects in tablet coating along with reason, causes and remedies for the same.

31 Write notes on:

(a) Sugar coating

(b) Film coating

3/14

(c) Enteric coating

(d) Gelatin coating

(e) Compression coating

32 Discuss various parameters used to increase efficiency of tablet coating machine.

33. Discuss IPQC testing of a tablet formulation.

34. Elaborate upon various FPQC tests for evaluation of tablets.

35. Write note on packaging of a tablet dosage form.

36. Discuss stability testing of tablet dosage forms

Chapter-3

1. What are liquid oral preparations? Classify them with giving suitable examples.

2. What are advantages and disadvantages of liquid oral preparations? 3 Write about general formulation considerations of liquid orals.

4 Enlist general excipients with examples used in liquid oral formulations.

5. Discuss solubility of active ingredients in formulating them as liquid oral preparations.

6. Write about properties of active ingredient in formulating them as liquid oral preparations.

7. What are solvents and co-solvents? Give their significance in formulating liquid oral products.

8 Discuss aqueous vehicles used in liquid oral products.

9 Write about formulation considerations of syrups.

10. Write about formulation considerations of elixirs.

11. Write about formulation considerations of suspensions.

12 Write about formulation considerations of emulsions.

13. What is significance of liquid filling equipments in the production of liquid orals?

14. Give general considerations to selecting fillers for liquid products. 15. Discuss various types of fillers used in liquid oral products.

16. Discuss techniques of filling liquid oral preparations.

17. What is significance of packaging of liquid oral products?

18. Describe packaging for syrups.

19. Describe packaging for elixirs

20. Describe packaging for suspensions.

21. Describe packaging for emulsions.

22. What is importance of evaluating of liquid oral products?

4/14

Pune District Education Association's SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTER KHARADI, PUNE 411 014 2009

23. Discuss evaluation of liquid orals as per various Pharmacopoeia.

24. Describe various unofficial tests used for liquid oral products.

25. Comment on universal tests used for liquid oral products.

26. Short note on:

(a) Uniformity of weight test for liquid orals

(b) Uniformity of content test for liquid orals

(c) Uniformity of dose test for liquid orals

(d) Mass variation test for liquid orals

(e) Uniformity of volume test for liquid orals

27. What are microbiological tests and antimicrobial effectiveness test for liquid orals?

28. Discuss tests for determining sedimentation volume, degree of flocculation and redispersibility of pharmaceutical suspensions.

29. What are objectives of determining zeta potential and theological behaviour of emulsions and suspensions?

Chapter-4

1. What are capsules? Classify them.

2. Differentiate between soft and hard gelatin capsules.

3. What are advantages and disadvantages of capsules?

4. What are hard gelatin capsules? Discuss in detail production of hard gelatin capsule shell.

5. What are primary ingredients used in hard gelatin capsules?

6 Enlist various steps in hard gelatin capsule production.

7. Write about size and shapes of hard gelatin capsules.

8. Write about methods of manual filling of hard gelatin capsules.

9. Enlist various machine filling methods used for hard gelatin capsules.

10. What is plate method?

11. Discuss principle and operation of Auger filing method used in filling materials in hard gelatin capsule.

12. Discuss Dosator feed method.

13. Write short note on dosing disc and tamping finger method.

14. Discuss in detail process of filling hard gelatin capsule.

15. Elaborate on bench scale capsule filling machine for hard gelatin capsule.

5/14

16. Discuss any semi-automatic hard gelatin capsule filling machine. 17. Discuss fully automatic hard gelatin capsule filling machine.

18. What is finishing in filling of hard gelatin capsule?

19. Write in detail about storage of hard gelatin capsules.

20. Discuss special filling techniques used in hard gelatin capsules.

21. Enlist various manufacturing defects in hard gelatin capsule? Discuss in detail probable reasons for these defects.

22. How defects in hard gelatin capsules can be avoided?

23. Enlist and explain IPQC tests for hard gelatin capsules.

24. Discuss FPQC tests used for hard gelatin capsules.

25. What are soft gelatin capsules? Write about nature of shell and capsule contents.

26. What are advantages and disadvantages of soft gelatin capsules?

27. What are ideal characteristics of soft gelatin capsules?

28. Write about size and shapes of soft gelatin capsules.

29. Enlist various methods of filling of soft gelatin capsules.

30. What is importance of base adsorption and minim/gram

capsules?

31. Discuss in detail production of soft gelatin capsules.

32. Discuss superiority of starch capsules over soft gel capsules.

33. Enlist various methods of producing soft gelatin capsules. Explain them in detail.

34. Short note on:

(a) Plate process in soft gelatin capsule.

(b) Rotary die process

(c) Reciprocating die method

(d) Accogel process

(e) Seamless gelatin capsule

(f) Finishing of soft gelatin capsule

35. Discuss in detail components used to manufacture soft gelatin capsules.

36 Enlist and explain IPQC tests for soft gelatin capsules.

37. Discuss FPQC tests used for soft gelatin capsules.

38 Elaborate on packing of soft gelatin capsules.

39. Short note on storage of soft gelatin capsules. 40 Comment on stability testing of soft gelatin capsules

6/14

41. Discuss applications of hard gelatin capsules

42. Discuss applications of soft gelatin capsules.

43 Give some examples of marketed products of hard gelatin capsules with their names, generic names, APIs and therapeutic categories.

44. Give some examples of marketed products of soft gelatin capsules with their brand names generic names, APIs and therapeutic categories.

Chapter-5

1 What are pellets? Write about historical background of pellet development.

2 Discuss in detail formulation requirements of pellets.

3 Write short note on:

(a) Binders used in pellets

(b) Plasticizers used in pellets

(c) Drug release modifiers used in pellets

4 What is pelletization? Classify pelletization techniques.

5 Discuss drug layering technique used to manufacture pellets.

6. Elaborate upon pelletization technique that produces pellets with high drug loading

7. Short note on

(a) Cryopeiletization

(b) Hot-melt extrusion

(c) Freeze pelletization

8. Discuss spray-drying and spray-congealing methods of pelletization.

9. Enlist and explain various factors that affect pelletization.

10. Discuss equipments used for manufacture of pellets.

11. Discuss principle and operation of screw type pellet extruder.

12. Discuss various types of extruders based upon gravity.

13. Short note on ram extruder.

14. Write advantages, disadvantages and applications of extruders. 15. Write note on

(a) Rota granulator

(b) Spray dryer

(c) Spheronizer

(d) Fluid-bed granulator

7/14

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTER
2009

Chapter-6

1 Define parenteral product? With examples, give its types.

2. Classify parenterals based on various parameters.

3. Give ideal requisites of parenteral products.

4. Enlist and explain various routes of parenteral drug delivery.

5. What are advantages and limitations of parenteral products?

6. Discuss in detail preformulation parameters of parenteral formulations.

7. What are essential requirements of parenteral products?

8. Write about vehicles used in SVP and LVP.

9. Discuss antimicrobials in SVP. 10. Why antimicrobials are not added in SVP?

11. Discuss concepts of hypotonicity and hypertonicity. What is role of buffers parenteral products?

12. Discuss in detail importance of isotonicity.

13. How isotonicity value is calculated? Explain any one of its methods.

14. Discuss in detail production procedures employed in parenteral prod manufacturing

15. Discuss in detail various facilities and controls used in parentral prod manufacturing.

16. Draw schematic of aseptic area. Give classification of clean area.

17. Explain processing of sterile products

18. Discuss various zones specified for environmental control in manufacturing ares parenterals.

19. Comment of facilities and procedures followed in change room of parenters production.

20. Discuss in detail about aseptic processing of parenteral formulations.

21. Elaborate upon formulation of injections. 22. Discuss formulation of sterile powders.

23. Elaborate upon large volume parenterals.

24. Discuss formulation of lyophilized parenteral products.

25. Discuss various types of containers and closures used in packaging of parenters formulations.

26. Discuss quality control testing of plastic containers.

27. Discuss quality control testing of glass containers.

28. What is dye bath test? What is its objective? How it is performed?

29. Discuss filling and sealing of ampoules, vials and infusion fluids.

30. Enlist various in-process quality control tests for parenteral formulations.

31. Enlist various quality control tests for finished parenteral products.

32. Comment on sterility testing of parenteral products.

33. What are pyrogens? Discuss tests used to detect the presence of pyrogen in sterie parenteral products.

34. Discuss quality control testing of WFL.

35. Write notes on:

(a) Clarity test for parenteral products

(b) Leaker test for parenteral products

(c) Content uniformity and weight

(d) Extractable volume test

(e) Stability testing of parenteral products

Chapter-7

1. What are ophthalmic products? Classify them going suitable example from each category.

2. Classify ophthalmic products based upon therapeutic category.

3. What are ideal requirements of ophthalmic formulations?

4. Discuss general formulation considerations for ophthalmic products.

5. Explain formulation considerations for ophthalmic drops.

6. Discuss formulation considerations for ophthalmic ointments.

7. Describe formulation of ophthalmic solution giving formulation design and method of Preparation.

8. Describe formulation of ophthalmic emulsion giving formulation design and method of preparation.

9. Describe formulation of ophthalmic ointment giving formulation design and metho of preparation.

10. Describe formulation of ophthalmic lotion giving formulation design and method preparation.

11. Elaborate upon sterility testing of ocular products.

12. Discuss isotonicity adjustment of ophthalmic preparations.

13. Explain significance of preservation of ophthalmic products.

14. Explain various preservatives used in ocular products.

15. Short note on eye lotions.

16. Discuss pharmacopoeial evaluation of ophthalmic products.

17. Enlist tests used to investigate quality of ophthalmic products.

18. Write short note on sterility testing of ophthalmic products.

9/14

Pune District Chemists Association
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTER
PHARMACIST FOR COMMUNITY HEALTH
Rx
2009
KHADKI, PUNE 411 014

19. How drop size of ophthalmic liquids is determined?
20. How water loss from the formulation is calculated?
21. Discuss drug release studies performed on ophthalmic suspensions and ointments.
22. Discuss stability testing of ophthalmic products.
23. Write short note on freeze thaw testing of ophthalmic products.
24. What is Draize test? Describe procedure and guidelines followed in resting ophthalmic products for eye irritation.
25. How transcomeal permeation study is performed on ophthalmic products? What are its objectives?
26. Differentiate between eye drops and eye lotions.
27. Describe various containers used for ophthalmic products.
28. Discuss ideal requirement for eye drops.
29. Elaborate on labelling of ophthalmic products.
30. How eye products are stored and transported.

Chapter-8

1. What are cosmetics? Classify them.
2. Write about ideal characteristics of cosmetic products.
3. What are harmful effects of cosmetics?
4. Define lipstick. Why lipsticks are used? What are its side effects?
5. Discuss various excipients used in lipstick formulation. 6. Discuss formulation of lipstick.
7. Discuss stepwise method of manufacturing and packaging of lipsticks.
8. Write about quality control testing of lipsticks.
9. What are shampoos? Classify them and give its ideal requirements.
10. Discuss various excipients used in shampoo formulation.
11. Discuss formulation of shampoo along with quantities and functions of ingredients used.
12. Discuss stepwise method of manufacturing and packaging of shampoos.
13. Write on evaluation of shampoos for quality control.
14. What are ideal requirements of creams?
15. What is cold cream? Write about its uses?
16. What are types of cold creams?
17. What are functions of cold creams?
18. Discuss development of cold creams.

16/14

19. Comment on ingredients used in cold cream.

20. Discuss formulation of cold cream along with quantities and functions of ingredients used.

21. What is vanishing cream? Write about its uses?

22. What are functions of vanishing creams?

23. What are types of vanishing creams?

24. Discuss development of vanishing creams.

25. Comment on ingredients used in vanishing cream.

26. Discuss formulation of vanishing cream along with quantities and functions of ingredients used.

27. Compare cold cream and vanishing cream.

28. Discuss various quality control tests used for evaluation of creams.

29. Define and classify toothpastes.

30. How toothpastes are applied?

31. Discuss various active ingredients along with their functions used in toothpastes.

32. Discuss various formulation excipients used in toothpastes.

33. Discuss fluorides as important component in toothpastes. Write about its regulatory requirements.

34. Discuss various quality control tests used for evaluation of toothpastes.

35. Elaborate upon ideal requirements of toothpastes.

36. What are hair dyes? What are its ideal requirements and uses?

37. Classify and discuss various hair dyes.

38. Elaborate upon formulation components of hair dye preparations. 39. Discuss in detail evaluation test for hair dyes.

40. What are sunscreen products? What are their uses?

41. Elaborate upon various types of skin and its disease etiology

42 Differentiate between UVA and UVB radiations.

43. Comment on government regulations on sunscreen products.

44. What are ideal requirements of sunscreens products?

45 Write short notes on

a) Sun protection factor (SPF)

b) Persistent pigment darkening (PPD).

46. Discuss appropriate method of applying sunscreens.

47 Classify sunscreens giving excipients used in them.

11/14

48. Compare physical and chemical sunscreens.

49. Enlist and discuss evaluation tests used to determine quality of sunscreen products.

50. Comment on labeling and rating of sunscreen products.

Chapter-9

1 What are aerosols? What is rationale behind uses of aerosols?

2. What are types of aerosols? Write about various components of aerosols?

3. How aerosols are prepared? Write advantages and disadvantages of aerosols?

4. Elaborate upon components of aerosol product.

5. What are propellants? Classify them and give their ideal characteristics.

6. Discuss mechanism of operation of propellants,

7. Classify propellants based upon route of administration of aerosol products.

8. Classify propellants depending upon nature of gas.

9. Discuss in detail various propellants used in aerosol products.

10. Elaborate upon method of nomenclature of propellants.

11. Differentiate between liquefied and compressed propellants.

12. Describe in detail container for aerosol products.

13. Discuss various types of containers for aerosol drug delivery.

14. Write short notes on:

(a) PMDIs

(b) DPIs

(c) Actuators

(d) Single dose aerosol device

(e) Cold filling method

(f) Pressure filling method

15. Discuss in detail various types of DPIs.

16. Giving examples discuss various commercial multi-dose devices for DPIs.

17. What are small volume nebulizers? Comment on its construction and applications along with its advantages and disadvantages.

18. Classify and discuss about nebulizers and its applications.

12/14

19. What are valves? Write about its functions? Classify and describe them.

20. Discuss in detail aerosol valve assembly.

21. Elaborate upon various aerosol systems.

22. Giving example discuss formulation of aerosol.

23. Describe methods of manufacturing aerosols.

24. Discuss methods of filling aerosol into its containers.

25. Discuss testing of aerosol containers.

26. Elaborate upon quality control testing of aerosol products.

27. Write about testing of aerosol containers.

28. Discuss evaluation parameters of aerosols.

29. Discuss various QC tests applied to aerosol containers.

30. Briefly describe microbiological and biological testing of aerosol products.

31. Comment on labeling instructions for aerosol products giving special emphasis on wamnings.

32. Describe in detail stability testing of aerosol products.

Chapter-10

1 Define packaging and pharmaceutical packaging.

2. What are ideal qualities of pharmaceutical package?

3. Give criterion pharmaceuticals for selecting packaging materials and package types.

4 Comment on packaging material interactions in pharmaceuticals.

5. Enlist and explain functions of packages.

6. Discuss various types of packages used in pharmaceutical packaging.

7. Elaborate upon various types of containers used for pharmaceuticals products.

8. Discuss various special types of packaging systems used in pharmaceuticals.

9. Comment on child resistant package.

10. Write about various formats of containers.

11. Discuss in detail about closures for pharmaceuticals.

12. Write a short note on closure liner.

13. Classify various materials used in pharmaceutical packaging. Describe in detail glass a material of choice.

14. Classify types of glass used in pharmaceutical packaging. Write about various containers made out of it and their uses.

13/14

15. Plastic is superior to glass. Explain with respect to various pharmaceutical issues.
16. Comment on use of metal in pharmaceutical packaging.
17. What is alufoil? Give its types and applications.
18. Give advantages and applications of metal for pharmaceutical packaging.
19. Write short note on 'lidding materials and its requirements.
20. Write short on paper and paper boards as packaging materials.
21. Discuss rubber as a pharmaceutical packaging material.
22. White short note on adhesives and inks used in pharmaceutical labeling.
23.Diness actors influencing choice of containers.
24. Discuss legal and official requirements for containers.
25. Elaborate upon stability issues related to packaging.
26. Enlist and discuss quality control tests used for testing packaging materials alone.
27. Discuss quality control tests for glass containers.
28. Discuss quality control tests for plastic materials used in pharmaceutical packaging
29. Enlist and explain various quality control test used for metals.
30. Discuss biological testing of plastic containers.
31. Write short note on surface hydrolytic resistance test for glass.
32. Discuss hydrolytic resistance test for powdered glass.
33. Discuss various tests used for closures.
34. Comment on testing of adhesives and inks.



Mrs. T. P. Shangarpawar

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

14
14

Class: Final Year B. Pharm. (Semester-I, 2018 P)
Subject: Instrumental Methods of Analysis (BP705P)
Academic Year: 2021-22

Question Bank

1. Give the principle of UV spectroscopy.
2. What is the material of Cuvette construction used in UV?
3. Why Glass cannot be used as a sample holder in UV?
4. What is molar absorptivity?
5. What is Assay?
6. What is a single point Method?
7. What is the Double Point Method?
8. What is the Wavelength range for the ultraviolet and visible region of the spectrum?
9. What do you mean by the Calibration curve?
10. What is Spectrum?
11. What is the function of Spectroscopy?
12. What is the solvent cut off?
13. What is the application of UV spectroscopy?
14. What is the regression coefficient?
15. Enlist sources used in UV spectroscopy?
16. What is a different monochromator used in UV spectroscopy?
17. What is the simultaneous Equation method?
18. What is the Absorbance ratio method?
19. What is an iso absorptive point?
20. What is the Absorbance method official method?
21. Give Beer and Lambert Equation.
22. What is A1%, 1cm?
23. What is absorbance?
24. What is derivative spectroscopy?
25. Give the principle of Flame Photometer.
26. What is Flame emission spectroscopy?
27. What is alkaline earth metal?
28. What is the use of a Flame Photometer?
29. What is the principle of colorimetry?
30. What is the application of colors meters?
31. What is chromophore?
32. What is another name for colorimeter?
33. What is the quenching effect?
34. What is the radiation source used in fluorimetry?
35. What is fluorescence?
36. What is the application of fluorimetry?
37. What is the principle of the Nephlo Turbidimetry?
38. What is turbidity?

39. What does NTU stand for?
40. What is the Principle of the Nephelometer?
41. What is the principle of the Turbidimeter?
42. What is chromatography?
43. What is application Chromatography?
44. What is the mobile Phase?
45. What is Stationery Phase?
46. What is Diluent?
47. Enlist types of Chromatography.
48. What is planer Chromatography?
49. What is Paper Chromatography?
50. What is Adsorption?
51. What is the mechanism involved in Paper chromatography?
52. What is the RF value?
53. What is Ascending Paper Chromatography?
54. What is two-dimensional Paper Chromatography?
55. What is Descending Paper Chromatography?
56. What is radial paper chromatography?
57. Enlist the Stationary phase used in paper Chromatography.
58. Enlist the Mobile phase involved in Paper chromatography.
59. What is the polarity of paper used in paper chromatography?
60. Enlist types of Paper chromatography.
61. What is Principle in TLC?
62. What is the full form of TLC?
63. What is the role of Gypsum in TLC?
64. Why Fluorescent is used in TLC?
65. Why activation of the plate done in TLC?
66. What is the formula to calculate RF?
67. What is the Solvent front?
68. What is the origin line?
69. What is capillary action?
70. What is the advantage of two-dimensional chromatography over Ascending Paper chromatography?
71. What is Coated Plate?
72. What is the typical size of Paper used in Paper Chromatography?
73. What is the typical Plate size used in TLC?
74. What is mean by Silica gel GF?
75. What is in TLC?
76. What is column chromatography?
77. What is meant by adsorption chromatography?
78. What are the two phases of Chromatography?
79. Why alumina is used in Column chromatography?
80. What is elution?
81. What is elite?
82. What is affinity?
83. What do you mean by Partition?
84. What is Normal Phase Chromatography?
85. What is Reverse Phase Chromatography?
86. What is the Full form of HPLC?
87. What is System Suitability Parameter?



88. What is Retention time?
89. What is the Capacity Factor?
90. Explain HETP
91. What is eddy diffusion?
92. What is Rate theory?
93. What is Plate Theory?
94. What is isocratic Elution?
95. What is the gradient elution?
96. What is Degassing?
97. What are Solvent reservoirs?
98. What are the types of HPLC?
99. Explain the mechanism involved in the separation of sample mixture in HPLC.
100. What is the application of HPLC?
101. What are the different types of columns used in HPLC?
102. What is a different detector used in HPLC?
103. What is the full form of HPLC?
104. What is the full form of GC?
105. What is the principle of GC?
106. What are the columns used in GC?
107. What is the detector used in GC?
108. What are the types of GC?
109. What is derivatization in GC?
110. Give the principle of Gas solid chromatography.
111. Give the principle of Gas-liquid chromatography.

Name and signature of subject teacher: Dr. Vijaya Uday Barge

Question Bank

Course: Cosmetic Science (PATTERN 2015)
Course code: 482 P
Class: Final Y. B. Pharm
Semester: VIII

1. Giving examples differentiate between a cosmetic and a drug.
2. Define cosmetics as per Indian Regulation.
3. Define cosmeceutical with suitable examples.
4. Define hair cosmeceuticals. Highlight its key ingredients.
5. Highlight the cosmetic regulation in Canada.
6. Define herbal cosmetics and their ideal properties.
7. With the help diagram illustrate classification of cosmeceuticals. Define Nutracosmetics.
8. Briefly account for the regulatory aspects of cosmetics.
9. Illustrate the mechanisms of action of cosmeceuticals.
10. Classify cosmetics according to their functions
11. Define gelling agents with suitable examples.
12. Give an account of anti-humectants carrier oils.
13. Classify cosmetic preservatives giving suitable examples.
14. Highlight the difference between occlusive agents and humectants.
15. What are the prohibited and restricted ingredients in cosmetics preparations?
16. Explain the kenogen phase of hair growth cycle.
17. Give an account of 2-in-1 shampoos, Explain the formulation approach of co-washes/co-poos.
18. Explain the mechanism of hair conditioning.
19. Write the benefits of mineral oil as hair oil.
20. Give an account of the ingredients of a conditioner.
21. How can alternative coloring be achieved?

22. Write a note on natural dyes
23. Explain the functions of various layers of stratum corneum.
24. Differentiate between cleanser and face wash.
25. What are cleansing balms?
26. Comment on "cold cream as cosmeceuticals".
27. Define moisturizers, Classify and mention their disadvantages.
28. Write about the role of teeth whitening agents and bleaching agents in toothpastes. Explain the origin and symptoms of gum diseases.
29. Give an account of causes of cold sores cause and its prevention. Write about the antibacterial agents used for supragingival plaque control and gingivitis
30. Define Halitosis. How can it be prevented?
31. How do UVA and UV B damage the skin?
32. List the advantages of sunblocks. What are the advantages of micropigment minera sunblock?
33. What is sun protection factor? Explain it significance.
34. Give an account of marine suncreens.
35. What are encapsulated suncreens? Specify their advantages.
36. Henna can be used an antidandruff herb, Comment.
37. Write the composition and beneficial effects of Herbal face pack and foot care creams
38. Write about the hair care aspect of Amla.
39. Give an account of herbal perfumes.
40. What is a ubtan? Give its uses.
41. Enlist the activities of Bureau of Indian Standards (BIS), in consumer interest.
42. What is the significance of ECO mark on cosmetic label. Specify its requirements.
43. Write the procedure of determination of non-volatile soluble matter in shampoo
44. What is the packing and marking requirements of toothpaste?
45. How is pH of shampoo determined as per BIS?
46. Give the principle of sebumeter. What are its applications?
47. Give an account of combability.
48. Classify skin types. Enlist the instruments used to measure skin colour.
49. Give the principle and any two advantages of Tewameter.
50. Explain the hair tensile strength test.
51. Give an account of Syndet bars.
52. Write the difference between herbal soap and Ayurvedic soap.

Pune District Education Association
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE
PHARMACIST FOR COMMUNITY HEALTH
Rx
2009

53. Enumerate the differences between vegetable soap and Syndet?
54. Sketch the evolution of cleanser technology.
55. Write the difference between Shower gels and Liquid body washes
56. Explain the causes and treatment of prickly heat.
57. Give an account of the cosmetic problem "ingrown hairs".
58. What do you understand by water immersion wrinkles? How can these be removed?
59. Birthmarks are cosmetic problem. Comment.
60. Define rosacea. What are its causes?
61. Define weathering of hair and Traction alopecia.
62. Give an account of dry hair.
63. What are the causes and treatment for oily/greasy hair.
64. What are the causes of dandruff? Classify anti dandruff shampoos.
65. give an account of cosmetic alteration process in hairs.
66. What are the reasons for gray hair? Highlight the cosmetic approach to conceal graying
67. Give an account of distribution and functionality of apocrine glands.
68. What are the causes of foot odour? How can treatment for foot odour be approached?
69. What do you understand by natural deodorant crystal? Give example. Also write about vaginal deodorants.
70. Write notes on odour-neutralizing agent and body absorbers.
71. Give the historical insight of evolution of antiperspirants and deodorants.
72. Explain SCC.
73. Explain spurious cosmetic.
74. Explain Misbranded cosmetics.
75. How is cosmetic safety regulated in US?
76. Define Rash.
77. Define Eczema.
78. Define Dermatitis.
79. Define shampoo.
80. Enlist conditioning agents of shampoo.
81. Enlist clarifying agents of shampoo.
82. Enlist Evaluation of Shampoos shampoo.
83. Define moisturizing cream.
84. Define Cosmeceutical.
85. Classify Sun burn.

Pune District Education Association
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE
PHARMACY FOR COMMUNITY HEALTH
2004

86. Define Sunscreen.
87. Give function of Vitamin D.
88. Give number of organic compounds has been screened for sunscreening properties.
89. Define Herbal products.
90. Give Advantages of herbal cosmetics.

Dr. Sujit Kakade
Subject Teacher

Class: Final Year B. Pharm. (Semester-I, 2018 P)
Subject: Instrumental Methods of Analysis (BP705P)
Academic Year: 2021-22

Question Bank

1. Give the principle of UV spectroscopy.
2. What is the material of Cuvette construction used in UV?
3. Why Glass cannot be used as a sample holder in UV?
4. What is molar absorptivity?
5. What is Assay?
6. What is a single point Method?
7. What is the Double Point Method?
8. What is the Wavelength range for the ultraviolet and visible region of the spectrum?
9. What do you mean by the Calibration curve?
10. What is Spectrum?
11. What is the function of Spectroscopy?
12. What is the solvent cut off?
13. What is the application of UV spectroscopy?
14. What is the regression coefficient?
15. Enlist sources used in UV spectroscopy?
16. What is a different monochromator used in UV spectroscopy?
17. What is the simultaneous Equation method?
18. What is the Absorbance ratio method?
19. What is an iso absorptive point?
20. What is the Absorbance method official method?
21. Give Beer and Lambert Equation.
22. What is A1%, 1cm?
23. What is absorbance?
24. What is derivative spectroscopy?
25. Give the principle of Flame Photometer.
26. What is Flame emission spectroscopy?
27. What is alkaline earth metal?
28. What is the use of a Flame Photometer?
29. What is the principle of colorimetry?
30. What is the application of colors meters?
31. What is chromophore?
32. What is another name for colorimeter?
33. What is the quenching effect?
34. What is the radiation source used in fluorimetry?
35. What is fluorescence?
36. What is the application of fluorimetry?
37. What is the principle of the Nephlo Turbidimetry?
38. What is turbidity?

39. What does NTU stand for?
40. What is the Principle of the Nephelometer?
41. What is the principle of the Turbidimeter?
42. What is chromatography?
43. What is application Chromatography?
44. What is the mobile Phase?
45. What is Stationery Phase?
46. What is Diluent?
47. Enlist types of Chromatography.
48. What is planer Chromatography?
49. What is Paper Chromatography?
50. What is Adsorption?
51. What is the mechanism involved in Paper chromatography?
52. What is the RF value?
53. What is Ascending Paper Chromatography?
54. What is two-dimensional Paper Chromatography?
55. What is Descending Paper Chromatography?
56. What is radial paper chromatography?
57. Enlist the Stationary phase used in paper Chromatography.
58. Enlist the Mobile phase involved in Paper chromatography.
59. What is the polarity of paper used in paper chromatography?
60. Enlist types of Paper chromatography.
61. What is Principle in TLC?
62. What is the full form of TLC?
63. What is the role of Gypsum in TLC?
64. Why Fluorescent is used in TLC?
65. Why activation of the plate done in TLC?
66. What is the formula to calculate RF?
67. What is the Solvent front?
68. What is the origin line?
69. What is capillary action?
70. What is the advantage of two-dimensional chromatography over Ascending Paper chromatography?
71. What is Coated Plate?
72. What is the typical size of Paper used in Paper Chromatography?
73. What is the typical Plate size used in TLC?
74. What is mean by Silica gel GF?
75. What is in TLC?
76. What is column chromatography?
77. What is meant by adsorption chromatography?
78. What are the two phases of Chromatography?
79. Why alumina is used in Column chromatography?
80. What is elution?
81. What is elite?
82. What is affinity?
83. What do you mean by Partition?
84. What is Normal Phase Chromatography?
85. What is Reverse Phase Chromatography?
86. What is the Full form of HPLC?
87. What is System Suitability Parameter?

Pune District Education Association SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTER 2009

88. What is Retention time?
89. What is the Capacity Factor?
90. Explain HETP
91. What is eddy diffusion?
92. What is Rate theory?
93. What is Plate Theory?
94. What is isocratic Elution?
95. What is the gradient elution?
96. What is Degassing?
97. What are Solvent reservoirs?
98. What are the types of HPLC?
99. Explain the mechanism involved in the separation of sample mixture in HPLC.
100. What is the application of HPLC?
101. What are the different types of columns used in HPLC?
102. What is a different detector used in HPLC?
103. What is the full form of HPLC?
104. What is the full form of GC?
105. What is the principle of GC?
106. What are the columns used in GC?
107. What is the detector used in GC?
108. What are the types of GC?
109. What is derivatization in GC?
110. Give the principle of Gas solid chromatography.
111. Give the principle of Gas-liquid chromatography.

Name and signature of subject teacher: Dr. Vijaya Uday Barge

Question Bank

Course: Quality Control and Quality Assurance (PATTERN 2019)
Class: F. Y. M. Pharm
Semester: I

1. Give objectives of ICH guidelines.
2. Define QC and QA.
3. What are the responsibilities of QA department?
4. Give QC test for glass containers.
5. Give scope of GLP.
6. Enlist the process for maintenance of ICH agreement.
7. Give QC test for plastic containers.
8. Add a note of GMP.
9. Explain in detail analysis of raw materials and finished product.
10. CPCSEA guidelines- Comment.
11. Add a note on IPQC test for tablet.
12. Add a note on IPQC test for injection.
13. What is Batch Formula Record.
14. Explain Type A and Type B change over in Formulation of product.
15. How to calculate expiry date.
16. Give role of Documentation in pharmaceutical industry.
17. How to control aseptic condition in Sterile product formulation.
18. Give IPQC tests for sterile product.
19. Give responsibility of production officer during the changeover.
20. Describe mix–ups and cross contamination in pharmaceutical industry.

21. Explain in detail Master Formula Record.

22. What is Three tier documentation.

23. Give format for Batch Formula Record with suitable example.

24. Explain process deviations in manufacturing unit.

Dr. Amit Kasabe
Subject Teacher

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune- 411014.

Class: First Year M. Pharm. (Semester-I, 2019 P)
Subject: Quality Assurance Practical- I (MQA 105P)
Academic Year: 2021-22

Question Bank

1. Why Quartz cuvette is used in UV spectroscopy?
2. What do you mean by solvent cut off?
3. What is vieodt's equation?
4. Discuss simultaneous estimation of drug?
5. Which type of column has the greater efficiency and resolution?
6. Why beer's lambert's law is not applicable for fluorescence compound?
7. Why HPLC is known as high pressure/ high performance/ high price liquid chromatography?
8. Which chromatography technique would you use for the analysis of volatile sample?
9. Which column should be preferred for analysis of compounds using GC?
10. What is detectors used in fluorescence?
11. Laminar flow burner used in flame photometer is also known as _____.
12. Who forms the part of six sigma implementation team?
13. When the process standard deviation σ is unknown for a process, to calculate the PCR what we use?
14. Explain Dissolution standard for uncoated tablet as per USP?
15. What happened if hygroscopic material, fills in the hard gelatin capsule?
16. True density is determined by which apparatus?
17. Why type IV glass is not used for parental purpose?
18. What the ideal temperatures & humidity condition required for conducting the accelerated stability studies at room temperature?
19. Explain role of HLB for micelle formation?
20. What is beers and lamberts law?
21. Explain Absorbance, specific absorbance and molar absorbance.
22. What is the wavelength ranges for the ultraviolet and visible regions of the spectrum?

23. How will you calculate the percentage purity of ciprofloxacin?
24. Explain the dilution factor for assay of paracetamol.
25. What molecular or structural features give rise to absorption of ultraviolet/visible (UV/VIS) radiation in organic species?
26. What is simultaneous estimation of drug?
27. What is Vierodt's equation?
28. Give the method for calculation of ax1 if concentration of drug is 5 PPM.
29. What is vaandemter equation?
30. Explain eddys diffusion, mass transfer coefficient, dead volume.
31. Explain injection system for GC.
32. What are different columns used in GC?
33. What's the principle behind fluorescence and phosphorescence?
34. Explain the detectors used in fluorescence.
35. Why beers lamberts law is not applicable for fluorescence compounds.
36. Explain Principle of Flame photometer.
37. Describe instrumentation for flame photometer.
38. What is meant by copq in six sigma?
39. What is the definition of dpmo or dppm?
40. What is pareto principle?
41. Name some of the quality management tools in six sigma
42. Name the different kinds of variations used in six sigma?
43. Who forms the part of six sigma implementation team?
44. What is the difference between the six sigma dmaic and dmadv methodologies?
45. Can you explain the concept of fish bone/ ishikawa diagram?
46. What is load testing process?
47. What level of understanding do you have regarding the statistical tools?
48. What is the difference between *Cpk* and *Ppk* ?
49. Can you explain standard deviation?
50. What is process sigma calculation?
51. What is regression? When is it used?
52. What is the difference between defect and defective?
53. What is the difference between process report and product report?
54. Explain fmea
55. What are x bar and r charts?



56. Explain flow charting and brain storming?
57. What is lean six sigma?
58. What are benefits of using lean six sigma?
59. What are the tools of lean six sigma?
60. What are different quality levels of six sigma?
61. What is fmea?
62. What is sipoc?
63. What is machine capability and process capability?
64. What is Potential Capability, Cp?
65. What are different statistical process capabilities?
66. Differentiate between Process capability versus process performance.
67. What is the difference between IPQC and FPQC test for tablet?
68. What are the standards for weight variation of tablet as per IP?
69. Explain Dissolution standards for uncoated tablet as per USP.
70. What is the significance of IPQC and FPQC test.
71. What are the side effects of ibuprofen tablet?
72. Explain mechanism behind granulation.
73. What are the types of gelatins?
74. What is the rationale behind formulation of Paracetamol capsules.
75. Write the standard moisture contents in capsule formulation ?
76. Name the commonly used diluents in capsule formulation?
77. Write few advantages of hard gelatin capsule.
78. Explain difference between HGC and SGC
79. What happened if hygroscopic material; fills in the hard gelatin capsule.
80. What is the use of 0.9% NaCl Injection?
81. Why leaker test for ampoule is performed?
82. Define Sterility test?
83. What are the particular matters seen in Parenterals?
84. Explain Pyrogens test for Parenterals?
85. What are main goals behind the Preformulation studies?
86. What is the significance of conducting the Drug excipient stability studies?
87. Define angle of repose and write down the standards for it?
88. Write the methods used for determination of angle of repose?
89. What is the relationship between cars index and Hausner's ratio?

Pune District Education Association's Yashwantrao Chavan College of Pharmaceutical Sciences & Research Centre

90. What is the difference between True, Bulk and Tapped density?
91. What is the effect of pH on solubility of drug?
92. What is the pH of solution?
93. What is the relationship between pH and PKa of the drug?
94. Explain Henderson Hassel batch equation Explain various factors affecting the solubility of the drug.
95. What are the benefits of Glass Containers over Plastic containers?
96. What is the difference between Type I and type II glass?
97. Whys Type Iv glass is not used for parental purpose
98. Writ the sizes for single and multiple dose containers.
99. Why water attack test is performed for glass container.
100. What are the objectives behind conducting stability studies?
101. What is the ideal temperature and humidity condition required for conducting the accelerated Stability studies at room temperature?
102. What is the ideal temperature and humidity condition required for conducting the long-term stability studies?
103. Which guidelines are specified foe stability studies of drug substance and drug product?
104. What is principle behind use of surfactants for solubility enhancement?
105. Which are the different solubility enhancement techniques?
106. Give the advantages of solubility enhancement by using surfactant.
107. What is the criterion for selection of surfactant for any formulation.
108. Explain Role of HLB for micelle formation.
109. Enlist the methods used to improve solubility of poorly soluble drugs.
110. What are the advantages of Co solvency approach?
111. Why ethanol gives higher solubility in water?
112. Why ibuprofen is partially soluble in water?
113. What is the significance of determination of PKa.
114. What are the limitations of UV method for determination of PKa of the drugs?
115. How will you determine the PKa of Acetic acid
116. Write Note on Methods to determine Pka of drug.
117. Write Note on Methods of determination of PH.
118. What is the relationship between pH, PKa.
119. Define semisolids. Give its classification.

Pune District Education Association SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE 2009

120. Enlist and explain preparation methods of ointments.
121. What is the main principle behind preparation of ointment?
122. What is the role of calamine and white paraffin in calamine ointment?
123. Enlist evaluation parameters for semisolids.
124. What is the significance of determination Log P?
125. What are the Advantages of method for determination of Log P of the drugs by using HPLC?
126. How will you determine the Log P of Acetic acid?
127. Write Note on Methods to determine Log P of drug
128. What is the relationship between pH and Log P?
129. What are the sources of impurities in pharmaceutical substances?
130. Explain the Principle for the Limit test for lead.
131. Define and Explain Impurities.
132. What is mean by force degradation studies?
133. What is mean by deviation?
134. Explain role of CAPA and FEMA in deviation analysis.
135. Why root cause analysis is carried out for any deviation.
136. How the risk is controlled for deviations.

Name and signature of subject teacher: Dr. Vijaya Uday Barge

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre

Kharadi, Pune-411014.

Class: First Year M. Pharm. (Semister-II,2019 P)

Subject: Molecular Pharmaceutics

Academic Year: 2022-23

Question Bank

1. Draw a schematic diagram that represents drug deposition in the body?
2. Write the reasons for site specific delivery of drugs.
3. Discuss various approaches consider for drug targeting?
4. Illustrate the anatomical and physiological pathways for site-specific delivery.
5. Explain schematic representation of extravasations and lymphatic drainage.
6. Explain the function of monoclonal antibodies and fragments in drug targeting.
7. Discuss about the active targeting and passive targeting.
8. Classify nanoparticles?
9. Elaborate characteristics important for drug delivery using nanoparticles?
10. Write different preparation method of nanoparticles?
11. Write applications of nanoparticulate delivery systems.
12. Discuss nanoparticle-based targeted drug delivery? Write applications and advantages of nanoparticle drug carriers.....?
13. Define liposome based drug delivery system ? Write the advantages and disadvantages of liposome based drug delivery system.....?
14. Classification of liposome.
15. Define microsphere?
16. Elaborate niosomes?
17. Discuss aquasomes?
18. Define phytosomes?
19. What are electrosomes?
20. Discuss various types of microspheres?

1/2

21. Write different techniques for the preperation of microspheres and physicochemical Evaluation?
22. Write advantages and applications of niosomes?
23. Write advantages, method of preparation and characterization of aquasomes?
24. Write advantages, method of preparation and characterization of phytosomes?
25. Write method of preparation, advantages, disadvantages, application and structure of electrosomes?
26. Define aerosols? Write different type of aerosols?
27. Define propellant? Write different type of propellant?
28. Write various factors influencing the nasal drug absorption?
29. Discuss various types of aerosol systems.
30. Define nasal drug delivery system? Write the advantages and limitation of nasal drug delivery system.
31. Write about the pulmonary drug delivery system?
32. Define gene therapy?
33. Elaborate development of gene delivery systems.
34. Discuss various.....?
35. Define.....? Write the.....?

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center Kharadi Pune 411014

Mrs. T. P. Shangrapawar

2/2

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Class: First Year M. Pharm. (Semester-II, 2019 P)
Subject: Quality Assurance Practical- II (MQA P)
Academic Year: 2021-22

Question Bank

1. What are the sources of impurities?
2. What are the ICH Guidelines for Impurities in drugs?
3. What is stahl's triangle?
4. What is Vandemter equation?
5. What are methods to determine the organic impurities present in API?
6. Explain Principle of Flame photometer
7. Describe instrumentation for flame photometer
8. Explain detectors used in flame photometry.
9. Why flame photometer is called emission spectroscopy.
10. Describe the limitation of Flame photometry.
11. What is the principle behind detection of hydrogen sulphide in air?
12. What are corrosive and toxic effects of hydrogen sulphide?
13. What is the standard limit for hydrogen sulphide?
14. Describe methodology for hydrogen sulphide collection for analysis.
15. What is the chlorination process?
16. Explain principle behind chlorine estimation.
17. Explain residual chlorine estimation.
18. What are different techniques for estimation of chlorine?
19. Discuss briefing about DPD Colorimetric
20. What is the basic theory behind determine concentration of sulphur dioxide by colorimeter?
21. Describe different theories behind sulphur dioxide estimation.
22. Describe principle for colorimeter
23. What is the principle behind moist heat sterilization?
24. What is difference between validation and qualification?

25. Explain significance of D. Z and F value.
26. Enlist the names of Biological and Chemical indicators for moist heat sterilization.
27. What is the principle behind Dry heat sterilization?
28. What is difference between validation, Calibration and qualification of equipment?
29. Explain significance of PQ.
30. Enlist the names of Biological and Chemical indicators for Dry heat sterilization.
31. What is the principle behind Dry Mixing?
32. What are the advantages of Double cone blender?
33. Explain significance bulk and tapped density.
34. Enlist the names various dry mixers.
35. What is the principle behind compression?
36. What are the advantages of PQ in compression machine?
37. Explain significance of 1Q and OQ.
38. Enlist the name of various types of compression machine.
39. What is mean by tooling?
40. What are the properties of EMR (Electromagnetic Radiation)?
41. Name the different types of EMR
42. What is the composition of EMR
43. What is wavelength? How is it expressed (unit)?
44. What is frequency? Hose is it expressed (unit)?
45. How is energy of EMR and wavelength related?
46. What is wave number? How is it expressed (unit)?
47. How wave number and energy are related?
48. What characteristics should be considered during the validation of analytical method?
49. What are the other integral parts of analytical method validation?
50. What methods require validations?
51. What is Analytical Method Validation?
52. What is the difference analytical method validation and analytical method verification?
53. What are the parameters commonly to be performed in analytical method verification
54. What is ruggedness and Robustness?
55. What is the significance of statistical analysis?
56. Explain beers and lamberts law.
57. Describe instrumentation for UV spectrophotometer
58. What is effect of column temperature on resolution in HPLC?

59. What are the significances of PQ in HPLC?
60. What is mean by isocratic and gradient flow?
61. What is significance of system precision.
62. Explain principle behind HPLC.
63. What is effect of column temperature on resolution in HPLC?
64. What are the significances of PQ in HPLC?
65. What is mean by isocratic and gradient flow?
66. What is significance of system precision?
67. Explain principle behind HPLC.
68. Why Dissolution Test Apparatus is calibrated with Salicylic Acid and Prednisolone.
69. What is the principle behind Qualification tests performed for dissolution testing?
70. What is mean by wobbling and centering?
71. Write down the standard conditions related to dissolution apparatus as Per USP.
72. Why Friability is performed for tablets.
73. What is the principle behind Qualification tests performed for Friabilator testing?
74. What is Formula to calculate friability?
75. Write down the standard conditions related to Friability apparatus as per IP.
76. Why Disintegration is performed for tablets.
77. What is the Significance behind Qualification tests performed for disintegration testing?
78. What is significance of using disc during disintegration testing?
79. Write down the standard conditions related to Disintegration apparatus as Per IP
80. Define and Explain importance of Checklist.
81. What is importance of SOP?
82. Why vendor qualification is required?
83. Define and Explain importance of Batch processing record.
84. What is importance of Quality Assurance?
85. Explain importance of IPQC testing and documentation?
86. Define and Explain importance of HVAC and HEPA in sterile product manufacturing.
87. What are importance of Sterile area?
88. What are the ideal conditions required for sterile manufacturing?
89. What is the significance of maintenance of Environment control in sterile manufacturing
90. What is the Grade A, B, C and D along with its Significance

91. What is the difference between Water for injection and sterile water for injection?
92. What are Grade A and B area?
93. What are the ideal conditions required for WFI preparation?
94. Enlist various methods for WFI Preparation along with its advantages.
95. What is mean by CPP and CQA
96. Why QbD is applied.
97. What is the significance of Fish bone diagram
98. Explain in short about QbD.
99. How the risk is controlled for deviations.
100. What is mean by PAT.
101. Why PAT is applied.
102. Explain in short about QbD
103. Which are the classes of air cleanliness?
104. Which activities are performed in zone 7?
105. What is mean by class 10,000?
106. Explain the filters used filtration depending on type of bacteria.
107. What are the advantages of designing of plant layout?
108. Explain parallel design for tablet manufacturing
109. What is mean by quarantine area
110. Why the HEPA is used in tablet manufacturing.

Name and signature of subject teacher: Dr. Vijaya Uday Barge

C. Problem Solving Methodologies

3. Laboratory Experiments

Class: S.Y.B.Pharm Sem-III
Sub: Pharmacognosy & Phytochem. I

PAGE NO. 1

Experiment NO. 1

9/2/2023

Aim -: To study characteristics of starch grains.

Requirement -:

Apparatus - Eye piece micrometer, stage micrometer, porcelain dish, slide etc.

Chemical - starch powder, Iodine solution

Theory -:

Starch grains are substance present in plant cell which have different characteristic based on origin. starch grains are key indicator for identification of plant cell and characteristics.

In microscopic characteristics, stains with Iodine solution which result blue colouration observed under microscope. In qualitative and quantitative evalution or analysis of crude drug, starch grains play imp. role.

Biological Sources -:

starch contain of polysaccharide granules procured from the grain of maize ie. zea mays L. or of Rice Oryza sativa L or of Wheat Triticum aestivum L. or form the tubers of the potato. ie. solanum tuberosum L.

Chemical Constituents -:

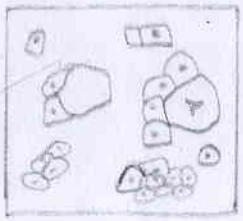
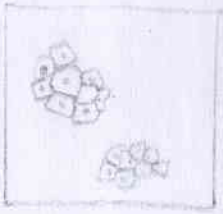
Starch contain generally a mixture of two polysaccharide amylopectin (α-amylase) and amylose (β-amylase).

Pune District Pharmacy Association
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICS & RESEARCH CENTRE
KHARADI, PUNE-411 014

1/9

V.V. Dhurde
Sub. Teacher.

Microscopical characters.

Description	Maize starch	Rice starch	Wheat starch
Nature	Simple	Simple and Compound	Simple.
Shape	polyhedral or rounded	polyhedral with sharp angle	oval or rounded
Size	5-30 μ probably most of in the range of 12-18 μ	4-10 μ Avg. 6 μ	20-50 μ large grain and 5-10 μ small grain.
Hilum	Triangular distant and centrally pointed.	centrally pointed minute hilum	Hilum centrally present, seldom cleft.
Diagram			

Pune District Education Association
ASHARAO UTSAL COLLEGE OF PHARMACEUTICAL SCIENCE'S RESEARCH CENTRE

2/4

No. of particles	Length	Width	Total.
1	7	5	35
2.	4	4	16
3	5	8	40
4	4	6	24
5	7	4	28
6	3	3	9
7	4	6	24
8	3	9	27
9	6	8	48
10	8	4	32
11	13	10	130
12	18	9	162
13	10	8	80
14	30	13	390
15	20	15	900
16	9	7	63
17	8	11	88
18	20	8	160
19	10	12	120
20	25	12	400
21	18	9	162
22	9	7	63
23	7	8	56
24	8	11	88
25	10	12	120

Total = $\frac{259}{25}$ = 10.36 and $\frac{209}{25}$ = 8.36

Pune District Education Association
Late Nanasaheb Dhariwal College of Pharmaceutical Sciences & Research Centre

3/4

Procedure For Determination OF Size OF Starch grain -:

1) Calibrate an eyepiece micrometer using a stage micrometer and Calculate the Factor.
2) Take little quantity OF starch powder in porcelain dish and add Few drop OF iodine solution.
3) Mix it properly and do not over stain it.
4) Then make it dry and spread this starch powder on slide.
5) Measure the length and Width OF that starch grain by eyepiece micrometer scale.
6) place the eyepiece micrometer scale horizontal on that starch grain and Count number OF division Covered by the starch grain For measurement OF width.
7) Similarly keep eyepiece micrometer scale Vertically on the starch grain and Count number OF division Covered by the starch grain For measurement OF length.
8) measure the length and width OF 50 starch grain particle and mutiply it With Factor.
   size OF starch grain = length x Width x Factor.
9) Calculate the average particle size OF Starch grain.

Result -: Size OF maize Starch grain by using eyepiece micrometer Found to be length = 10.36 µm and width = 8.36 µm.

ReFerence -: Practical pharmacognosy & phytochemistry-I handbook Pee Yee publication bharat & Nagadev [illegible] 17 18

4/4

Class : S.Y. B.Pharm. Sem-IV

Sub: Pharmacognosy & Phytochem.-I

PAGE NO. 7

23/12/2022

Experiment No. 4

Aim :- To identify type of stomata and determine stomatal number of given crude drug.

Requirement :-

Apparatus - Forceps, water bath, slide, stage microscope.

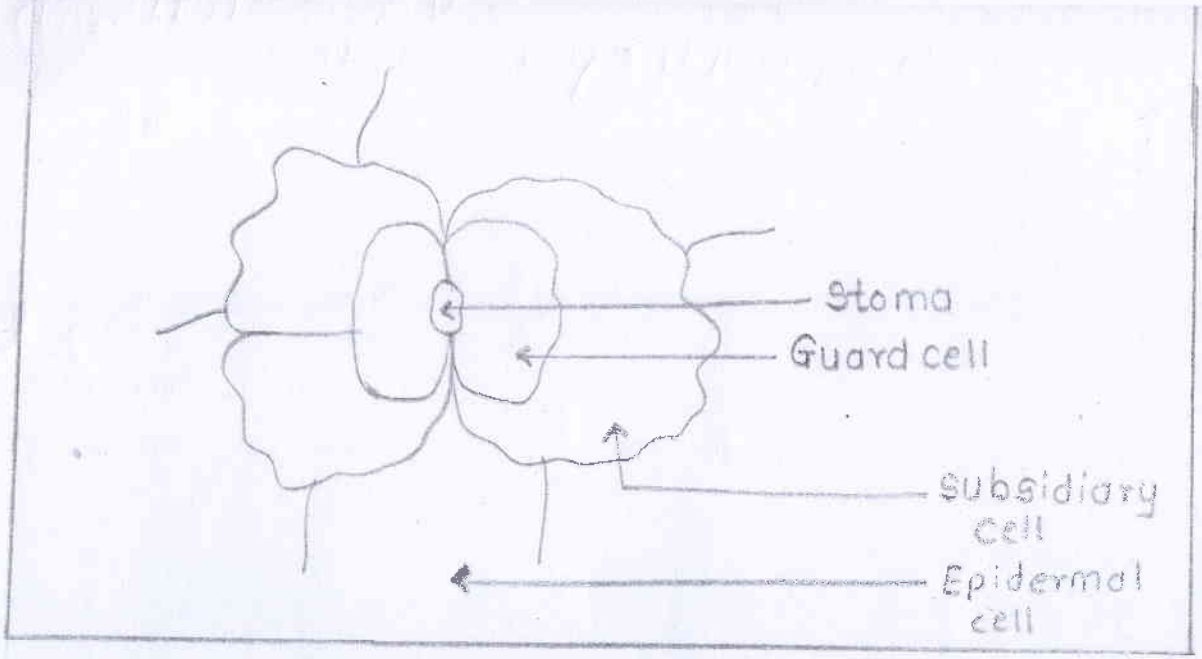
Chemicals - chloral hydrate solution, water.

Theory -

It is the average number of stomata per square mm or per mm^2 in between margin and central vein of the epidermis of leaf.

Stomata is a tiny opening or pore that is used for gas exchange. A stomata is made up of two identical guard cells. Forming a pore in centre, each stoma remains surrounding by two kidney or bean shaped epidermal cells the guard cells. The stomata may occurs on any part of plant except the roots. During the formation of stoma, the epidermal cell surrounding the guard cell cut off from the mother epidermal cell and get slightly different shape and size & these cell are called as subsidiary cell on the basis of the characteristic of the guard cells & subsidiary cells. stomatas can be classify by variation in the turgidity of the guard cells. The size of the pore is altered.

V.V. Dharade 1/5
Sub. Teacher



Stomata

① According to the characters of guard cells.

Stomata ✓

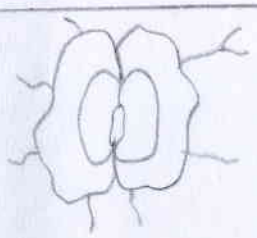
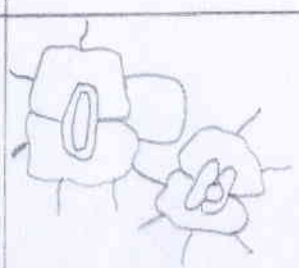
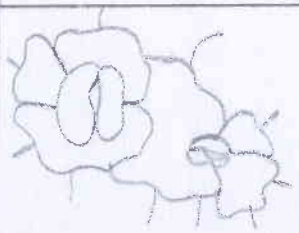
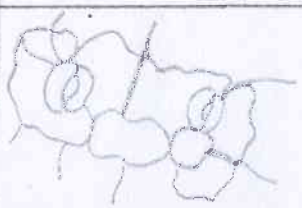
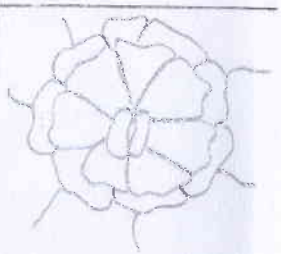
- Moss type → United guard cells eg. Funaria
- Gynospermous → oval & partially lignified guard cells eg. Savin
- Gramineous → Dumb-bell shaped guard cells eg. Family graminaseg Cyperaceae.
- Dicotyledon → Arcuate gua cells (bean shaped)

Pune District Education Association
Institutional College of Pharmaceutical Science & Research Centre
Khadki Pune 411 020

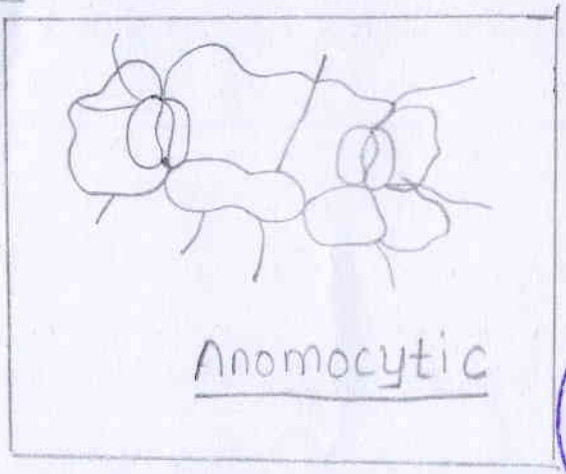
215

② According to number, nature and arrangement of subsidiary cells

Dicotyledonous Stomata

Paracytic (Rubiaceous or parallel celled)	Diacytic (caryophyllous or cross celled)	Anisocytic (cruciferous/ unequal celled)	Anomocytic * (Ranunocalaceous/irregular celled)	Actinocytic
				
Long axis of the subsidiary cell is parallel to that of stoma	Long axis of two subsidiary cell is at right angle to that of the stoma	The stoma subsidiary cell of which 1 is markedly small than other.	The stoma is surrounded by varying Number of cell in no way differing From epidermal cells.	subsidiary ce are arrange radialy.
eg. senna, Coca	eg. peppermint Vasaka, Spearmint.	eg. Belladonna Stramonium Datura	eg. Lobelia, Digitalis	eg. Buchan Lonzan, spreng.

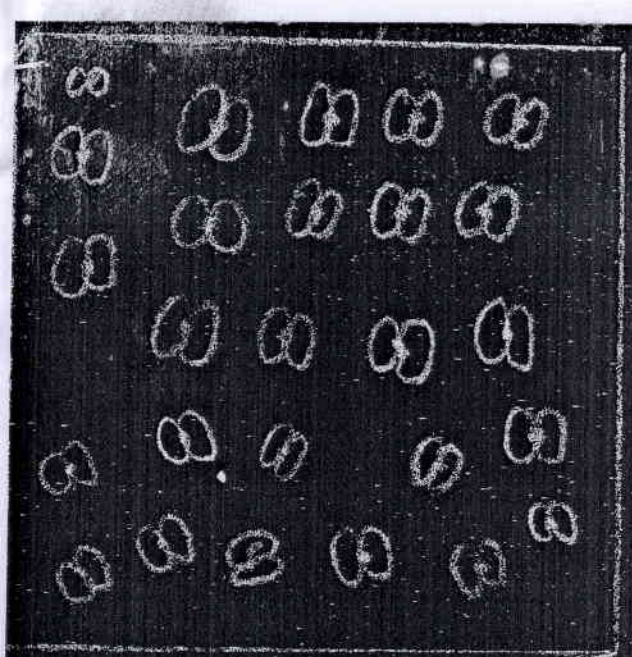
Observe (stomata) -!



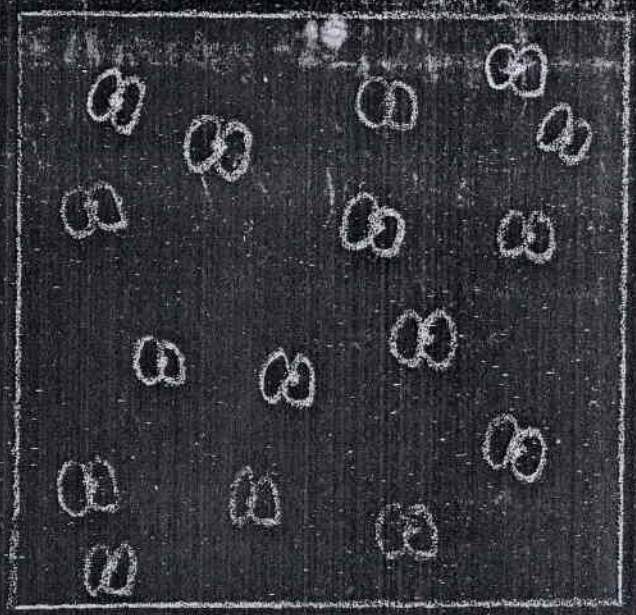
Anomocytic

Pune District Education Association
COLLEGE OF PHARMACEUTICAL

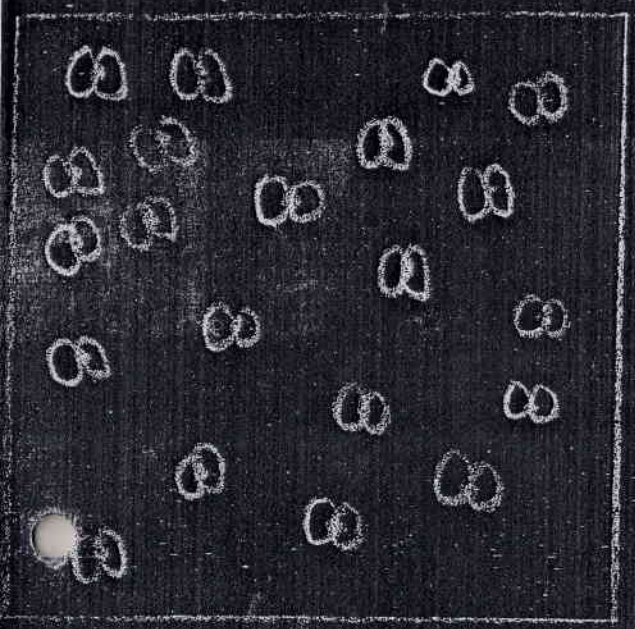
315



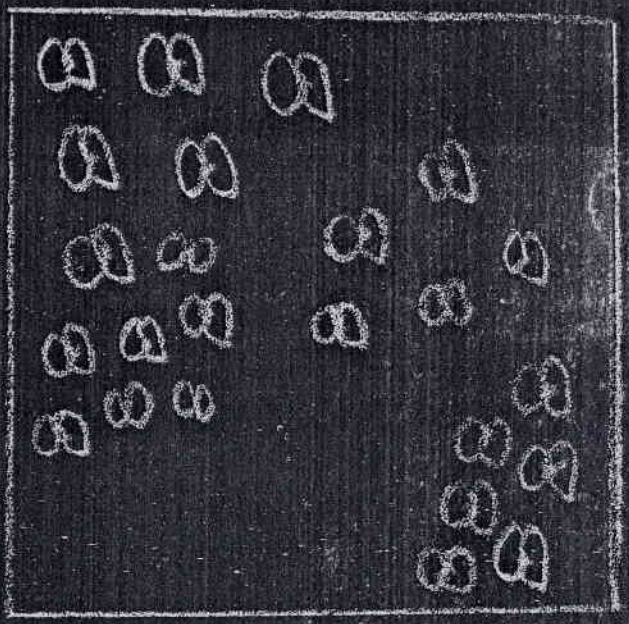
$n_1 = 26$



$n_2 = 16$



$n_3 = 21$



$n_4 = 24$

Average no. of stomata $= \frac{n_1 + n_2 + n_3 + n_4}{4}$

$= \frac{26 + 16 + 21 + 24}{4}$

$= 21.75$

415

Procedure -:

1) Clear the piece of the leaf by boiling with chloral hydrate solution.
2) peel out upper & lower epidermal layer separately by means of Forceps keep it on the slide.
3) Arrange the camera lucida and drawing board For making the drawing of scale. Draw a square of 1mm by means of stage micrometer.
4) place the slide with cleared leaf on the stage. trace the epidermis cell & stomata.
5) Count the number of stomata present in the area of 1 sq.mm. Include the cell if atleast half of its area lies within the square.
6) Record the result For each of the ten Fields & calculate the average number of stomata per sq.mm.

Result - stomatal number of stomata of given sample (hibiscus) was found to be 21.75 per sq mm

Reference - Mayur R. Bhurat, Md. Rageeb, Md. Usman et.al, practical pharmacognosy & phytochemistry-I, peevee publication 2020 edition, punjab, 2020 - pgno. 34-35.

Dr. R.K. khandelwal, practical pharmacognosy techniques & experiments, Nirali publication, twenty-second edition, pune, 2019 pgno. 11.2 & 24.1.

5/5

EXPERIMENT - 12

119

AIM- To perform successive solvent extraction followed by qualitative chemical analysis of extract.

* **RAUWOLFIA :-**

Synonym- Serpentina Root, Sarpagandha, Indian snake root.

Biological source- It consists of dried roots & rhizomes of Rauwolfia serpentina.
Family - Apocynaceae.

Chemical constituents -
Indole alkaloids (0.8 - 1.3 %), Reserpine, Rescinnamine, Ajmaline, serpentine.

Uses - Antihypertensive & tranquilizing agent.

* **PRINCIPLE - (SOXHLET EXTRACTION)**

A soxhlet extractor is a piece of laboratory apparatus invented in 1879 by Franz von Soxhlet. It was originally designed for the extraction of a lipid from a solid material soxhlet extractor consists of round bottom flask holding the menstrum, the extractor of a cylindrical percolator (body) in the middle provided with an attached siphon & a reflux condenser fitted at the top.

V.V. Thakade 1/7
Sub. Teacher

The material to be extracted in from is placed in a thimble (made of filter paper) & then inserted into the extractor. The menstrum is placed in the round bottom flask & boiled. The vapours arising from the flask pass by the side side tube into condenser. The vapours are condensed and drips into body of the extractor as pure menstrum. It percolates through the drug to be extracted dissolving the soluble constituents. As soon as the level of menstrum in the main extractor rises above the siphon bend, the extract is drained out flowing through the siphon into the flask. The process is continuous & can be continued as desired.

During each cycle, a portion of non-volatile compound dissolves in the solvent. After many cycles the desired compound is concentration. After extraction the solvent is removed by means of rotatory evaporator yielding the extracted solid compound. The non-soluble portion of the extracted solid remains in the thimble & is usually discarded.

* EXTRACTION-

PROCEDURE-:

Take 30 gm of Punarnava powder in the pocket

made up of filter paper. Then place this into soxhlet chamber.

2) Assemble the still pot, soxhlet chamber & condenser in proper position & start the heating mantle

3) Add different solvents. The list of solvents to be used for this extraction is;

Polarity Increases.

- n-Hexane.
- ↓
- ethyl acetate
- ↓
- chloroform
- ↓
- Ethanol / menthol.
- ↓
- water.

4) ① 1st extraction -

use water as first solvent for extraction. Add some solvent in soxhlet chamber and still pot After passing 2 cycles, stop the extraction process. Take the solvent from still pot & perform chemical test after concentrating the obtained solvent extract Dry the drug that is used.

② 2nd extraction -

use ethanol for extraction. Add some solvent in soxhlet chamber & still pot. After 2 cycles, stop the extraction process. Take the solvent from still pot & concentrate it &

517

- RESULT-

The successive solvent extraction followed by qualitative chemical analysis of extract was performed.

- REFERENCE-

1) S.S. Khandabadi, S.L. Deore, B.A. Bavishkar, Experimental phytopharmacognosy. A comprehensive guide Nirali prakashan, Pune, 2nd edition, feb 2013, Page No. 31-3.13.

2) R.P. Khandelwal, Vrunda Sethi, Practical pharmacognosy, techniques & experiments, Nirali prakashan pune 25th edition April 2015, Page No. 25.1-25.8.

3) Pulok. K. mukharjee, Quality control of herbal drug, An approch to evaluation of botanicals business horizons, new Delhi-5th edition, 2013, Page No: 275-276, 405-406, 447.

4) S.B. Gokhale, S.R. Patwardhan, K.S. Bedas, Analytical Pharmacognosy & extraction technology Nirali prakashan, Pune 3rd edition. 2018, Page No. 1.27-1.29.

7/7

EXPERIMENT No - 10.

AIM- To perform extraction of piperine from piper nigrum & identify by qualitative tests and TLC.

* **PIPERINE -** Synonym- common piper, Black pepper

Source - It is an alkaloid isolated from fruits of piper nigrum, piper longum.
Family → Piperaceae.

Chemical constituents -
It contains lignans, alkaloids, flavonoids, aromatic compounds & amides. Essential oil (3.5 %) containing sabinene, pinene, phellandrene, linalool & limonene. It also has piperine which is weak basic substance. piperidine, starch (80%), pungent resin (6%).

* EXTRACTION -

Apparatus -
Round bottom flask, Reflux condenser.

Procedure -

1) weigh 25 gm of powder & add ethanol & place it in reflux condenser for 1 hr.
2) extract allowed to cool & filter.
3) Into the above filtrate add 10 % alcoholic KOH solution

V.V. Dhumale
Sub. Teacher.

Calculations -

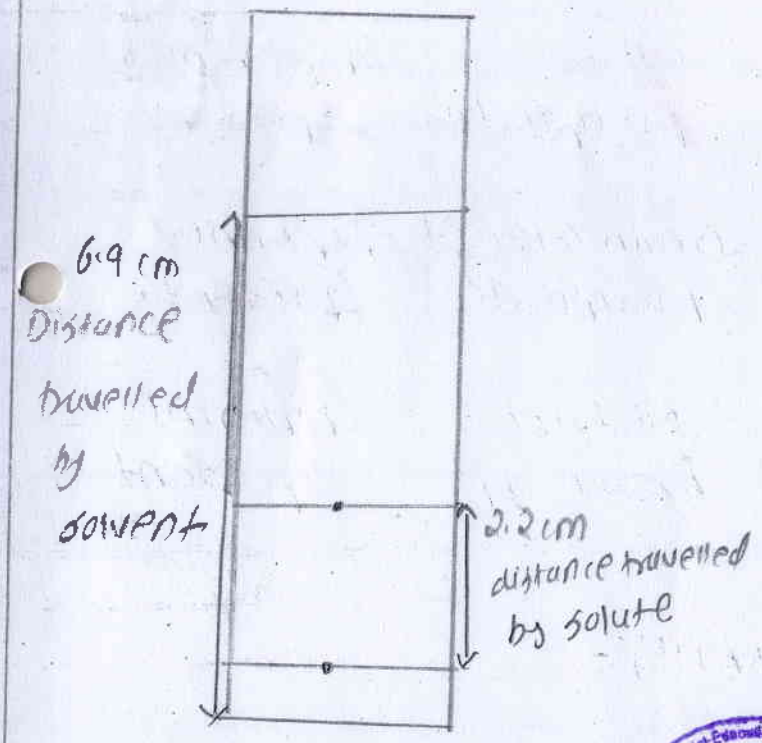
Rf value = $\frac{\text{Distance travelled by solute}}{\text{Distance travelled by solvent}}$

Mobile Phase -

1) Benzene : Ethyl acetate (2:1)

$Rf = \frac{2.0}{6.9}$

$\therefore Rf = 0.28$

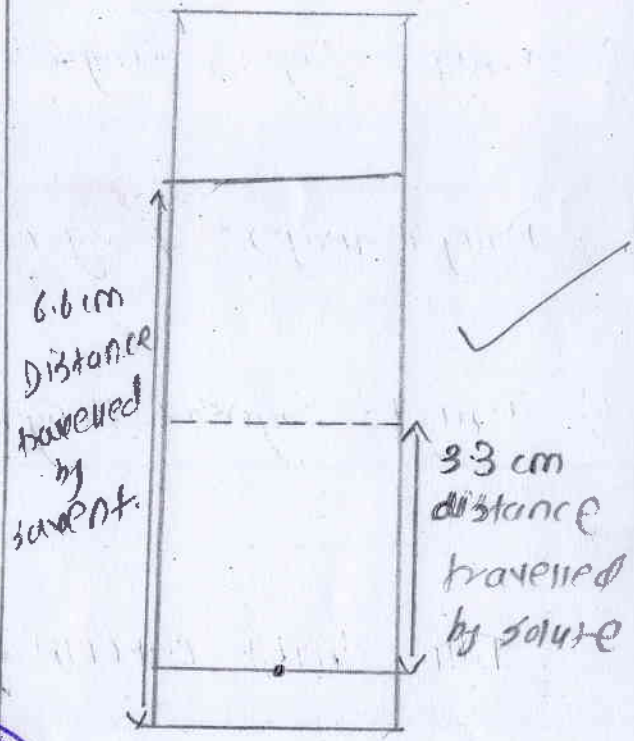


2) Toluene : Diethyl ether : Dioxane.

(9:4 : 3.2 : 2.4)

$Rf = \frac{3.3}{6.6}$

$Rf = 0.50$



Pune District Education Association
SHANKARACHARYA COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE
2009

3/6

* Solvent System-

1) Benzene : Ethyl acetate (2:1).

Detection - At UV_{365} piperine shows blue fluorescence with anisaldehyde sulphuric acid reagent. yellow spot is obtained.

Rf value - 0.25

2) Toluene : Diethyl ether : Dioxane (9.4 : 3.2 : 2.4).

Detection - At UV_{254}, violet spot appear with anisaldehyde : glacial acetic acid : methanol : conc. H_2SO_4 reagent (0.5 : 10 : 85 : 5) : yellow spot appear.

Rf value - 0.48

USES -

It acts as analgesic, antipyretic, CNS depressant, anti inflammatory, anti oxidant, anti-tumour, hepato protective etc.

RESULT -

The extraction of piperine from piper nigrum was performed & the results obtained by TLC are;

5/6

C. Problem Solving Methodologies

4. Assignments

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.

Assignment on Problems for Structure Elucidation

Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)

Class: First Year M. Pharm. Sem-I (2019 P) **Date: 02/02/2022**
Max Marks: 50

Q. 1. Deduce the structure for each compound with justification **[5 Q × 3 Marks]**

1} Molecular formula: $C_6H_{12}O$
PMR: δ = 2.58(septet, 10 mm)
δ = 2.45 (quartet, 20mm)
δ = 1.07 (doublet, 60 mm)
δ = 1.01 (triplet, 30mm)

2} Molecular formula: C_4H_8O
PMR: δ = 1.05 (triplet, 3H), (J= 6 Hz)
δ = 2.05 (singlet, 2 H)
δ = 2.4 (quartet, 3H), (J= 6 Hz)

3} Molecular formula: $C_8H_{10}O$
PMR: δ = 2.2 (singlet, 1 H)
δ = 2.7 (triplet, 2 H),(J= 6.5 Hz)
δ = 3.68 (triplet, 2H), (J= 7 Hz)
δ = 7.2 (multiplet, 5 H)

4} Molecular formula: $C_8H_6O_3$
IR: 1820, 1770 cm^{-1}
PMR: δ = 1.95 (quintet, 10 mm), (J= 6.5 Hz)
δ = 2.7 (triplet, 20mm), (J= 6.5 Hz)

5} Molecular formula: C_3H_6O
IR: No significant peak above 1100 cm^{-1}
PMR: δ = 1.32 (d, 6.5 Hz, 3H)
δ = 2.43 (dd, 3.5 Hz and 2.5 Hz , 1H)
δ = 1.32 (dd, 3.5 Hz and 3Hz , 1H)
δ = 1.32 (ddq, 2.5 , 3 and 6 Hz, 1H)

Q. 2. Numerical problems **[5 Q × 5 Marks]**

1} A compound with molecular macs 112 is transparent in the UV spectrum. In the IR spectrum it shows two bands 2941 cm^{-1} (m) and 1464 cm^{-1} (m). In the NMR it forms a singlet at 8.48 τ . Deduce the Structure of compound.

2} Molecular weight = 100
UV : λ max = 274 mμ , ε max = 2050
IR: 3031 (ν), 2941 (ω). 1725 (s), 1608, 1504(ω), 1060 (s) and 830 cm^{-1} (s)
NMR: Singlet 7.65 τ (3H) , Singlet 6.18 τ (3H)
Unsymmetrical pattern 2.15-2.8 τ (4H).
Deduce the Structure of compound

3} A Volatile compound with molecular mass 130 Contains 73.85% Carbon and 13.85% hydrogen .The Compound is transparent above 210 μm in UV. In it's IR Region, bands are formed at 2960-2851 cm^{-1} , 1342 (ω) and 1075 cm^{-1} (s) . Only one singlet at 8.95 τ is formed in its nmr spectrum. Find the Structural formula of compound.

4} An organic compound with molecular mass 174 Shows absorption in UV regions at 213 nm, ε max 60.In IR absorption bands are formed at 2941-2857 cm^{-1} (m), 1745 cm^{-1} (s) and 1458 cm^{-1} (m).
In NMR the signal observed are,
(1) 5.86 τ Quartet (J= 7.2 cps 10.4 squares)
(2) 7.40 τ singlet (10.8 squares)
(3) 8.73 τ triplet (J= 7.2 cps, 16.0 Squares).
Deduce the Structure of compound

5} An organic compound A ($C_8H_6O_3$)exhibits the following data :
IR 1745 cm^{-1} (s), 1225 cm^{-1} (br, s), 749 cm^{-1} (s), 697 cm^{-1} (s)
UV: λ max at 268 nm, 264 nm 262 nm, 257 nm.
PMR: δ = 1.96 (singlet, 3 H)
δ = 7.22 (singlet, 5 H)
δ = 5.00 (singlet, 2 H)
Deduce the Structure of compound A.

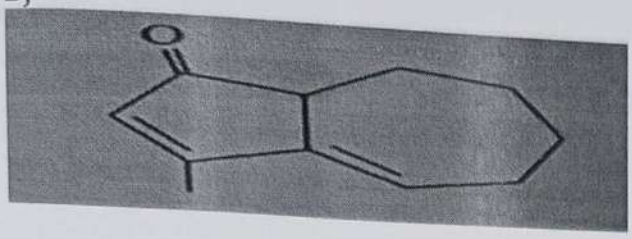
Q. 3. Calculate λ max for given Structure ; **[5 Q × 5 Marks]**

1}

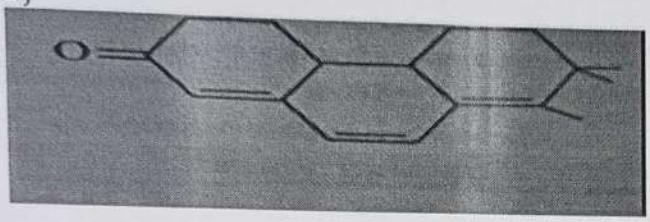


2/3

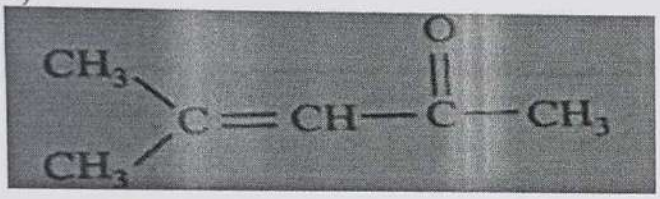
2}



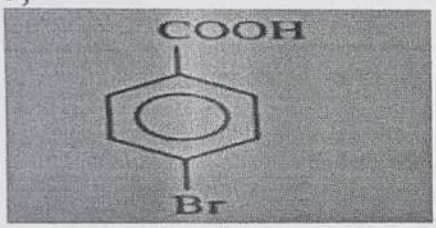
3}



4}



5}



Dr. V. U Barge

--------x----------x---------

Date
Page

Modern Pharmaceutical Analytical tecnniques.

02/02/2022

50/50

[F.Y.Mpharm] [sem 1]

Name -: Riya Bhondve
Rollno -: 04

* Assignment on problems on structure elucidation based on UV, IR, Mass & NMR data *

Q I) Deduce the structure for each compound with justification. (5 Q x 3 M = 15 marks).

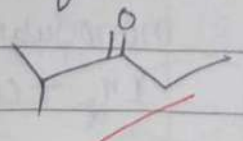
Ans) IHD = (6) - (12/2) + 1 => 1 . Presence of one double bond or Ring

Shift.	Splitting	Integral	# of H	Neighbor & Interpretation
2.58	Septet	1	1H	-CH- in $-\underline{CH}(CH_3)_2$ attached to electronegative or electron withdrawing group
2.45	quartet	2	2H	$-\underline{CH_2}-CH_3$
1.07	doublet	6	6H	$-CH(\underline{CH_3})_2$
1.01	triplet	3	3H	$-CH_2\underline{CH_3}$
	Total	12	12H	$CH + CH_2 + (2 \times CH_3) + CH_3 = C_5H_{12}$

IHD Check : 1 - 0 = 1

Atom check : $C_6H_{12}O - C_5H_{12} = CO$

This can be C=O groups of ketone type, since there is no aldehydic proton shift. This satifies the IHD too.



Ethyl isopropyl Ketone.

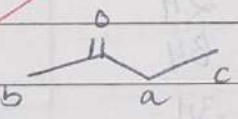
Ans 2) IHD = $4 - (8/2) + 1 = 1$ presence of one double bond or Ring

Shift	Splitting	# of H	Neighbour & Interpretat
2.4	Quartet, J=6Hz	2H	$-CH_2-CH_3$ neighboured by 3 equivalent H
2.1	Singlet	3H	$-CH_3$ attached to ele negative atom
1.1	Triplet J=6Hz	3H	$-CH_2-CH_3$ neighbored by $CH = +CH_3 + CH_3 = 3$
	Total	8H	

IHD check : $1-0=1$

Atom check : $C_4H_8O_2 - C_3H_8 = CO$

The CH_3, CH_3, CH_2 & C=O can be assembled for observed splitting as 2-butanone.



Ans 3) IHD : $(8) - (10/2) + 1 = 4$

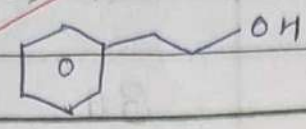
four double bonds & or Rings.

Shift	Splitting	# of H	Neighbour & Interpr
2.2	singlet	1H	$-OH$
2.7	triplet J=6.5Hz	2H	$-CH_2$ in $-CH_2-CH_2$
3.68	triplet J=7Hz	2H	$-CH_2$ in $-CH_2-CH_2$
7.2	multiplet	5H	monosubstituted benzen
		10H	$CH_2 + CH_2 + C_6H_5 + O$ $= C_8H_{10}O$

IHD check : 4-4 = 0 All IHD is used.

Atom check : $C_8H_{10}O - C_8H_{10}O = 0$.

Anemoly of pieces;



Ans 4) IHD = (5) - (6/2) + 1 = 4 Presence of double bond & or Ring.

IR absorption at 1820, 1770 cm^{-1} indicates presence of carbonyl groups.

Shift	Splitting	Integral	# of H	Interpretation
2.75	Triplet	20mm	4	2 CH_2 groups neighboured by CH_2
1.95	Quintet	10mm	2	CH_2 group neighboured by equivalent four H's.

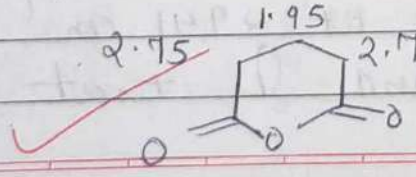
Atom Check : $CH_2 + CH_2 + CH_2 = C_3H_6$.

$C_5H_6O_3 - C_3H_6 = CO_3$

The remaining atoms can be two carbonyl groups & Remaining oxygen is O.

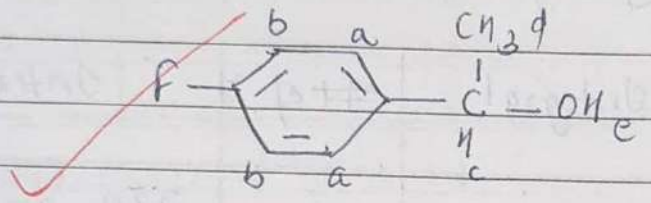
The groups three CH_2, two C=O & O are to be arranged such that, there will be symmetry.

Hence the molecule will be glutaric anhydride



Ans 5) IHD = 8 - (9/2) - (1/2) + 1 = 4 Probably benzene

Shift	Splitting	# of H	Interpretation
1.38	d, 7Hz	3H	$-CH_3$ in $-CH-CH_3$
3.2	S, exch	1H	$-OH$
4.75	q, 7Hz	1H	$-CH$ in $-CH-CH_3$
6.98	dd, 11 & 8Hz	2H	2H on benzene.
7.22	dd, 8, & 3Hz	2H	2H on benzence Para disubstituted



Q II Numerical problems. (5 Q × 5 marks = 25 m)

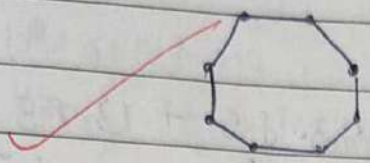
Ans i) mol mass 112.
2941 cm^{-1} (m), 1464 cm^{-1} (m) : IR
NMR : Singlet at 8.48 τ

→ The formation of a suiglet at a high field in NMR spectrum shows that the Compound is Cyclo Alkane.

→ The cycloalkane with molecular mass 112 appears to be cyclooctane.

→ The absorption band at 2941 cm^{-1} is due to C-H stand Q that of at

1464 cm^{-1} is due to C-C str.



12b → In UV spectrum, the abs. band at 271 mμ ε max 2050 may be due to conjugation, acid ester or aromatic Ring substituted with group which cause bathochromic shift.

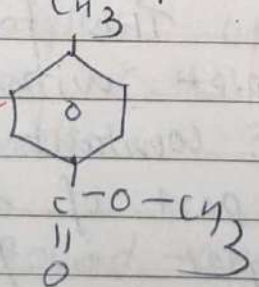
→ In IR the band at 3031 cm^{-1} is due to =C-H stretching or the CH stretching from an aromatic ring while that at 2941 cm^{-1} (w) is the result of C-H stretching from an alkyl group.

→ The band at 1725 cm^{-1} (s) is probably due to C=O stretching

→ The presence of aromatic Ring is also supported by unsymmetrical pattern at 7.15 - 7.8 I in the nmr spectrum.

→ The 4 proton unsymmetrical pattern further reveals that the Ring is disubstituted.

→ The structure of compound;



Ans 3) The compound contains;

C = 73.84%.

H = 13.85%.

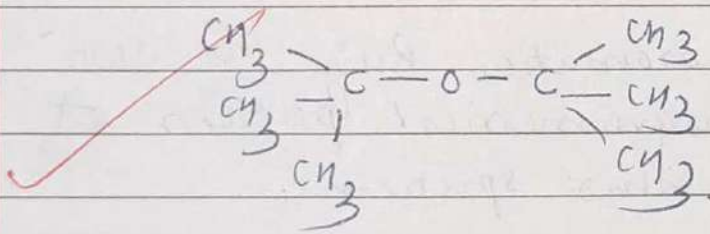
O = 100 − (13.85 + 13.85) = 12.31

from this data, empirical formula is $C_8H_{18}O$

In IR Spectrum, there is characteristic band at 1075 cm^{-1} (S) for an ether (C-O) streching in C-O-C group.

The other bands at 2960 − 2851 (m) & at 134. cm^{-1} (w) are for C-H stretching and C-H bending vibrations.

The appearance of only one singlet at high field 8.95 τ reveals that all alkyl group in comp are in exactly similar environ



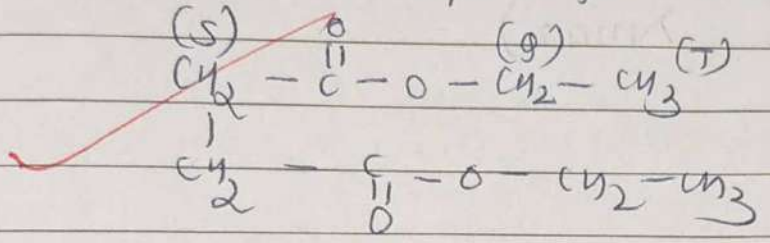
Ans 4)

→ In NMR, the signals are formed in the proton ratio 2:2:3. The formation of a quartet & a triplet with the same value of coupling constant suggests that CH_3-CH_2- is a part of structure. Also a two proton singlet is formed. It

may be due to $-CH_2-$ group in the structure.

In IR spectrum, the information of a strong band at 1745 cm^{-1} shows the presence of an ester. Thus $-COO$ is a part of the structure. Thus CH_3-CH_2-, $-CH_2$ & $-COO$ units amount to 87 mass units.

Probable structure of compound is;



ms5) In PMR, 3 signals are formed with 3 equivalent sets of protons, 3H, 2H & 5H.

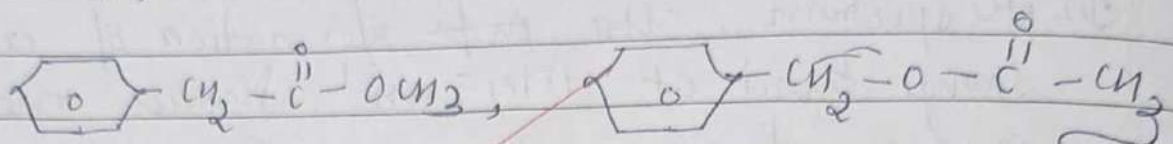
A 3 proton singlet upfield is due to CH_3 group which may be linked to oxygen atom. Also a two proton singlet relative downfield is due to CH_2 directly attached to benzene.

For the aromatic ring, a highly deshielded 5H singlet appears at 7.22 δ.

Substracting C_6H_5, CH_2 & CH_3 units from the molecular formula, COO is left.

The compound appears to be an ester

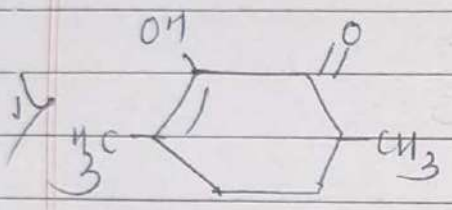
& its probable structural formulae can be writing as;



(I) (II)

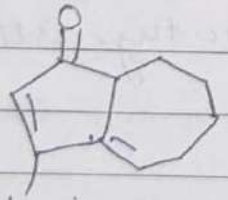
Q III) Problems based on UV (5 Q x 2 M = 10 M)
(Calculate λmax).

1)



basic value = 215 mμ
On substitution at;
α-position = 35 mμ
2 β-substituents = 24 mμ
Calculated value = 274 mμ
Observed value = 275 mμ

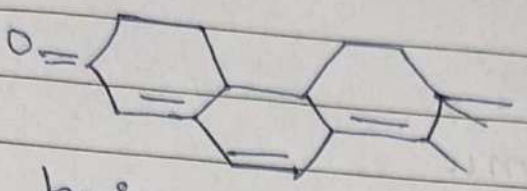
2)



It is an α, β-unsaturated cyclopentenone.
basic value = 202 mμ
1 β-alkyl substitution = 12 mμ
1 exocyclic double bond = 5 mμ
1 double bond extending conjugation = 30 mμ
1 8 ring Residue = 18 mμ
1 δ ring residue = 18 mμ
Calculated value = 285 mμ

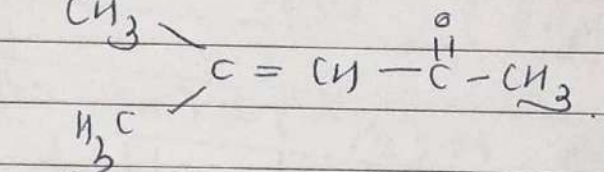
Observed value = 287 mu.

Ans 3)



basic value = 215 mu
1 β Ring Residue = 12 mu
1 (δ+1) Ring Residue = 18 mu
2 (δ+2) Ring Residue = 36 mu
2 double bond extending Conjugation = 60 mu
2 exocyclic double bond = 10 mu
Calculated value = 351 mu
Observed value = 354 mu

Ans 4)



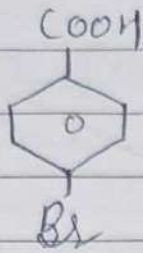
The basic value for acyclic α, β-unsaturated Ketone is 215 mu.

The value of absorption max is thus Calculated,

basic value = 215 mu
2 β alkyl substituted (2×12) = 24 mu
Calculate value = 239 mu

The observed value is found to be 237 mu, Emax 12,500.

Ans 5)



basic value = 230 mu
Br substitution at para = 15 mu
Calculate value = 245 mu
Observed value 245 mu.

—x—x—x—.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune 14

Date: 5/08/2022

Subject: Pharmaceutical Analysis

GPAT TEST

1. The different types of energies associated with a molecule are _____
   a) Electronic energy
   b) Vibrational energy
   c) Rotational energy
   d) All of the mentioned
2. Effect by which absorption maximum is shifted towards longer wavelength
   a) Hypsochromic
   b) hypochromic
   c) Hyperchromic
   d) Bathochromic
3. _____bands originate due to π-π* transition from a compound containing conjugated system.
   a) K band
   b) R Band
   c) B band
   d) E bond
4. The reciprocal of wavelength is called as
   a) Frequency
   b) Wavenumber
   c) Energy
   d) Velocity
5. The energy carried by an electromagnetic radiation is directly proportional to
   a) Frequency
   b) wavelength
   c) Photon
   d) intensity of radiation

6. Ratio of radiant power transmitted by sample to radiant power incident on sample is

a) Absorbance

b) Transmittance

c) Absorptivity

d) molar absorptivity

7. Originate due to electronic transitions in benzoid system

a) K band

b) R Band

c) B band

d) E bond

8. It is the ratio of absorbance to the product of concentration and length of optical path.

a) Absorbance

b) Transmittance

c) Absorptivity

d) molar absorptivity

9. The functional group attached to chromophore altering wavelength of absorption

a) Chromophore

b) Auxochrome

c) Transmittance

d) Absorptivity

10. The plot of absorbance versus wavelength is

a) Calibration curve

b) Spectrum

c) Graph

d) EMR spectrum

(Dr. V.J. Barge)

5/8/22

Practice test

Date: / /20

8/10 seen

TR Raiyje

Roll no - 11
class - Final year

MON TUE WED THU FRI SAT SUN

Que.1. The different types of energies associated with a molecule are

⟹ All of the mention 1

Que.2. Effect by which absorption maximum is shifted to a longer wavelength

⟹ Bathochromic shift 1

Que.3. ——— Bands originate due to $\pi \rightarrow \pi^*$ transition from a compound containing conjugated system

⟹ K band 1

Que.4. The reciprocal of wavelength is called as

⟹ wave number 1

Que.5 The energy carried out by an electromagnetic radiation is directly proportional to

⟹ Intensity of radiation 0

Que.6. Ratio of radiant power transmittence or by sample to radiant power incident on sample

⟹ Transmittance 1

Que.7. Originate due to electronic transition in benzinoid system

⟹ B band 0

Que.8. It is the ratio of absorbance to the product of concentration & length of optical path

⟹ Absorptivity.

Date: / /20

MON TUE WED THU FRI SAT SUN

9) The functional group — chromophore attach to chromophore altering wavelength of
⟹ auxochrome

10) The plot of absorbance vrs wavelength is
⟹ spectrum.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune 14

Date: 5/08/2022

Subject: Pharmaceutical Analysis

GPAT TEST MARKSHEET

Sr. No.	Roll No.	Marks obtained out of 10	Sr. No.	Roll No.	Marks obtained out of 10
1	1	5	33	52	6
2	2	5	34	54	7
3	3	7	35	56	8
4	5	7	36	57	5
5	6	7	37	62	7
6	7	7	38	63	5
7	8	8	39	66	8
8	10	7	40	67	5
9	11	8	41	68	8
10	12	7	42	69	6
11	14	6			
12	18	5			
13	21	9			
14	23	7			
15	27	7			
16	28	7			
17	31	7			
18	32	7			
19	33	6			
20	34	7			
21	35	7			
22	37	7			
23	38	5			
24	40	7			
25	41	5			
26	43	6			
27	44	8			
28	45	8			
29	46	8			
30	48	8			
31	49	7			
32	50	6			

Total No. of students appeared for GPAT Practice Test: 42

Name and signature of Subject Teacher:

Dr. Vijaya U. Barge

Pune District Education Association's

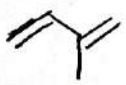
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune 14

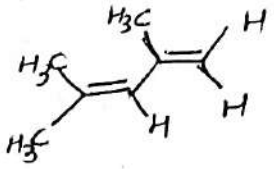
Date: 12.08.2022

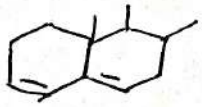
Subject: Pharmaceutical Analysis

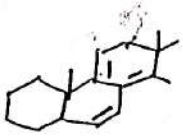
GPAT TEST

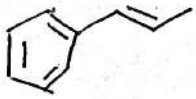
Calculate the λ_{max} for the following compounds.

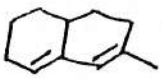
1. 

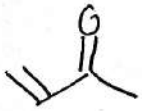
2. 

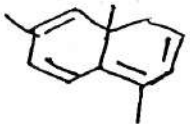
3. 

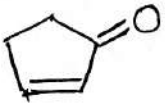
4. 

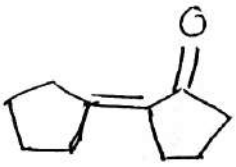
5. 

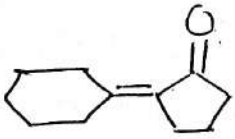
6. 

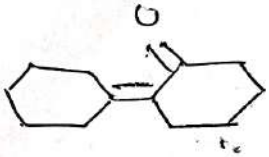
7. 

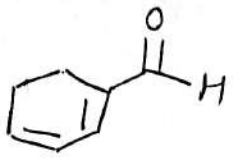
8. 

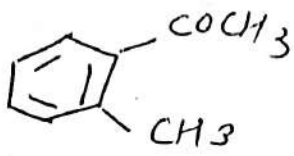
9. 

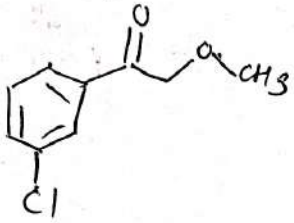
10. 

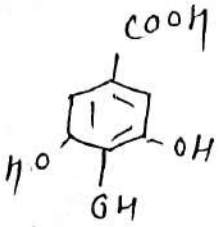
11. 

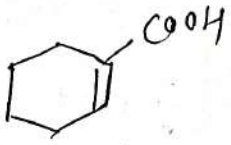
12. 

13. 

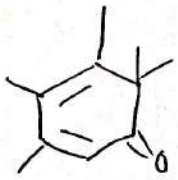
14. 

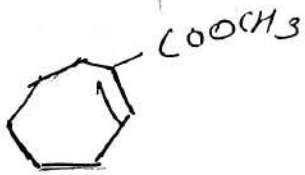
15. 

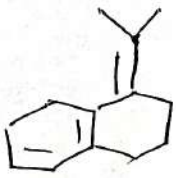
16. 

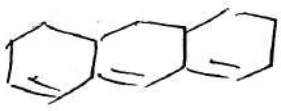
17. 

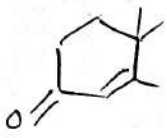
18. 

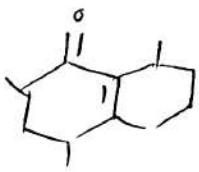
19. 

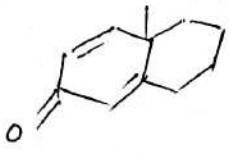
20. 

21. 

22. 

23. 

24. 

25 

Does
(Dr. V.U Barge)

Shivatta seen 12/08/22

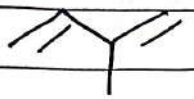
14/25

Pharmaceutical Analysis

GPAT TEST.

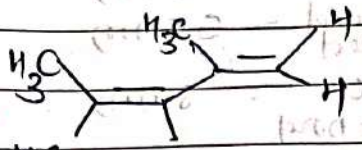
Page No. 27
Date 12 08 22

Q.1



acyclic diene = 215 nm
substitution = 5 nm
220 nm.

Q.2.



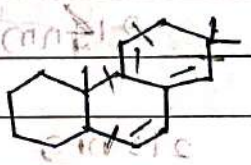
acyclic diene = 215 nm
+ 15
230 nm.

Q.3



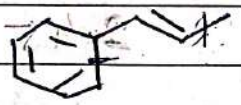
Heteroannular = 215 nm.
Exocyclic double bond = 5 nm
Ring residue = 3 × 5
15 nm
235 nm

Q.4.



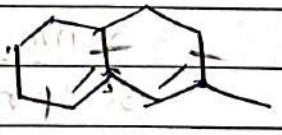
Homoannular = 253 nm
Exocyclic double bond = 10 nm
Ring residue = 4 × 5 = 20 nm
Double bond conjugation = 30 nm
313 nm

Q.5.



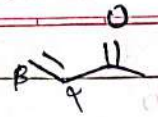
Homoanular = 253 nm
Exocyclic = 0 nm
D.B.E.C = 30 nm
Ring residue = 5 nm
5 nm
298 nm.

Q6.



Heteroanular = 215 nm.
Exocylic. = 5 nm
Doub = 0 nm
Ring residue = 15 nm
Substitution = 5 nm
240 nm

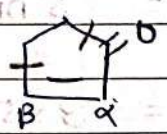
Page No.
Date

Q.7 

Base value = 215nm

Q.8. 

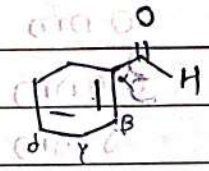
Homoanular = 253nm
Double bond extended = 60nm
Exocyclic double bond = 5nm
Ring residue = 15nm
Substitution = 10nm
343nm

Q.9. 

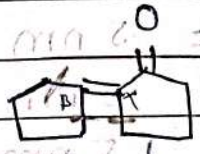
α, β 5 memb = 202nm
Ring residue β = 12nm.
Exocyclic D.B = 5nm
219nm

Q.10 

Heterocyclic = 215nm
Double bond = 30nm
extended
Exocyclic = 10nm.
Ring residue = 4 × 5
= 20nm.
245

Q.13 

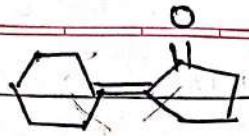
Base value. = 215nm.
Double bond ex = 30nm
Ring residue = α - 10nm
γ = 18nm
Substitution = 35nm.
308nm

Q.10. 

Base value = 215nm
Exocyclic = 10nm
Ring residue = α = 10nm
β = 24nm
259nm

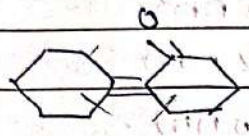
Page No.
Date

Q 11.



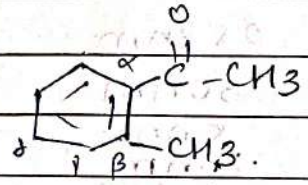
Base value = 215 nm
Double E.C = 0.
Exocyclic = 10 nm
Ring residue : α = 10nm
β = 24nm
259 nm

Q.12.



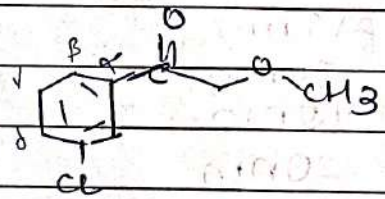
Base value = 215nm.
Double bond = 0nm
Exocylic ex. = 10nm
ring residue : α = 10nm
β = 24nm
259nm

Q.14.



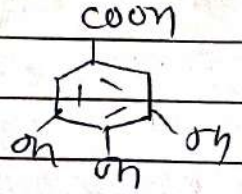
Base value = 215nm
Double bond = 60nm

Q.15.



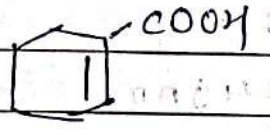
Base value = 215nm
Double ex = 60nm
Exocylie = 0nm
Ring residue = 5nm
Substitution = 6nm
= 5nm
291nm

Q.16.

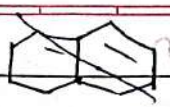


Base value = 269nm.

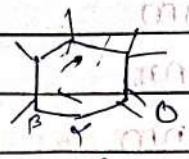
Q.17.



Page No.
Date

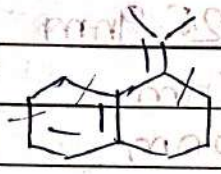
Q.18 

Base value = 253nm
Double bond =

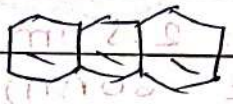
Q.19. 

6/more = 215nm
~~12nm~~
Double ex = 30nm
Ring residue = 18nm
Substitution = 12nm
18nm
18nm
311nm

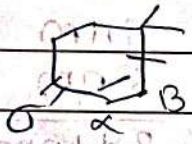
Q.20.

Q.21 

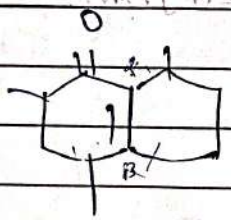
Homoannu = 253nm
D = 30nm
Exo = 5nm
Ring. = 15nm
alkyl = 10nm
318nm

Q.22 

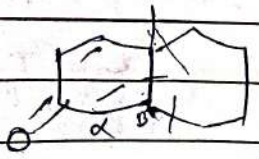
Base value = 215nm
Extend = 30nm
Exocyclic = 10nm
Ring residue = 20nm
275nm

Q.23 

Base = 215nm
Ex = 0
D = 0
Regi. = 12nm
227nm.

Q.24 

base value = 215
Ring residue:
α = 10
β = 24
249nm.

Q.25 

base value = 215nm
Double = 0
Ex = 0
Ring residue = 12
12
241 nm

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune 14

Date: 12/08/2022

Subject: Pharmaceutical Analysis

GPAT TEST MARKSHEET

Sr. No.	Roll No.	Marks obtained out of 25
1	1	8
2	2	9
3	4	8
4	14	14
5	27	14
6	33	13
7	34	13
8	40	12
9	41	12
10	40	12
11	44	14
12	48	14
13	60	13
14	62	12

Total No. of students appeared for GPAT Practice Test: 14

Name and signature of Subject Teacher:

(Dr. V. U. Bagde)

Final Year B. pharm [Semester VII]

Roll No-42 Pharmaceutical Analysis V

I

3/12/2018 Assignment.

[40 marks]. 1

Q1) Discuss theory, instrumentation & quantitation techniques of gas Chromatography. (15M)

Q2) Discuss pumps, Columns & degassing techniques in HPLC (15M)

Q3) Discuss on Principle & Application of SEM & TEM (10M)

Ans 1) Gas-Liquid Chromatography.

In this technique gas is used as mobile phase & the liquid which is immobilized by supporting on some solid matrix is used as stationary phase.

* PRINCIPLE / THEORY:-

For GLC sample should be in vapour form. The vapor of sample is introduced at the head of column. The solutes from mixtures interact with stationary phase by dissolving it. The solutes having greater solubility in stationary phase remain in higher conc in it, whereas solutes having lesser solubility in stationary liq. phase remain in small conc. in it.

14

* INSTRUMENTATION:-

The basic components of GLC are;

1) Carrier gas supply
2) Sample injection system
3) Columns
4) Thermostat
5) Detectors
6) Recorders.

Scanned by PDF Scanner

① Carrier gas supply.

Helium gas is mostly used. The gas supplied is under pressurized condition. Pressure regulator, pressure gauge & flowmeter are provided. 25-30 ml/min is flow rate of carrier gas.

Soap bubble flowmeter → To measure flow meter

② Sample injection system

Sample is injected as a plug of vapor for sharp peak. The sample is injected in heated sample pot on top Column with help of microsyringe.

③ Column

i) Capillary column
ii) Packed column

i) Capillary column

It is Column of stainless steel / copper / nylon / glass. Capil tubing inner diameter is 0.3-0.5 mm. Inner part Coated with thin film (1μm) of liquid stationary

Advantages -: i) No resistance to flow of mobile phase
ii) No pressure drop.

Drawback -: i) low Sample loading capacity.

ii) Packed column

made up of glass / stainless steel / Cu/Al. Internal diameter is 1-8 mm. Column filled with solid support (inert). Pore diameter is 2-9 μm.

Advantages -: i) Sample loading capacity more.

Drawback -: i) Shows Resistance against mobile phase
ii) shows pressure drop

Scanned by PDF Scanner

Date

(4) Thermostat

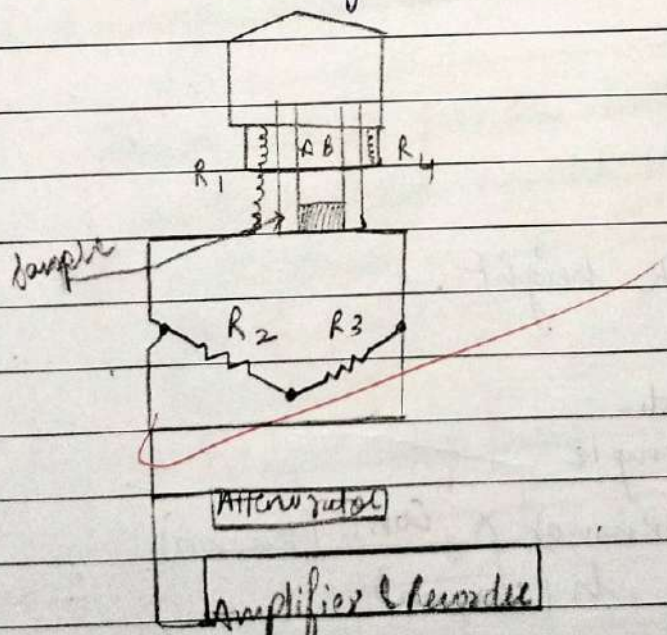
It control temperatures. The change in temp, causes change in retention time.

(5) Detectors.

1) Thermal Conductivity detector
2) Flame ionization detector
3) Electron capture detector
4) ~~X-ray~~

i) Thermal Conductivity ~~detector~~.

Principle —: It is based on change in thermal conductivity of gas phase. Three Resistance in wheatstone bridge. Magnitude of 3 Resistance is constant. The 4th Resistance is varying with temp. This change in current gives the concentration.

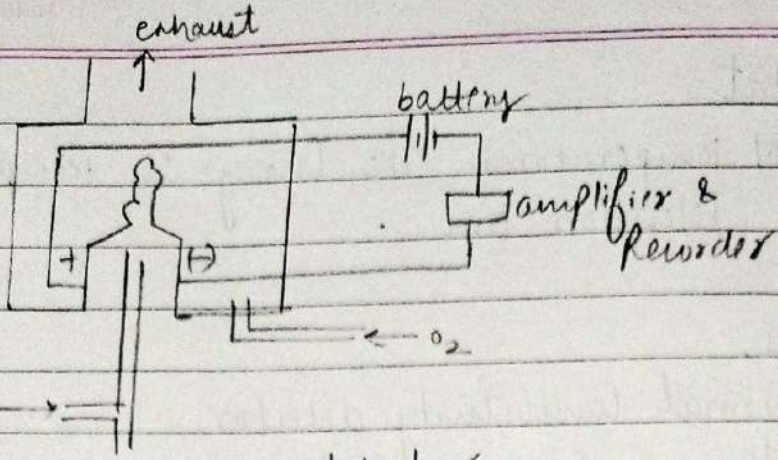


ii) Flame ionization detector

It has its basis by burning of H_2 gas in presence of O_2, flame is produced. 2 electrodes at both sides of flame. Potential difference maintained at 2 electrodes by batteries.

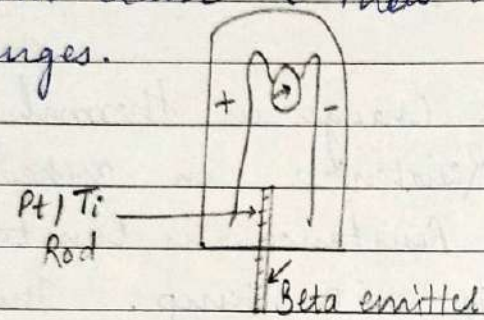
Electric Resistance of flame $= 10^{12}\ \Omega$

Scanned by PDF Scanner



iii) Electron capture detector

A beam of electron generated from electron emitter when elution occurs, the Org. compound captures electron from beam & thus the standing current value changes.



(6) Recorders.

* QUANTITATION TECHNIQUES.

(1) Analysis based on peak height.

Conc ∝ Abs

$$\frac{C_{std}}{C_{sample}} = \frac{A_{std}}{A_{sample}}$$

$$C_{unknown} = \frac{h_{(unknown)} \times Conc_{(known)}}{h_{(known)}}$$

(2) Analysis based on peak Areas.

→ Can be used for assymetric peaks. Independent of band broadening.

$$C_{unk} = \frac{A_{unk} \times Conc. known}{h_{known}}$$

Scanned by PDF Scanner

(3) Area normalization

$\% C_x = \frac{A_n}{\Sigma \text{ all areas}}$ $\% C_z = \frac{A_z}{\Sigma \text{ all areas}}$

$\% C_y = \frac{A_y}{\Sigma \text{ all areas}}$.

(4) Internal standard method

The Resolution time to be different than sample Compound. It must not elute out far away from sample.

Conc $\propto$ height of peak.

(5) External standard method

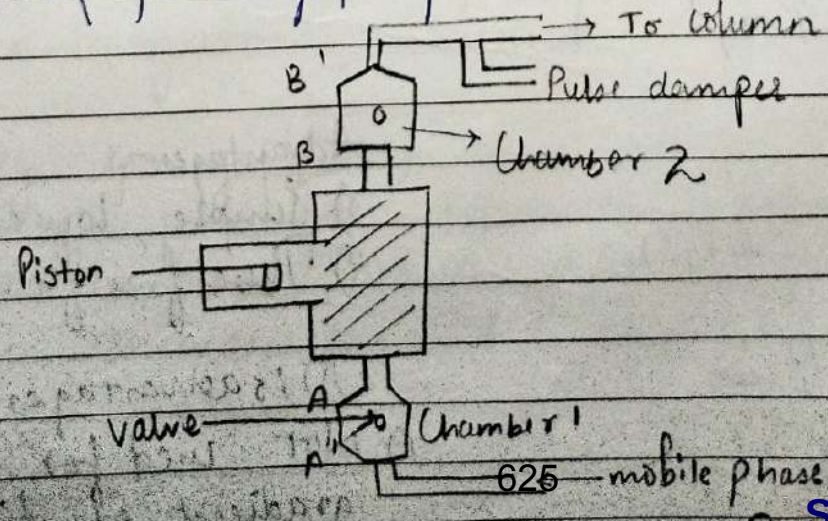
In this procurement of standard is easy.

Ans 4) * Pumps used in HPLC.

Pumps should provide continous flow rate / pulse free flow. The flow rate should be 0.1 - 10 ml/min.

Types of pumps :-

1) Reciprocating pump.



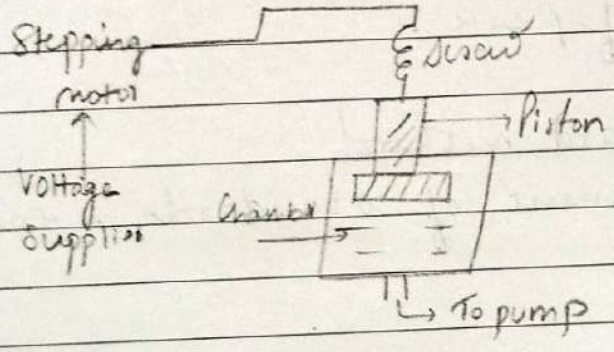
14

Scanned by PDF Scanner

Advantages -:
1) yield high output pressure.
2) Constant flow rate of mobile phase
3) Internal volume of Pump is small.

Disadvantages -:
1) Pulse flow occurs.

2) ~~Syringe type / Displacement type pump~~

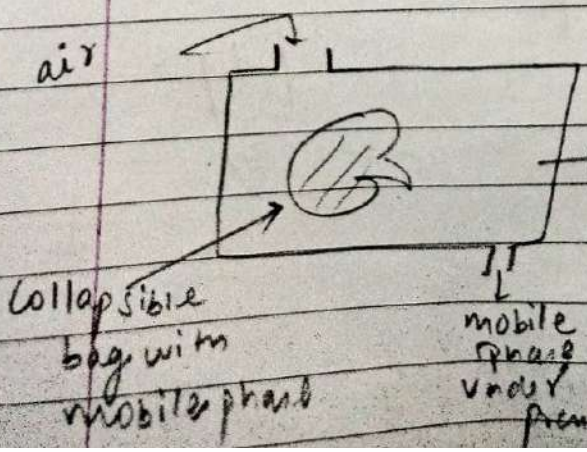


flow rate depends on voltage applied to stepping motor.

Advantages -: 1) Pulse free flow
2) flow rate is independent of back pressure in column & viscosity of mob. phase

Disadvantages -: 1) Not suitable for gradient elution

3) Pneumatic Pump



Advantages -:
1) Simple, low cost
2) Pulse free flow

Disadvantages -:
1) Not used for gradient elution

Scanned by PDF Scanner

The compressed air pressure, squeezes the collapsible bag & lets the flow of mobile phase out of Container.

* Columns in HPLC

→ Glass column for low pressure use (upto 1000 psi)
→ Stainless steel column for high pressure use (2000 - 6000 psi)
→ length of column → 15-150 cm
→ Inner diameter → 2-3 mm
→ Stationary phase particle size → 5-10 um

* Degassing techniques

1) By filtration under vaccum :-
millipore filter used, vaccum used to remove air / O_2 from mobile phase.

2) By distillation of mobile phase :-
Distil the mobile phase under vaccum so it gets free from O_2 / air

3) Ultrasonication :-
mobile phase is placed under ultrasonic bath. Due to agitation, dissolved air / O_2 gets removed.

4) By sparing (flush) an inert gas of low Solubility gas like Ar, Helium are flushed into mobile phase, bubbling occurs (gas flushing) & this removes dissolved O_2 / N_2.

Scanned by PDF Scanner

Ans 3) Principle of SEM

When primary electron beam incidents on sample various signals are emitted. These signal includes secondary electrons, auger electrons, BSE, X-rays transmitted electron. The secondary electron will have some energy thus they are absorbed by sample. The electrons emitted at top of surface are useful to observe the topography of sample surface. The shallow dept of production of detected secondary electrons make them ideal for examining topography. Some electrons get scattered in specimen in an elastic fashion with no loss of energy. These electrons are backscattered electrons. BSE can be used to generate an image in microscope that shows the diff. elements present in sample

Applications -:

1) They are useful for Characterization of solid material wherever it is involved.
2) SEM provides topographical, morphological, compositional & crystallographic information of materials
3) SEM is useful in determining spatial variations in chemical compositions
4) SEM is useful in determining the crystalline structure of compounds.
5) SEM acts as a research tool in field of life science, biology, gemology, medical & forensic science & metallurgy.

Scanned by PDF Scanner

Principle of TEM

TEM uses high energy electrons (upto 300 KV) of very short wavelength, emitted from a tungsten filament which are accelerated to nearly the speed of light. when a electron beam passes through a thin section specimen of material, which is placed in the vacuum, electrons are scattered. Electro-magnetic lenses focuss the scattered electrons into an image or a diffraction pattern depending on mode of operation. Each of these modes offer a different insight about the specimen. The diffraction mode displayes accurate info about local crystal structure. The nano analytical modes reveal which elements are present in the tiny volume of material.

10

Applications

1) The topographical, morphological, compositional & crystalline info can be obtained by TEM.
2) TEM are useful in study of crystals & metals.
3) TEM is useful in semiconductor analysis
4) TEM can be used as a tool in production of flaws, fractures & damages to microsized objects thus helpful in providing good quality products.
5) TEM are an important tool for research activities carried out in both industries & academics

—x—x—x—

Scanned by PDF Scanner

Final year B. Pharm Sem 8 Roll no - 65

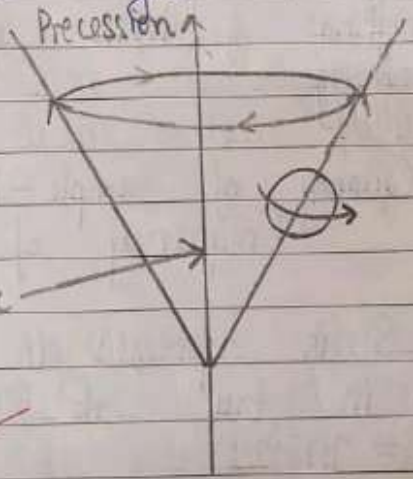
23/4/2019 Pharmaceutical Analysis VI 28/30

Term 2 [Test] Seen Marathe

Q1) Discuss throughly principle of NMR spectroscopy? [5m]
Q2) What do you mean by chemical shift & elaborate on scales of measurement of chemical scale? [5m]
Q3) Give an exhaustive account on spin-spin coupling? [5m]
Q4) Write a note on coupling constant? [5m]
Q5) Discuss double resonance in NMR? [5m]
Q6) Add a note of C_{13} NMR spectroscopy? [5m]

Ans-1) Principle:-

An atom consists of nucleus at the center and electrons revolve around it in well defined orbits. The nucleus contains protons and neutrons. Nuclei have spin i.e they rotate about an axis & and nuclei with odd number of protons or neutrons posses angular momentum.



4

Gyrating motion

Spinning charged nucleus creates a tiny magnetic field. The magnetic moment is directly proportional to angular momentum.

$\mu \propto p$

$\mu = \gamma p$

For each nucleus which has spin, number of allowed spin states is described by a physical constant called nuclear spin quantum number. It can take values as integer, half integer or zero depending on atomic number

and atomic mass. Number of allowed spin states governed by formula

$2I+1 \neq 0$

Only nuclei with non zero ($I \neq 0$) are NMR active.

Ans-2) Chemical shift:-

The shift in the position of NMR signals resulting from shielding or deshielding by electrons is termed as chemical shift. The position of signals in NMR spectrum relative to reference peak is expressed as delta value. Chemical shifts arise from the secondary magnetic fields produced by circulation of electrons in a molecule. These total diamagnetic currents are induced by fixed magnetic field and may increase or decrease the magnetic field experienced by the proton. This leads to shifting of NMR signal downfield or upfield respectively.

$$\delta = \frac{\text{Frequency of sample} - \text{Frequency of reference}}{\text{Frequency of reference}} \times 10^6$$

δ is expressed in ppm. Chemical shift is also expressed in tau scale.

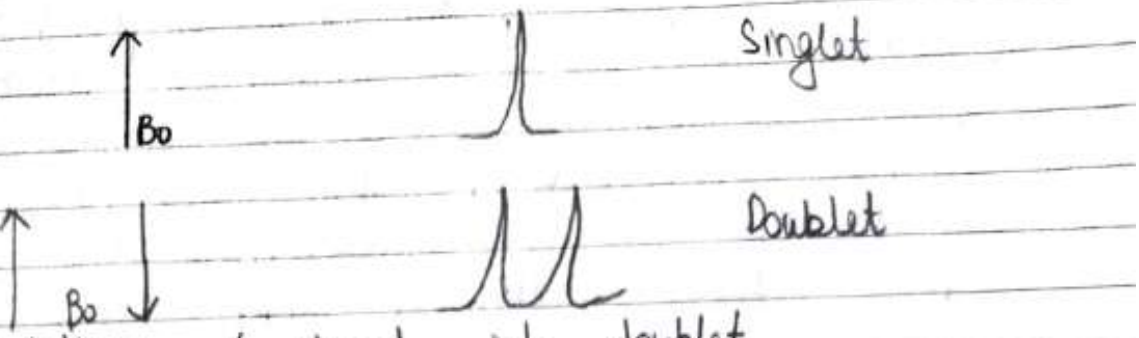
$$\tau = 10 - \delta$$

Ans-3) Spin-spin coupling:-

Interaction of magnetic moments of adjacent nuclei leads to splitting of NMR signal. The coupling of protons on adjacent carbon atom takes place through bonds rather than through space.

Doublet:-

One adjacent proton splits the NMR signal into a doublet.



Splitting of signal into doublet

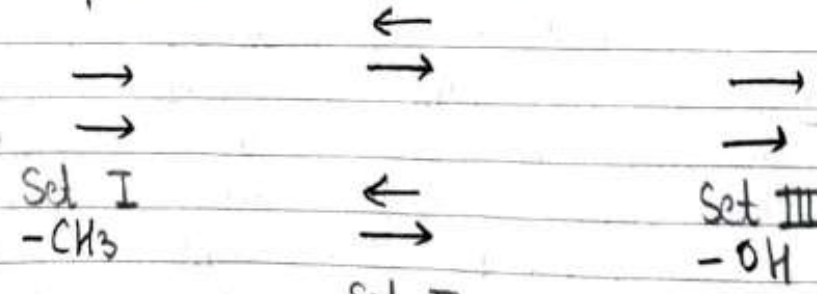
In the compound $Br-CH_2-CH-Br_2$, signal of the protons in CH_2 group splits as a doublet due to presence of one proton on neighbouring carbon. When placed in an applied electric field, the adjacent proton can be aligned with or against magnetic field.

Thus, the absorbing CH_2 protons feel 2 slightly different magnetic fields - one slightly larger than Bo, while the other slightly smaller than Bo

Since the absorbing protons feel 2 magnetic fields, they absorb 2 different frequencies in the NMR spectrum, thus splitting absorption signal into doublet.

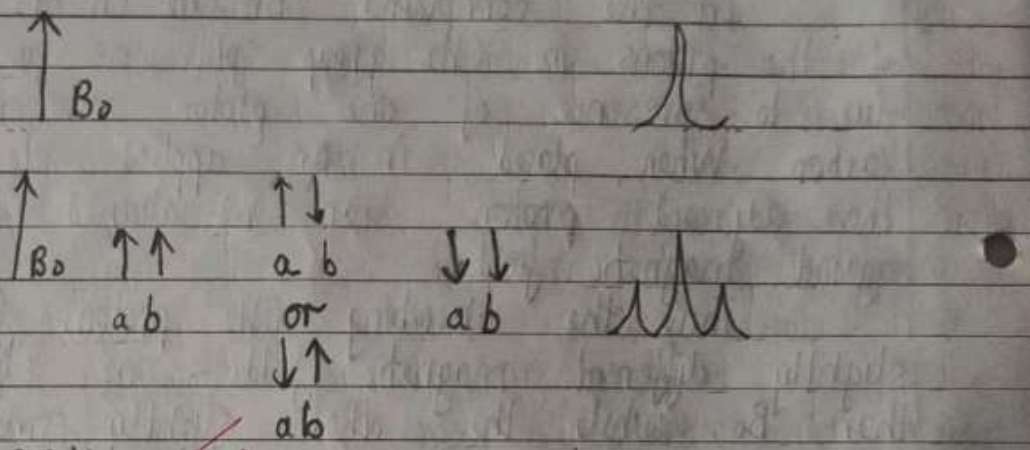
Triplet:-

In CH_3-CH_2-OH, let's consider $-CH_3$ protons as set I, $-CH_2-$ protons as set II, and $-OH$ protons as set III.



In the first state, both the spins are aligned against the external field thus magnetic field felt by neighbouring $-CH_3$ protons will be less. The signal will shift upfield. But third spin state has

both the spins aligned with external magnetic field leading to increased effect experienced by adjacent $-CH_3$ protons. Thus, signal will shift downfield. The effect of second spin state will be twice that of state one and set three. Thus, the area under the middle peak of triplet will be twice that of other two. The ratio is 1:2:1 for a triplet.



Splitting of signal into triplet

Similarly, $-CH_3$ protons will split the signal of protons on adjacent carbon into quartet by n+1 rule. The relative intensities in a quartet will be 1:3:3:1.

Singlet:-

The signal for -OH proton appears as a singlet and not a triplet. Because, -OH protons are exchangeable protons. Exchange of -OH protons among alcohol molecules is catalysed by acids, bases and other impurities commonly found in alcohols. The frequency of exchange is high and hence such protons are unable to couple with protons on neighbouring atoms. Hence -OH protons give singlet. But if highly purified alcohol is used, -OH protons give triplet.

Ans-9) Coupling constant:-

When a signal in NMR gets split into a multiplet due to the phenomenon of

spin spin coupling, it may be noted that the distance between peaks within a multiplet is constant for coupled peaks. The spacing between the peaks is the same for both coupling protons.

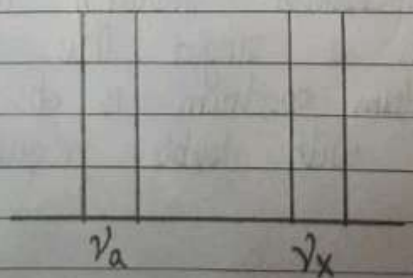
This distance is called as coupling constant. It is a measure of magnitude of splitting effects. It is denoted by J. It is expressed in Hz, and is a measure of interaction between a pair of electrons

~~J_{Hz} = Distance between lines (ppm) X Instrument frequency (MHz)~~

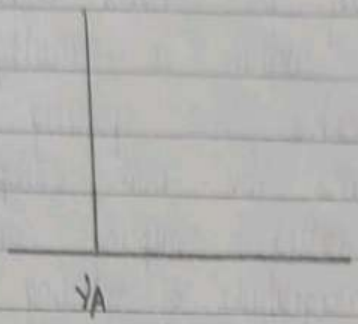
J_{Hz} = Distance between lines (ppm) × Instrument frequency (MHz)

Ans-5) Double resonance:-

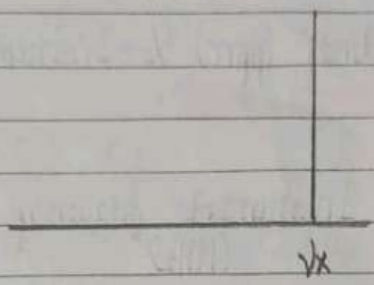
In the nuclear magnetic double resonance technique, a nucleus is subjected to 2 radiofrequencies, 1 is called an applied frequency and the other 1 is called an irradiation frequency. For an AX system, if a constant magnetic field B_o is applied, then the proton H_A precesses with the frequency ν_A and the proton H_X precesses with the frequency ν_X. In the normal spectrum, 2 doublets are seen for both these protons when the sample is exposed to a mixture of radiofrequencies and the resonance is obtained for the match of ν_A and ν_X, seperately.



A normal spectrum for AX system



Double irradiation of Hx



Double irradiation of H_A

In the double resonance technique, apart from the RF, the molecule is irradiated with a 2nd RF signal ν_x, which corresponds to the precessional frequency of Hx. When this RF is applied, the proton Hx flips and undergoes rapid changes in its spin state. Under this condition, the neighbouring proton H_A, is aware of only 1 equivalent spin state of Hx and therefore, H_A shows only a singlet. Thus, the double irradiation of Hx effectively decouples the signal from H_A. Similarly, if the proton H_A is irradiated with a 2nd frequency ν_A, which matches with its precessional frequency, the signal for Hx appears as a singlet. Thus, the simplicity in the ~~spectrum~~ spectrum is observed after irradiating the nucleus with double frequencies.

Ans-6) C_{13} NMR spectroscopy:-

The ~~prin~~ principle of C_{13} NMR is exactly that of H_1 NMR. C_{13} has a very low natural abundance of 1.1%. C_{12} is not NMR

active. The gyromagnetic ratio is also 1/4 th that of H_1. Hence C_{13} is a weaker technique. At magnetic field strength of 1.9T, H_1 resonates at 80MHz and C_{13} at 20MHz. More quantity of sample is required than for H_1 experiment.

The number of signals is equal to type of carbon atoms. It is used to study backbone of a molecule. The multiplicity is decided by number of protons attached directly to C_{13} of interest, and not the protons on the neighbouring C_{13}. CH_3 will be a quartet and CH_2 will be a triplet. $C_{13}-C_{13}$ splitting is not observed. The chemical shift values are spread over a wide range of 0-220ppm. Well resolved signals are obtained that are easier to interpret than H_1 signals.

Formulae are available to predict chemical shift of C_{13} in a molecule based on the neighbouring C_{13} in chain. Off-resonance decoupling of DEPT are the techniques used or determining type of C_{13} atom ie methyl or methylene carbon

Date
Page

Aditi R. Beldar
Drug Delivery System.
Roll No :- 02.
12/02/2022.

08/10

Q.1 Describe about various barrier for protein delivery.

→ Barrier to protein drug delivery :-

1. Enzymatic Barrier.
2. Intestinal Epithelial Barrier.
3. Capillary Endothelial Barrier.
4. Blood Brain Barrier.

1. Enzymatic Barrier

Peptids and proteins are usually susceptible to degradation not only in the liver, but also at the site of administration in the blood, kidney, vascular endothelia.

1. The protection of peptides and proteins against degradation in more than one anatomical site is necessary in order to maximise their anatomical bioavailability.
2. The plasma half-life of peptides and proteins is short. Due to rapid clearance of substance by liver and kidney. The kidney play imp. role in clearing peptides and proteins with less molecular weight (50,000) by glomerular filtration followed by digestion. The clearance of peptids & proteins by liver has been found to occur in both parenchymal and non-parenchymal cells both

which are capable of degrading peptids and proteins. Peptids and proteins can be altered in liver by chemical modification.

2. Intestinal Epithelial Barrier

→ The intestinal epithelium is a single cell layer that forms the luminal surface of both small and large intestine of GIT composed of simple columnar epithelial cells supported by lamina propria and muscular mucosa. Molecules cross the epithelium by either transcellular or paracellular routes.

1. Epithelial barrier is the mucosal layer, which contains glycocalyx, a layer of sulfated mucopolysaccharides, glyco-proteins, enzymes, electrolytes and water.
2. The cells of epithelial layer are joined together by tight junction thus forming a contiguous and relatively impermeable membrane.
3. The tight junction is the primary determinant of paracellular permeability. Tight junctions are the most important components of epithelium for the barrier function.
4. The tight junction barrier exhibits both size and charge selectively.

4. Blood Brain Barrier

The Capillary membrane between the plasma and brain cells are much less permeable to water-soluble drugs than the membrane between plasma and other tissue.

Only drugs that have a high lipid-water partition coefficient can penetrate the tightly apposed Capillary endothelial cells.

1. The BBB is formed mainly by the tight brain endothelium, which is surrounded by basal lamina and regulated by other cells in neurovascular unit.
2. The BBB is a physical, metabolic and transport barrier that tightly controls the transport of substance from blood to neural tissue.
3. BBB is the main gateway to the brain as it grants access to necessary ions, nutrients.
4. BBB shuttles peptides capable of increasing the brain uptake of large cargoes in a non-selective way belong mainly to the cell-penetrating peptides family.

Q2 Describe in detail various approaches by which gastric transit of dosage forms can be delayed.

→ The stomach anatomy and physiology contains parameters controlling gastrointestinal transit time for example drugs like → anticholinergic agent and prokinetic agent.

1. Particle size.

→ The size should be in range of 1-2 mm to pass through pyloric valves into small intestine.

2. Density of Dosage form

→ Dosage forms having a density lower than the gastric contents can float to the surface, while high density system sink to bottom of stomach.

3. Shape and Size of the dosage form.

→ Shape and size of the dosage forms are important in designing indigestible single unit solid dosage forms. It is greatly dependent on their size.

4. Single Unit and Multiple Unit.

5. Food Intake and its Nature.

→ Food intake, viscosity and volume of food caloric value and frequency of food intake.
The drug absorption increases by allowing its stay at absorption time

mentioned above were some of the factors.

→ Floating system includes effervescent system

Adhesion ← GRDDS → Swelling of to stomach ↓ dosage form.
wall. Sedimentation
of pellets.

1. Floating Drug Delivery system.
→ Delivery system is desirable for drugs with an absorption window in the stomach or upper small intestine.
The major requirement for floating Drug Delivery system.

→ It should release contents slowly to serve as a reservoir.
→ It must maintain specific gravity lower than gastric content.

→ It must form a cohesive gel barrier.

micro particles based on low density foam powder, beads prepared by emulsion gelatin method.

Based on mechanism of buoyancy two distinctly different technologies

- Non-effervescent
- effervescent -

(4)

Sonali
Sem

Assignments [Pharmaceutical microbiology]

Name -: Sonali Ghule
Class -: S.Y. B pharm
Rollno -: 16
Date -: 12/8/2021

09/10

Q1) Explain different branches of microbiology
Q2) Explain moist heat sterilization ~~of~~ in detail

Q1. Explain different branches of Microbiology.

→ General microbiology is classified into 3 main branches which are as follows;

Microbiology

- By taxonomy
- By type of Research
- Applied microbiology.

(A) By taxonomy ⇒

1) Bacteriology: It is the study of bacteria

2) Immunology: It is the study of immune system.

3) Mycology: It is the study of fungi such as yeasts.

4) Nematology: It is the study of Nematodes.

5) Parasitology: It is the study of parasites.

Q2y Explain moist heat sterilization in detail.

→ Principle —: Moist heat is more efficient for sterilization in contrast to dry heat, it destroys microorganisms by the irreversible denaturation of enzymes & structural proteins. The temperature at which denaturation occurs varies inversely with the amount of water present.

There are three types of temperatures are used in this technique:

At temperature below 100°C
- Pasteurization —: food industry
- Vaginal bath —: Vacuum Sterilization
- Serum bath —: Serum contaminants, does not kill spore
- Inspissation —: Egg & Serum containing media, can kill Spores.

At temperature 100°C
- Boiling: Boiling Water (100°C)
- Tyndallization: (100°C)

At temperature above 100°C
- Autoclave.

* Pasteurization => This process was first discovered by Louis pasteur. It is the process for heating liquids for the purpose of destroying viruses & harmful organisms such as bacteria, molds etc.

eg: vegetative bacteria are killed immediately at 90 - 100°C.

Steam at 100°C :-
It is an inexpensive method of utilizing free steam to sterilize culture medium. In this method, container & the medium are simultaneously sterilized.

* Tyndallization :-
It is also known as intermittent sterilization. It helps first exposure to kills all bacteria & spores. It is used for media with sugar or gelatin which require 100°C for 20 min on 3 successive days.

* Autoclave :-
It is also known as steam under pressure.

Advantages =>
1) It is Rapid & effective
2) It destroys microorganisms more efficiently than dry heat & therefore a shorter exposure at a lower temperature.
3) It can be used for a large propotion of the official injections.

Disadvantages =>
1) Items sensitive to heat cannot be sterilized.
2) It is unsuitable for anhydrous materials such as powders & oils

Seen Sachin

Assignment

Date: 15/01/2022

Name: Chavan Sachin
Class: I st B.Pharm
Roll No.→09

08/10

Q.1. Give Methods of preparation of Suspension.

→ Suspension:

Suspensions are important pharmaceutical dosage forms widely in use today. They are dispersions of solids in liquids.

A pharmaceutical suspension is a coarse dispersion in which internal phase consists of insoluble solid particles of specific range of size in dispersed uniformly throughout the external aqueous or organic or oily liquid phase with aid of single or combination of suspending agent.

Methods of Suspension Preparation:

The methods of preparing pharmaceutical suspensions are categorized as follows:

1. General Methods
   a) Precipitation Method
      i) Organic Solvent Preparation
      ii) Precipitation effected by changing the pH
      iii) Double decomposition
   b) Dispersion Method
      i) Small Scale : Using Colloidal Mill
      ii) Large Scale : Using Mortar & Pestle

2. Extemporaneous method
   i) From dry powders & granules for reconstith
   ii) From Oral Solid dosage form

3. Mechanism involved
   i) Controlled Flocculation
   ii) Structured vehicle

(1) Precipitation Method

Three precipitation methods are used:

a) Organic Solvent precipitation:
- Water insoluble drugs can be precipitated by dissolving them in coater-miscible organic solvent & then adding organic phase to distilled coater under standard conditions.
- Organic Solvents used are ethanol, methanol, propylene glycol & polyethylene glycol.

b) Precipitation by pH:
- The method of changing of the pH of medium is more readily accomplished & does not present the same difficulties associated with organic solvent precipitation.
- Example: Estradiol Suspension & Insulin Suspension

c) Double Decomposition:
- This method involves simple chemistry
- Example: White Lotion (NF XIII)

② Dispersion Method:
- In this method, the vehicle must be formulated so that solid phase is easily wetted & dispersed.
- The use of surfactant is desirable to ensure uniform wetting of hydrophobic solid.
- The use of suspending agent such as synthetic polymers, natural gums & others.

③ Use of Controlled Flocculation:
- Controlled flocculation of particles is obtained by adding flocculating agents, which are:
  a) Electrolytes
  b) Surfactants
  c) Polymers

④ Use of Structured Vehicles:
- Structured vehicles called also thickening or suspending agents.
- They are aq. soln. of natural & synthetic gums.
- These are used to increase the viscocity of suspension.
- These structured vehicles entrapped the particle & reduces the sedimentation of particles.
- Thus, the use of deflocculated agent in a structure vehicle may form solid hard cake upon long storage.

OH

Q.2. ② Explain different identification tests for emulsion.

→ Following are the identification test for emulsions:

① Dilution test
② Dye test
③ Conductivity test
④ Flourescence test

① Dilution Test:
- The emulsion can identify on the basis of dilution test
- Emulsion is diluted with water/oil.
- O/W emulsion easily diluted with water.
- W/O emulsion easily diluted with oil.

② Dye Test:
- When an emulsion is mixed with a oil soluble dye such as scarlet red dye & observed under the microscope.
- If continuous phase shows red colour & dispersed globules shows colorless means W/O type of emulsion.

③ - If the dispersed globules shows red color & continuous phase colorless, means O/W type of emulsion.

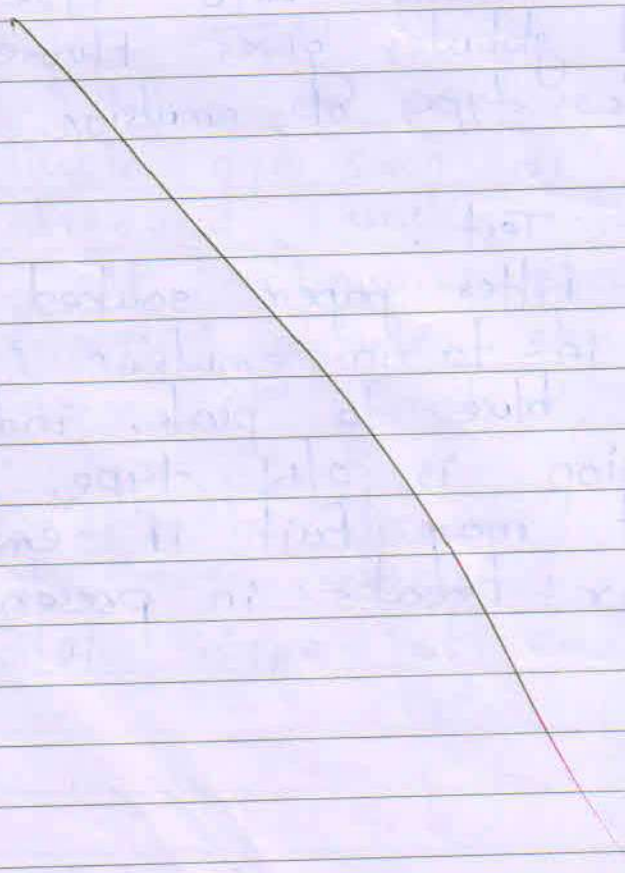
③ Conductivity Test:
- Water is good conductor of electricity but oil is not.
- This test perform by dipping pair of electrode connected by a bulb in emulsion.
- If the bulb glow that means O/W type of emulsion.
- If not glow that means W/O type of emulsion.

④ Fluroscence Test:
- Certain fixed oil has property of fluroescing in presence of UV radiation on microscopic observation.
- If emulsion's continuous phase give fluorescence that means w/o type of emulsion
- If dispersed globules gives fluorescence that means o/w type of emulsion.

⑤ Cobalt Chloride Test:
- When a filter paper soaked in cocl2 soln is dipped in to an emulsion & dried, it turns from blue to pink, indicating that the emulsion is o/w type.
- This test may fail if emulsion is unstable or breaks in presence of electrolyte.

⑥ Refractive Index measurement:

- RI measurement is a unique way of identifying emulsion.
- Consider a beam of light is transmitted through o/o emulsion.
- When a oil phase & water phase have equal RI values, light will not blend as it strikes obliquely at the emulsion interface.
- Instead, light is transmitted through the emulsion without refraction which produces clarity.
- This test is mostly used to identify micro or nano emulsions.



PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE - 14.

Assignment: – I

Subject: - Industrial Pharmacy - I

Class: - Third Year B. Pharmacy **Time: -1 Hr.**

Date: - 02.12.2022 **Max. Marks: - 20**

7. **Note: All questions are compulsory.**
8. **Figures to right indicate full marks.**
9. **Draw the well labeled structures wherever necessary.**

Q.1) Answer the following questions (Any - 4) **(4Qx5M=20)**

1. Describe formulation of parenterals.
2. Give evaluation of parenterals.
3. Write a note on formulation of Tablet.
4. Explain evaluation of Tablet.
5. Describe formulation of Ophthalmic.

Miss T. P Shanegapalle

1/1

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI, PUNE-14.

List of Students with Marks

Assignment – 2.12.2022

Third Year B. Pharm

Academic Year 2022-2023

S. No	Name of the Student	Marks out of 20
1.	Atole Akanksha	15
2.	Badhe Payal Santosh	13
3.	Bavdhane Nilam H	18
4.	Bhosale Gitanjali Pandurang	
5.	Bochare Shrinath Rangnath	15
6.	Bohra Sayam Sunil	
7.	Choudhari Abhijeet Shivlal	
8.	Choudhary Yogesh K	
9.	Dhale Rushikesh Krishna	
10.	Dhumal Siddhant Vikas	
11.	Doke Shubham Dadabhau	
12.	Dolare Sakshi Popat	
13.	Dombe Akshada Nilkant	
14.	Dorage Shreya Dattatray	16
15.	Dumbre Jagruti Sandeep	
16.	Gaikwad Nikita Nana	15
17.	Gaikwad Utkarsh Ramesh	16
18.	Ghavate Siddhi Ashok	15
19.	Ghule Sonali Balasaheb	16
20.	Ghule Vaibhavi Dattatray	15
21.	Girase Pallavi Mahendra	15
22.	Gosavi Subhash Santosh	16
23.	Gund Rutuja Santosh	15
24.	Hambir Utkarsha Gulabrao	12
25.	Hole Shubham Mahadev	16
26.	Holkar Nikita Rajaram	14
27.	Ingole Rajlaxmi Sanjay	12

Mrs. T. P. Shangrapawar

1/3

PRINCIPAL

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences

Research Centre

Kharadi, Pune-411 014

28.	Jadhav Shivjeet Ramesh	16
29.	Jadhav Vaibhav Santosh	14
30.	Jagtap Hrishikesh Sudam	15
31.	Jagtap Rutvik Anil	15
32.	Jedhe Gaurav Avinash	12
33.	Kadam Manish Ramdas	11
34.	Kale Vinit Ganpat	15
35.	Kamble Esha Rajendra	15
36.	Kaspate Shubham Biru	18
37.	Khaladkar Tejas Santosh	15
38.	Kharabe Khushi Rohidas	17
39.	Kirtane Vaibhav Vishwajeet	12
40.	Kolhe Gauri Ishwar	14
41.	Lagad Jai Anil	13
42.	Mane Rohini Vijaykumar	13
43.	Mane Sakshi Sayaji	16
44.	Mate Mayur Rameshwar	13
45.	Mohite Aditya Rahul	14
46.	Mohite Sumit Santosh	14
47.	Munde Amarnath B	12
48.	Naiknavare Deepali Radhkisan	14
49.	Narvekar Snehal Sukhdev	12
50.	Pabale Sourabh Santosh	13
51.	Pandkar Saniya Rajendra	14
52.	Patange Vaibhav Narayanrao	18
53.	Pawar Pratiksha Prashant	14
54.	Pawar Vikas Rajaram	11
55.	Pujari Vaishanavi V	12
56.	Raje Vasundhara Satish	18
57.	Rajpurohit Srushti Harisingh	14
58.	Raskar Laukik Chandrakant	
59.	Rathod Bharat	
60.	Salunke Shreya Pravin	15
61.	Sawant Aarti Ramdas	
62.	Shegokar Yash Anil	11
63.	Shewale Pranali R	17

Checked
Mrs. T. P. Shangarpawar

2/3

PRINCIPAL

64.	Solanke Prathamesh N	13
65.	Sonawane Drushti Hemant	18
66.	Tambe Vaibhav Vishnu	12
67.	Thite Rohan Nitin	18
68.	Thokal Sakshi Bhaskar	16
69.	Thombre Mrudula Mahesh	13
70.	Thopate Saurabh Dattatraya	12
71.	Thorat Suyash Vikas	13
72.	Todmal Bhakti Nilesh	12
73.	Vidhate Rachna Suresh	14
74.	Zalte Omkar Ganesh	18
75.	Dalvi Vaibhav Balbhim	

Mrs. T. P. Shangarpawar

3/3

PRINCIPAL
Pune District Education Association's
Shankarrao Dhere College of Pharmacy, Wagholi
Science & Research Centre
Kharadi, Pune - 411014

Name: Nikanksha Shivaji
Roll no. - 01
Industrial - pharmacy

Q1 Formulation of Parenterals

1) Therapeutic agents
Antibiotics, Anticancer, steroids, vaccines, Antipyretics, Analgesics, Antiinflamatory, LVP's like dextrose, Nacl or combination.

2) Vehicle
i) water
ii) water miscible vehicles - Ethyl alcohol, PEG, PG
iii) non aqueous vehicles - fixed oil

3) Added substances (additives)
i) Antimicrobials
Benzyl alcohol, methyl paraben, propyl paraben, phenol

ii) Antioxidants
a) reducing agents - Ascorbic acid, ester, B+ sodium bisulphite, Thiourea, sodium metasulphite
b) Blocking agent - Ascorbic acid, BHT
c) synergistic - Ascorbic acid, Citric acid, Tartaric acid
d) chelating agent - EDTA

iii) Buffers
Acetates, citrates, phosphates, acetic acid, benzoic acid, citric acid, lactic acid

iv) chelating agents -
Disodium edetate, Disodium calcium edetate
Tetrasodium edetate

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre

vi) Stabilizers
Creatinine, Glycine, Sod. Saccharin
Nicotinamide, Sodium saccharin

vii) solubilizing agents
Dimethyl acetamide, Ethyl alcohol, Glycerin, Lecithin, PEG-40, PEG-300, polysorbate-40, 80

viii) Tonicity adjusting agents
Glycerin, Lactose, mannitol, Dextrose, Sodium chloride, Sorbitol

ix) surfactants - Sodium lauryl sulfate, Tween 80

x) Protectants
sucrose, amino acids - glycine or lysine,
polymers - PEG / dextran
polyols - mannitol / sorbitol



2 Formulation of Tablet

i) Diluents -
lactose, starch, mannitol

ii) Binders & adhesives
starch, carboxy methyl cellulose, acacia

iii) Disintegrants
starch, clays, cellulose

iv) Lubricants
talc, strearic acid, magnesium stearate

v) Glidant
starch & talc

vi) Colouring agents
F D & C yellow 6 - sunset yellow, F D & C yellow tartrazine, F D & C green 3 - fast Green.

vii) Sweetening agent -
Aspartame, mannitol, lactose

viii) Flavoring agent
menthol, clove oil, vanilla.

Q3 Evaluation of parenterals

1) Leakage test
① Take the ampoules or vials containing sample
② Invert the ampoules in 1% methylene blue solution
③ Observe color the sample before & after test
If color change occur → leakage present
If color change occur → leakage absent

2) Clarity test
a) Visual method
① The ampules are placed in dark ground observe light particles
② Light black ground observe dark particle
b) Microscopic method
① A measure sample soln is filtered through membrane filters
② Particles observe in the microscope under low magnification

3) Pyrogen Test
a) Rabbit test
① With held food in the day of experiment
② Record the initial temp of the rabbits any rabbit's how temperature more than 39°C should be excluded
③ Inject the sample into the ear vein of each rabbit
④ Check the temperature after 30 min 1, 2, & 3hrs

Result :-

① The test is positive when each rabbit shows increases in temperature if only 2 of the 3 rabbits show increases in temperature

② The test using group of 5 & test will be positive if the 4 of the rabbits show increases the temperature

b) LAL Test

① Limulus amebolyte lysate

② The LAL assay is an vitro assay used to detect the presence of conc. of bacterial endotoxins in the drugs on biological product

③ Endotoxins which are a type of pyrogen are lipopolysaccharides present in the cell walls of gram negative bacteria

④ Pyrogens as a class are fever inducing substances that can be harmful or even fatel if administered to humans above certain conc.

⑤ water can be a source of pyrogen so it may be - imp to routinely monitor water systems using to bacterial endotoxins test.

LAL tube	Test sample/control	Result
①	negative control (Pyrogen free saline)	should be negative
②	positive control Pyrogen	should be positive



4) Sterility testing

① Membrane filtration method

The membrane filtration technique is used to examine water samples from different sources. An appropriate volume of the sample is filtered through a membrane with a pore size of 0.45 mm the membrane is incubated on an agar plate

② Direct innoculation method :-

The direct inoculation a small volume of sample is removed aseptically from the sample unit & inoculated directly into a suitable volume of growth medium before incubation

64 Formulation of Ophthalmic

① Drop size & dosage

mean volume of tears in human eye is about 7 microlitres maximum volume that can be held in cul de sac without spillage is about 30 microlitres

② Viscosity Increasing Agents

Increase in viscosity increase residence time of drug in eye hence its bioavailibility eg. methyl cellulose, derivative, polyvinyl alcohol, povidone, Dextran, acrogol

3) PH & Buffering capacity
Human tear normally have a pH of about 7.2 with good buffering capacity
Eye drop formulated at particular pH require the addition of buffering agent to minimize pH change
e.g. Borate, phosphate & citrate

4) Tonicity
To minimise irritation of eye, opthalmic solution should locally be isotonic with lachrymal secretion Tonicity equivalent to 0.9% solⁿ of Nacl
Tonicity adjuster are - sodium chloride potassium chloride, Glucose & glycerol

5) wetting & spreading agents
surfactant - polysorbate 80

6) stabilizer
to prevent oxidative decomposition antioxidants are used.
e.g. sodium metabisulphite, sodium sulphite

7) Sterility & preservation
opthalmic solⁿ are sterilised by autoclaving or by bacteria retentive filters
preservatives - Benzalkonium chloride, Thiomersol, phenylmercuric acetate.

PRINCIPAL
Pune District Education Association's
Shankerrao Uttar College of Pharmaceutical Sciences & Research Centre,
Khardi, Pune-412105

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE - 14.

Assignment: – I

Subject: - Industrial Pharmacy - I

Class: - Third Year B. Pharmacy **Time: -1 Hr.**

Date: - 10.10.2019 **Max. Marks: - 10**

Note: All questions are compulsory.

Figures to right indicate full marks.

Draw the well labeled structures wherever necessary.

Q.1) Answer the following questions (Any - 2) **(2Qx5M=10)**

1. Introduce capsule in details
2. Explain manufacturing of gelatin with its quality control parameters.
3. Describe formulation of hard gelatin capsule and brief about difficulties in the filling the capsule and its remedies.
4. Explain the manufacturing of soft gelatin capsule by rotary die process.

mrs. T. P shangrapawar

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014

1/1

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES
AND RESEARCH CENTRE, KHARADI, PUNE-14.

List of Students with Marks
Assignment - 10.10.2019
Third Year B. Pharm
Academic Year 2019-2020

S. No	Name of the Student	Marks out of 10
1.	Abhale Shivani Vijay	09
2.	Anandkar Sudarshan Baban	03
3.	Bande Kiran Shivaji	07
4.	Bankar Shubhkari Ajit	06
5.	Beldar Aditi Rameshwar	07
6.	Bhadale Prashant Sunil	08
7.	Bhairavkar Chaitrali Prabhakar	Ab
8.	Bhalerao Ruchita Arvind	07
9.	Bhondve Atish Shyam	07
10.	Bhondve Riya Rahul	08
11.	Bhosale Supriya Sharad	06
12.	Borade Sayali Ashok	08
13.	Bramhane Jayshri Annasaheb	08
14.	Chaudhari Mahendra Aasaram	06
15.	Chavan Nitesh Arjun	06
16.	Chavan Rajgouri Harichandra	07
17.	Choudhary Bharat Gghisaram	07
18.	Choudhary Nareshkumar Mohanlal	05
19.	Dolas Siddhant Manohar	07
20.	Dombe Suvarna Sanjay	08
21.	Dudhwade Prasad Sahebrao	08
22.	Gaikwad Rajratna Deepak	06
23.	Galave Shital Tanaji	08
24.	Ganjkar Mayuri Ramesh	07
25.	Ghavate Tejas Dipak	07
26.	Gholap Aarti Sunil	Ab
27.	Jadhav Kajal Sandip	07

1/3

28.	Jadhav Ketaki Ashok	09
29.	Jadhav Rohit Parmeshwar	04
30.	Jadhav Rutuja Pravenkumar	08
31.	Joshi Onkar Sadanand	04
32.	Kadam Ankita Mohan	07
33.	Kalbhor Prajakta Pandurang	06
34.	Kamble Rohit Harshad	04
35.	Katake Pranali Sadashiv	08
36.	Kaygude Sachin Dattatray	06
37.	Khabiya Darshana Vijay	08
38.	Khandave Akshada Hanumant	07
39.	Khandave Shreya Dnyanoba	08
40.	Khandve Sayali Tanaji	Ab
41.	Khilare Amey Chandrakant	03
42.	Kiratwad Balaji Tukaram	08
43.	Kokate Rutuja Vijay	07
44.	Kokate Suraj Rrajabhau	09
45.	Kolpe Rushikesh Uttam	08
46.	Kunte Nandesh Ashok	06
47.	Langhe Snehal Sanjay	08
48.	Lekurwale Yogita Sopan	08
49.	Mane Hanuman Keshav	07
50.	Mhaiskar Mahesh Rajendra	08
51.	Mhetre Akshay Namdev	08
52.	More Gayatri Raju	09
53.	More Mayuri Chandrakant	08
54.	More Vaishnavi Pradeep	07
55.	More Mrunalini Sanjiv	08
56.	Munde Sachin Arjun	09
57.	Nilakhe Akshay Abhinand	06
58.	Parade Lalit Genu	Ab
59.	Patil Damini Sanjay	08
60.	Patil Sarika Rajaram	07
61.	Pawar Jaya Parmeshwar	09
62.	Pise Ajay Ashok	05
63.	Rao Abhishai Samson	06

Mrs. T. P. Shangrapawar

2/3

PRINCIPAL
Pune District Education Association's
Shankarrao Chavan College of Pharmaceutical

64.	Raut Sarika Ganesh	07
65.	Sathe Shrutika Dattatray	08
66.	Satkar Mrunal Manik	06
67.	Shevakar Shantanu Sanjay	07
68.	Shinde Harshal Mohan	07
69.	Shreebhagat Sonali Baliram	08
70.	Sreya Subhash	06
71.	Tambe Jayesh Dattatray	03
72.	Tambe Rutuja Jagdish	08
73.	Tarmude Shrikrushna Gautam	07
74.	Telgote Prachi Raju	AB
75.	Thongire Priyanka Pandhurang	08
76.	Umrekar Rutuja Mohan	08

Attested
Mrs. T. P. Shargepawar

3/3

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Roll No - 1

Name :- Shivani Vijay Abhale

Q1 Introduce Capsule in detail. 5 Marks
Q2 Explain manufacturing of gelatin with it's quality Control parameter. 5 Marks
Q3 Describ formulation of hard gelatin Capsule & berife about difficulties in the filling Capsule & it's remedies 5 Mark.
Q4 Give Explain manufacturing of soft manufacturing capsule by rotatory die process.

Q3 Formulation of Hard gelatin Capsule -

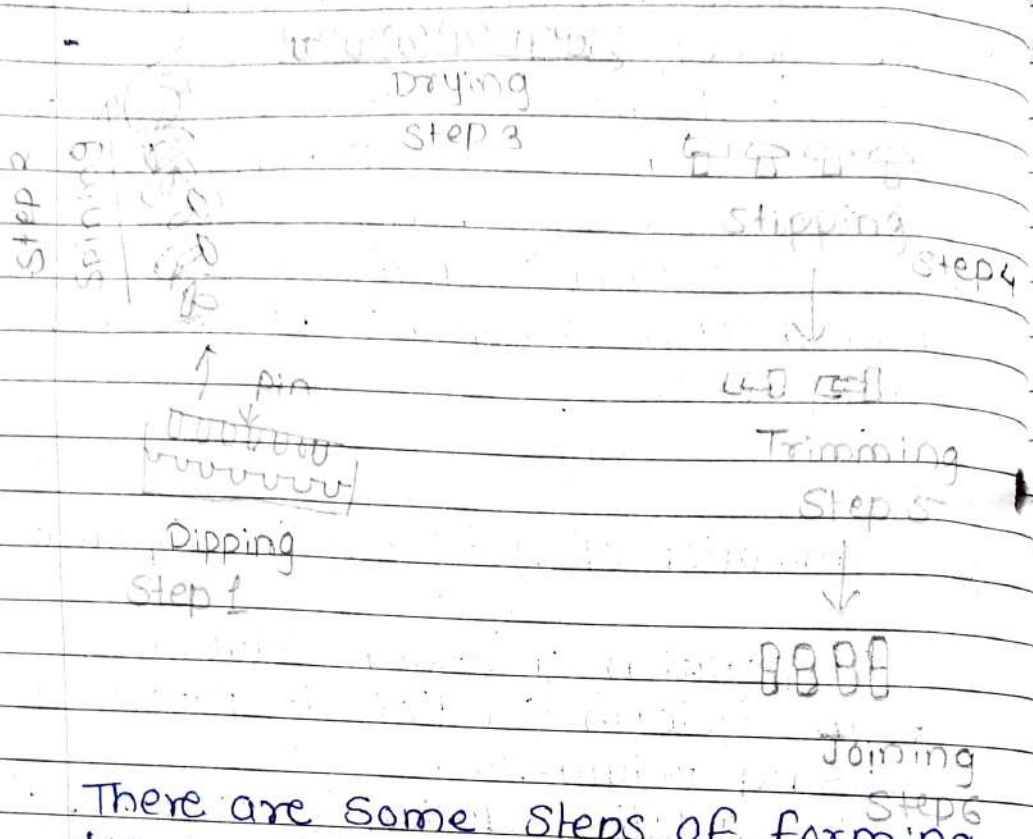
a Preparation of gelatin solution -
- The gelatin solution is prepared by using polymers.
- The gelatin solution is used for the preparation of Hard gelatin Capsule.
- The pork skin or animal bone or tissue is used for the preparation of gelatin solution.
- Pork skin, animal bone or tissue with the polymer i.e titanium oxide used.

b Viscosity of gelatin solution -
- The viscasity is the major parameter because it form the Proper Capsule
- As the viscosity is lowest then thickness of capsule decreases.
- As viscosity is increases then thickness of capsule also increases

miss. Tip shangarpalwar

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,

C. Formation of Capsule by using pins



There are some steps of forming Hard gelatin capsule are as follows-

① Dipping →

- The Dipping Solution is the gelatin solution. the temperature of the dipping solution is 22°C. & pins temperature is 50°C.
- So that pins are dipped into the dipping solution & form the gelatin layered around it.

② Sipining →

- Spining is nothing but it gives rotation to the pins.
- That pins rotated because of this the gelatin is form the

uniform layer around itself.

③ Drying-
- Here the air supply to the pins to dry the gelatin layer.
- Continous air supply is provided to the pins.

④ Stepping-
- In this stage the capsule i.e pins are place for the some time.
- That is to dry completely, & it can remove easily.

⑤ Trimming-
- Triming is nothing but cating the gelatin layer into the proper shape.
- The kinef like structure or apparatus trimmed the capsule.

⑥ Joining-
- The final step the body & cap of the capsule is get joined.
- & the Hard gelatin capsule is ready.

• Difficulties in filling capsules:-

① Hydroscopic powder.

- This type of the powder is mostly absorb the moisture content from

atmosphere.
- Due to this there will be chances of defects in the capsule packaging.

Remady-
To avoid the absorbance of the moisture of powder from atmosphere add the absorbant like magnesium dioxide.

② Eutectic mixture -
- When two powders are mixed with each other & then it will form the liquid before some reaction.

Remady
① Add that powder in drum let the reaction happen then add the absorbant or kaolin.

② Add seperately 1st absorbant in that powder & then mix with each other.

③ Potent Drug :-

- If the powder is in less quantity then it will Incompletely fill the capsule.
- It may form defects in capsule.

Remady - ① To overcome this problem add the Diluents in the Formulation.

PRINCIPAL

④ Incompatible powder-

- If the some powder are incompatible with each other then it will form some other effect.

Remady-

① Take the two capsule small & large 1st place one drug into the small capsule then other in the large capsule & pack or join it.

⑤ Granular powder-

- If the granular powder then it will form some problem to form or fill the capsule.

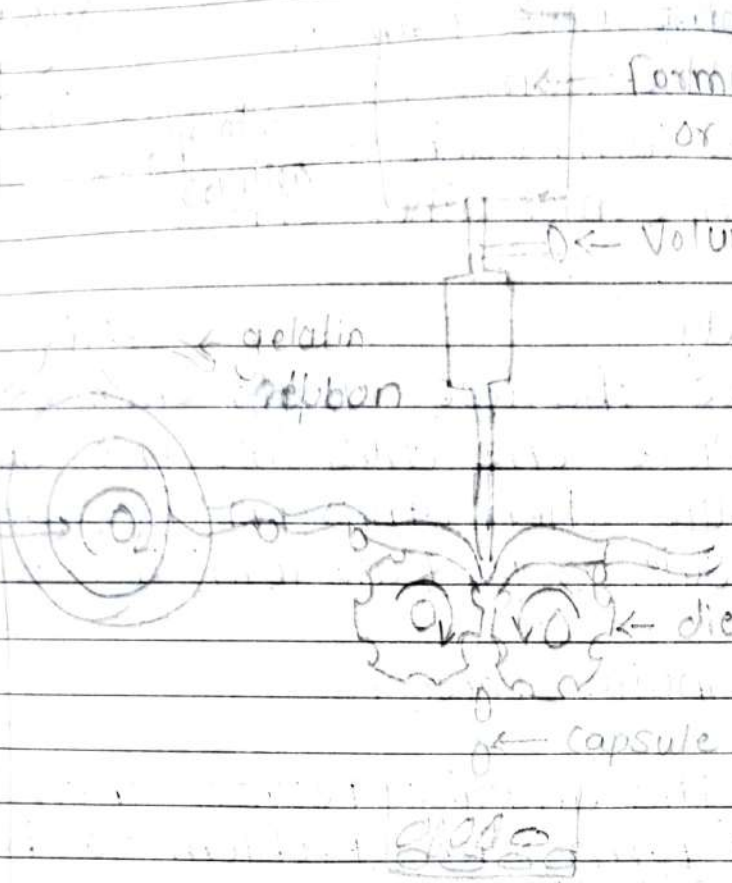
Ramady-

① Add alcohol into it & then that granules are fill into the capsule.

Q 4. Manufacturing of soft gelatin capsule by rotatory die Process:-

- Soft gelatin capsule is nothing but single capsule which does not contain cap & body like structure.
- Soft gelatin capsule is single body which is sealed.
- Soft gelatin capsule is intended for only liquid formis of drug. powder are not fill in the soft gelatin capsule.

Pune District Education Association's Shankarrao Uttal College of Pharmaceutical Sciences & Research Centre, Nigadi, Pune-411044.



Rotatory die machine

- In the rotatory ~~dry~~ die machine following points are involved:-

Construction -

- The rotatory die machine contain the particular volumes die which is manufactured already.
- It also contain the dryer drum to dry gelatin ~~ze~~ ribbon.
- It contain hopper which contain gelatin solution & formulation solution.

working:-

① From the hopper the gelatin solution is come out in the ribbon shape.
② That ribbon goes on the dryer drum. that drum dry the ribbon & it travelled to the die.
③ & from the another hopper the liquid is come.
④ That liquids volume is adjused & that will fill into the gelatin ribbons pocket.
⑤ That ribbon form the cavity between them on die rolar.
⑥ then due to the die that capsule get ~~sele~~ sealed properly
⑦ Sealed capsule collected into the jar.

Advantages-

① It is easy process of manufacturing the soft gelatin capsule.
② It contain less lebour cost.

Disadvantages-

① It only applicable for liquid

Checked
Mrs. T.P. Shangapour

PRINCIPAL

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE - 14.

Assignment: – II

Subject: - Pharmacovigilance (BP805ET)

Class: - Final Year B. Pharmacy (Sem VIII) **Time: -1 Hr.**

Date: - 12.04.2023 **Max. Marks: - 20**

4. **Note: All questions are compulsory.**
5. **Figures to right indicate full marks.**
6. **Draw the well labeled structures wherever necessary.**

Q.1) Answer the following questions (Any - 4) **(4Qx5M=20)**

1. Explain in detail contract research organization.
2. Write a detail note on vaccination failure.
3. Write in detail communication in drug safety crisis management.
4. Explain CIOMS.
5. What are good clinical practices in pharmacovigilance study.

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI, PUNE-14.

List of Students with Marks

Assignment II– 12.4.2023

Final Year B. Pharm- Pharmacovigilance

Academic Year 2022-2023

S. No	Name of the Student	Marks out of 20
1.	Akhade Akshay Balkrishna	16
2.	Aranya Atharva Ravindra	14
3.	Bhamare Mansi Dipak	18
4.	Bhapsekar Nikhil Deepak	15
5.	Bhosure Nikita Kaluram	12
6.	Bhujbal Nandini Dashrath	14
7.	Bichukale Snehal Janardan	14
8.	Choudhary Snehal Shantaram	15
9.	Dake Raj Atul	12
10.	Damale Pallavi Suresh	
11.	Dhainje Rinku Bhimrao	15
12.	Dhanle Varsha Gautam	10
13.	Dhavale Sahil Satish	
14.	Gaikwad Pranjal Pramod	14
15.	Galgunde Soham Dnyandev	15
16.	Gaware Sonali Ravindra	13
17.	Gund Omkar Dattatray	13
18.	Hake Neha Ashok	13
19.	Jadhav Santosh Baliram	
20.	Jagtap Vaishnavi Chandrashekhar	14
21.	Jamdade Gayatri Santosh	15
22.	Kabire Dinesh Pandharinath	13
23.	Kalsheitt Aishwarya Revanappa	13
24.	Kamthe Aishwarya Vijay	15
25.	Khaladkar Vaibhav Bhauso	10
26.	Khandve Gauri Vasant	14
27.	Khiratkar Shweta Janardan	

1/3

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre,
Kharadi, Pune-411014

28.	Khobare Abhishek Suresh	12
29.	Khote Shruti Gorakh	15
30.	Kokani Deepak Bapu	
31.	Akhade Akshay Balkrishna	12
32.	Aranya Atharva Ravindra	13
33.	Bhamare Mansi Dipak	14
34.	Bhapsekar Nikhil Deepak	13
35.	Bhosure Nikita Kaluram	13
36.	Maharnavar Shankar Shivaji	13
37.	Mokashi Mansi Mohan	12
38.	Mulla Anisa Imam	12
39.	Nikalje Kiran Balu	15
40.	Paigude Shradha Rajendra	12
41.	Pansare Akshay	13
42.	Pathak Chaitanya Dashrath	11
43.	Patil Anuja Datta	12
44.	Pawar Prajakta Jyotishya	12
45.	Pharate Abhijit Kailas	12
46.	Pote Priti Bharat	12
47.	Puri Ravi Kailas	14
48.	Raghatwan Akshada Uttam	11
49.	Raipure Prachi Nitin	09
50.	Rajpurohit Rajvirsing	13
51.	Sagar Deepali Rajendra	10
52.	Sarode Pratiksha Balasaheb	
53.	Sarode Ravikiran Dattatray	09
54.	Shaikh Afiya Ramjan	13
55.	Shelake Komal Kisan	12
56.	Shinde Mayuri Baburao	10
57.	Shinde Sagar Jaysing	16
58.	Shinde Saurabh Shivaji	—
59.	Shinde Vishal Namdeo	17
60.	Shitole Tejas Eknath	17
61.	Surve Sakshi Anil	11
62.	Thorat Rutuja Bapusaheb	13
63.	Ubale Rohan Suresh	17

2/3

PRINCIPAL
Pune District Education Association's
Shankarrao Uttal College of Pharmaceutical
Sciences & Research, Office,
Narhe, Pune-411041

64.	Ugale Snehal Sunil	
65.	Undre Darshana Sanjay	15
66.	Waghmare Diksha Mahendra	15
67.	Wakchaure Ajay Balasaheb	16
68.	Walanj Sejal Santosh	12
69.	Warghade Rushita Bappu	

Mrs. T. P. Shangrapawar

Mrs. T. P. Shangrapawar

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Arts

5/3

Pharmacovigilance

Assignment No 2

Roll no	Name	Sign
1	Akhade Akshay Balkrishna	Akhade
2	Aranya Atharva Ravindra	
3	Mansi Dipak Bhamare	DBhamare
4	Bhapsekar Mitchell O.	Bhapsekar
5	Bhosure Nikita Kaluram	
6	Bhujbal Nandini Dashrath	Bhujbal
7	Bichukale Snehal Janardan	Bichukale
8	Snehal. S. choudhary	Snehal
9	Raj Dake	
10		
11	Ritu Bhimrao Dhainje	Dhainje
12	Dhanle Varsha Gautam	
13		
14	Pranjal Gaikwad	
15	Soham Golgunde	
16	sonali Gawane	Sonali
17	Omkar gurd	
18	Hake Neha Ashok	
19		
20	Vaishnavi Jogdap	Jogdap
21	Gayatri Pandade	Pandade
22	Dinesh kabire	Dinesh
23	kalshetti Aishwarya. R	
24	Aishwarya Vijay kamthe	
25	Kholadkar Vaibhav Bhausa	
26	Khandve Gauri Vasant	
27	Khiratkar Shweta Janardan	
28	Abhishek Suresh Khobare	Abhishek
29	Shruti Gorakh khote	
30		

PRINCIPAL

Roll no	Name	Sign
31	Kudale Suvarna Gautam	
32	Harshada Shankar Kumbharkar	
33	Lowande Rutuja Vikas	
34	Minakshi Lordhe	
35	Vaishnavi. S. madure	
36	Maharnavar Shankar Shivaji	
37	Mansi Mokashi	
38	Ansa Nulla	
39	Kiran Nikalje	
40	Paigude smradha	
41	Akshay Parsave	
42	Chaitanya Pathak	
43	Anuja Patil	
44	Prajakta Pawar	
45	Pharak Abhijeet	
46	Pote Priti Bharat	
47	Akshada Uttam Raghatwan	
48	Raipure Prachi Nitin	
49	Rajvir H. Rajbhar	
50	Deepali R. sagar	
51	Sarode Pratiksha	
52		
53	Shaikh Afiya	
54	Shelake komal kisan	
55	Shinde Mayuri B.	
56	Shinde sagar J.	
57	Shinde Saurabh S.	
58		
59	Shitole Tejas Eknath	
60	Surve Sakshi	

Roll no	Name	Sign
61	Rutuja Thorat	Rutuja.
62	Rohan Ubale	Rohan.
63	Snehal sunil Ugale	Snehal.
64		
65	Waghmare · Diksha · M	Waghmare Dipali
66	Ajay B. Wavchaure	Ajay
67	Walanj Sejal	Swalanj.
68	Warghade · Rushita · B	Rushitaw.

Checked

Mrs. T. P. Shangrapwar 3/3

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences
Kharadi, Pune-411014

Pharmacovigilance

Roll no. 06

Date
Page

1) Explain in detail contract Research organization (CRO).

CRO stands for contract Research Organization. It provides support to the Pharmaceutical industry and offers various "Pharmaceutical research that is essential for conducting clinical trials in the present boom when various complication are involved in the drug discovery process".

Need of CRO's.

1) Preclinical study:

- In this new drug / chemical is tested.
- Time duration required in this type of study is 1 to 3 years.
- Preclinical study is conducted in laboratory animals.

2) clinical study:

Phase I - Testing drug is approx 20 - 100 volunteers.

Phase II - Patient suffering from same disease.
- volunteers required are 100 - 500 approx.

Phase III - Thousand people are tested to verify efficacy and long term safety on a larger sale.

evaluation of CRO's:

- Prior to CROs academic institutions & laboratories handled drug development work.
- In India 5% of global clinical trials are being conducted 2012.
- Due to greater workload, drug companies began to outsource additional studies could not be handled internally.
- CRO's gave pharma - companies the opportunity to turn a portion of fixed development.

1/6

Growth factors of CRO :

- Integration pharma and biotech.
- Rising R & D cost.
- Need of quality auditing.
- Stringent regulatory environment.
- Pressure to improve clinical pipeline.

2) Write a detail note on vaccination failure :

→ Vaccination failure -

It is defined as, "A variety of end point criteria eg. disease mitigation, immune response or disease prevention."

It include some points :

1) Vaccine failure -

a) Due to immuno deficiency.

b) Due to age related responses.

c) Due to other infectious agents.

d) Due to suboptimal immune response.

2) Vaccine related :

Vaccines are not 100% efficient against antigen. sometimes manufacturing related problem can cause disease. In the manufacture defect can be known batch variations or quality.

3) Other factors :

It affect vaccines failure releated problems.

1) Usage issues.

2) Immunization programme - releated issues.

1) Usage issues - It include steps related to administration of vaccines, incomplete series of vaccination & sometimes storage related problems. These errors

2/6

affect vaccine performance & lead to vaccination failure.

2) Immunization programme related issues:

In these programme there are specified points of starting vaccines and ending is specified. It is necessary to obey or complete the time schedule of vaccination according to guidelines.

They are categorized as :

a) confirmed clinical vaccine failure.

b) suspected clinical vaqine failure.

c) confirmed immunological vaccine failure.

3) Write in detail communication in drug safety crisis management.

→ Crisis communication is defined as the process of managing the strategy, message and distribution channels which are necessary to communicate effectively with media and employes product and their outcomes.

crisis management:

It is divided into three phases.

1) Pre - crisis :

In this process, the prevention of known risks which may lead to crisis is done. It include various step which helping to maintain data for the prevention of risks which leads to crisis. organization have to make a crisis management plan, committes for betterment in crisis management plan, committes for betterment in crisis management programme. pre-crisis programme it is easy to make effective decision about crisis.

3/6

ii) Crisis response:

It is defined as the response from the management after crisis hits. For response public play the key role to help in developing the message to public. It is divided into two sections.

a) Initial crisis response.

b) Reputation repair and behaviour intentions.

iii) Post crisis:

Post crisis phase is the phase where the organization return to business. An organization process various step to return actual state of business after crisis. The organization release various updates for the recovery process and other corrective action.

each and every class is having their own importance in communication and exchanges for the information.

This section of communication describes the conversation of information between the company and regulatory authorities, business partners, health care facilities & media.

5) What are good clinical practices in pharmacovigilance study

→ Pharmacovigilance plays an important role in research & development of new medicinal products & their trials For study and identification, safety, efficacy with risks & benefits. In these procedure one thing is most important that is protocol and safety of humans. According good clinical practices, there are specified standards for conduction of trials. each and every

4|c

organization who is conducting the trials releated to pharmacovigilance good clinical practices are mainly focused on the protection of human rights in clinical trials.

It provides assurance of the safety of the newly developed compounds.

The main two committes of GCP which help to regulate and control and clinical trials are.

1) Independent Ethics committee (IEC).
2) Institutional Review Board (IRB).

1) Independent ethics committee:

It is formally designated to review and approve the initiation of clinical research study involving human participants and providing the continuing reviewing of research studies. This committee ensure protection Main work of this committee is to review, check facilities and approve the protocols.

- Role of IEC:

- IEC ensures a complete review of all ethical aspects of project proposals.
- IEC provides advice to the researchers on all aspects of welfare and safety of research participants after ensuring the sound.

ii) Institutional Review Board (IRB):

It is independent body constituted of medical scientific members. This board has to prepare a report on this whole trial and their aspects. IRB responsible for ensuring the protection of rights & safety of well-being

5/6

human.

In these, 5 members include,

a) one scientist

b) one non-scientist

c) one person who is not affiliated with institution & other two are form normal profiles which can review board.

Responsibilities of IRB & IEC committees.

- To review the protocols within a responsible time.
- To conduct the continuing reviewing of trials.
- To view documents in writing.
- safe guard the rights, safety and well being of all trial subjects.

Answered
Mrs. T. P. Shangrapawar

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre

6/6

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE

Subject: - Industrial Pharmacy II (BP 702 T)

Assignment No.: 02

Class: - Final Year B. Pharm (Sem VII, 2018 P)

Date: - 01/09/2021

10M

5M×2Q = 10M

1 Report responsibilities of regulatory affair professionals

2 Write short note on Drug Development Teams

V.V. Dhuseede

Assignment No: II

Date: 01/09/2024

Subject - Industrial Pharmacy II
class - final year B.Pharm.
Roll NO. - 50

08/10 Seven

Q.1. Report responsiblities of regulatory affair profe ssionals.

→ RA professionals usually have responsibility for the following general areas.

1. ensuring that their companies comply with all of regulations & laws pertaining to their business.
2. working with fedrel, state & local regulatory agencies & & personal on specific issues affecting their business.
3. Advising their companies on regulatory aspects & climate that would affect proposed activities.
4. keep updated with intentional legislation, guidlines & coustume practice.
5. keep updated with companies product range.
6. ensure that company's product comply with current regulations.
7. keep track of ever-changing legislation in all the regions in which the company wishes to distribute its products.

8. Formulate regulatory strategy for all appropriate regulatory submissions for domestic, international & contract projects.
9. moniter the progress of all registration submission.
10. maintain approved applications & the record of registration fees paid against submission of DMF & other documents.
11. Respond to queries, as they arise, & ensure that approved are granted without delay.
12. Impart training to R&D, pilot plant, & RA team members on current regulatory requirements.
13. Manage & review audit reports & compliance, regulatory & costumer inspections.
14. to create & maintain an electronic or hard copy filling system for organized records.
15. Create & implement compliance strategies for newly developed products.
16. to minimize & avoid problems caused by improper records, inappropriate scientific thinking or poor presentation of data.

04

Q.2. Write short note on drug development teams.

→ Most pharmaceutical & biotechnology firms employ teams known as drug Development teams.

These teams guides various processes involved in transforming drug development stages to final approved drug candidate into therapeutic product.

a) Drug discovery team-

It is a small group of researches & is first team in DDT. The primary responsibility of this team is to identify lead compounds or classes of compounds.

b) preclinical Drug Development team-

once the management accepts a lead compound candidate as drug candidate, its further establishment is carried out by preclinical drug development team.

c) clinical Drug Development team-

once the IND is submitted, the non-clinical project team is further expanded to include new members &

renamed as clinical Drug development team. Wherein teams roles substainally expand.

- Role of Drug Development Team -

The DDT work involves an internal peer review process to ensure maximum consideration for sucess of projects & issues.

- Responsibilites of DDT.

1. Integrating new research results with previously generated data.
2. planning research studies to further characterize a drug candidate.
3. generally timelines for completion of project.
4. Defining & monitoring the critical path in development program.
5. Monitoring Status of research to meet timelines.

Final Year
ROLL NO :- 40
Date :-
Page No.
01/09/2021

Assignment - No. - II.

INDUSTRIAL PHARMACY II

08/10 Seen VV. Dhurale.

Q.1) Responsibilities of Regulatory Affairs Proffessionals.

→ RA proffessionals usually have responsibility for the following general areas:

1) ensuring that their companies comply with all of the regulations and laws pertaining to their business.

2) Working with federal, state and local regulatory agencies and personnel on specific issues affecting their business.

3) Advising their companies on the regulatory aspects and climate that would affect proposed activities.

4) Keep updated with international legislation, guidlines and customer practices.

5) Keep updated with a company's product range.

6) Ensure that a company's products comply with the current regulations.

mynotes My Knowledge Bank

7) keep track of the ever-changing legislation in all the regions in which the company wishe to distribute its products.

8) Advice on the legal and scientific restraints and requirments and collect, collate, and evaluate the scientific data that their R&D colleagues are generating.

9) Formulate regulatory strategy for all appropriate regulatory submissions for domestic, international and contract projects.

10) Co-ordinate, prepare and review all appropriate documents for example dossier & submit them to regulatory authorities within a specified time frame in conjugation with the organization.

11) prepare and review SOPs related to RA. Review of Batch formula Record, Master Formula Record, change control and other relevant documents.

12) Monitor the progress of all registration submission.

13) Maintain approved applications and the record of registration / Fees paid against submission of DMF and other documents.

mynotes Knowledge bank

14) Respond to queries as they arise and ensure that registration / approval are granted without delay.

15) Impart training to R&D, pilot plant and RA team members on current regulatory requirment.

16) Manage and review ~~delet~~ audit reports and compliance, regulatory and customer inspections.

17) To minimize and avoid problems caused by improper records, inappropriate scientific thinking or poor presentation of data.

18) provide physicians and other healthcare proffessionals with accurate and complete information about the quality, safety and effectiveness of the product.

19) Create and maintain an electronic or hard copy filing system for organizational records.

20) Create and implement compliance strategies for newly developed products.

21) oversee the process of replying to requests from customers or vendors.

22) Work with engineering departments to ensure the creation and delivery of compliance-oriented customer services.

23) Evaluate marketing or promotional materials to guarantee all information meets compliance standards.

RA professionals are group of people who act as a liaison between the potentially conflicting words of government, industry and consumers to help make sure that marketed products are safe and effective when used as advertised.

Page No.
Date

Q Write a short note on Drug Development team.

→ A company make a decision, on the basis of new research findings or an unmet medical need or marketing surveys, to enter into a new disease area or to expand their existing therapeutic area. Once decision is made, the responsible department, commonly a therapeutic disease group assigns researchers, usually chemists, to synthesize compounds and pharmacologists or biologists to evaluate the lead compounds using in-vitro or in-vivo models of the disease. This small group of researches is the first project team and is commonly called a discovery project team.

The drug discovery and development process involves the close interaction of a large number of scientific disciplines. Most pharmaceuticals and biotechnology firms empoly teams known as Drug Development team.

These teams guides various processes involved in transforming candidate drug discovery through the various drug development stages to final approved drug candidate into a therapeutic product.

The DDTs consists of non-clinical and translational experts with extensive pharmaceuticals drug discovery and development experience.

The DDT is comprised of different sub-teams namely drug discovery team, preclinical drug development team and clinical drug development team.

A) Drug Discovery Team :-

Drug discovery team is a small group of researchers and is the first team in DDT. The primary responsibility of this team is to identify lead compounds or classes of compounds. Drug discovery team then includes other experts from various scientific disciplines such as pharmacology, chemistry, toxicology, drug metabolism and pharmacokinetics, and biopharmaceutics.

B) Predinical Drug Development Team :-

once the management accepts a lead compound candidate as a drug candidate, its further establishment is carried out by predinical drug development team.

In addition to the drug discovery team members, the PDDT has a no. of new players that includes.

(1) A Managment :

They assign team leader and co-ordinator.

(2) RA and QA personal :

To ensure that the development studies meet with the regulatory requirment.

(3) clinical Researchers :

provide input into study designs so that the generated result support the proposed clinical program.

(4) Analytical chemist :

Responsible for development of assay methods and to characterize the new drug substance and new drug product.

(5) Manufacturing chemist :-

Scale up the synthesis of the drug candidate.

(6) Marketing experts :

determine drug candidates potential market.

The final responsibility of the PDDT is to prepare an Investigational New Drug. and submit the appropriate documents to FDA and other regulatory agency.

c) clinical Drug Development Team :-

once the IND is submitted the non-clinical project team is further expanded to include new members and renamed as clinical Drug Development Team wherein team's roles substantially expand.

The new players and their expanded roles include's :

(1) Physicians :

They are involved in conducting phase I, II and III clinical studies.

(2) clinical Research associates:

They cordinate and monitor the phase I, II and III clinical studies.

(3) Manufacturing chemist:

co-ordinate development of new drug substance and drug production.

(4) Quality Control Analyst:

ensure the appropriate assay are development validated.

(5) statisticians:

Assist in designing clinical protocols.

(6) clinical pharmacokinetics:

participate in Phase I trials to support design of studies.

(7) Marketing personal:

Evalute the status of competitors drug candidates and the potential of the new drug candidate.

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE, KHARADI, PUNE

Subject: - Industrial Pharmacy II (BP 702 T)

Assignment No.: 01

Class: - Final Year B. Pharm (Sem VII, 2018 P)

Date: - 26/08/2021

---

2 Q X 5 M = **10M**

1 Wight requirement for new drug application

2 Explain steps in hall in NDA and FDA submission

V.V. Dhurade.

Final Year B-pharm
Roll No - 09

Assignment - I

26/8/2021

08/10

INDUSTRIAL PHARMACY-II

Seen V.V. Dhulekar

Q.1. Write requirement for new drug application.

Ans New Drug Application :-

A] Defination -

- An application submitted by the manufacture of a drug to FDA after clinical trials have been completed for a license to market the drug for a specified.
- NDA is the vehicle in the united states through which drug sponsers formally propose that FDA approve a new.

B] Requirement for NDA

Format requirement

a] No. of copies : Before 1985 3 copies and only now 2 copies are required.

- The copies are of two types -
  1] Archival copy
  2] Review copy

b] Assembling the Application

1] folder
2] Paper size and binding
3] Pagination
4] Volume size and identification
5] Packing carton

Basic requirement

a] Archival copy includes

- Application form (FDA 356th)
- Index

- Summary requirement

a] Labeling - Proposed label

b] Pharmacological class

c] foreign marketing history - list of country who approved withdrawn same drug.

d] Chemistry, mfg, control :

Drug substance → Names
Physical and chemical properties
stability
Manufacture

Drug product → Composition — Analytical method
Dosage form — container
Manufacture — Closure
Specification — stability.

e] Non-clinical pharmacology and toxicology summary

- Pharmacological studies
- Acute toxicity studies
- Multi dose toxicity studies
- Mutagenicity studies

f] Human pharmacokinetic summary -

g] Microbal summary :

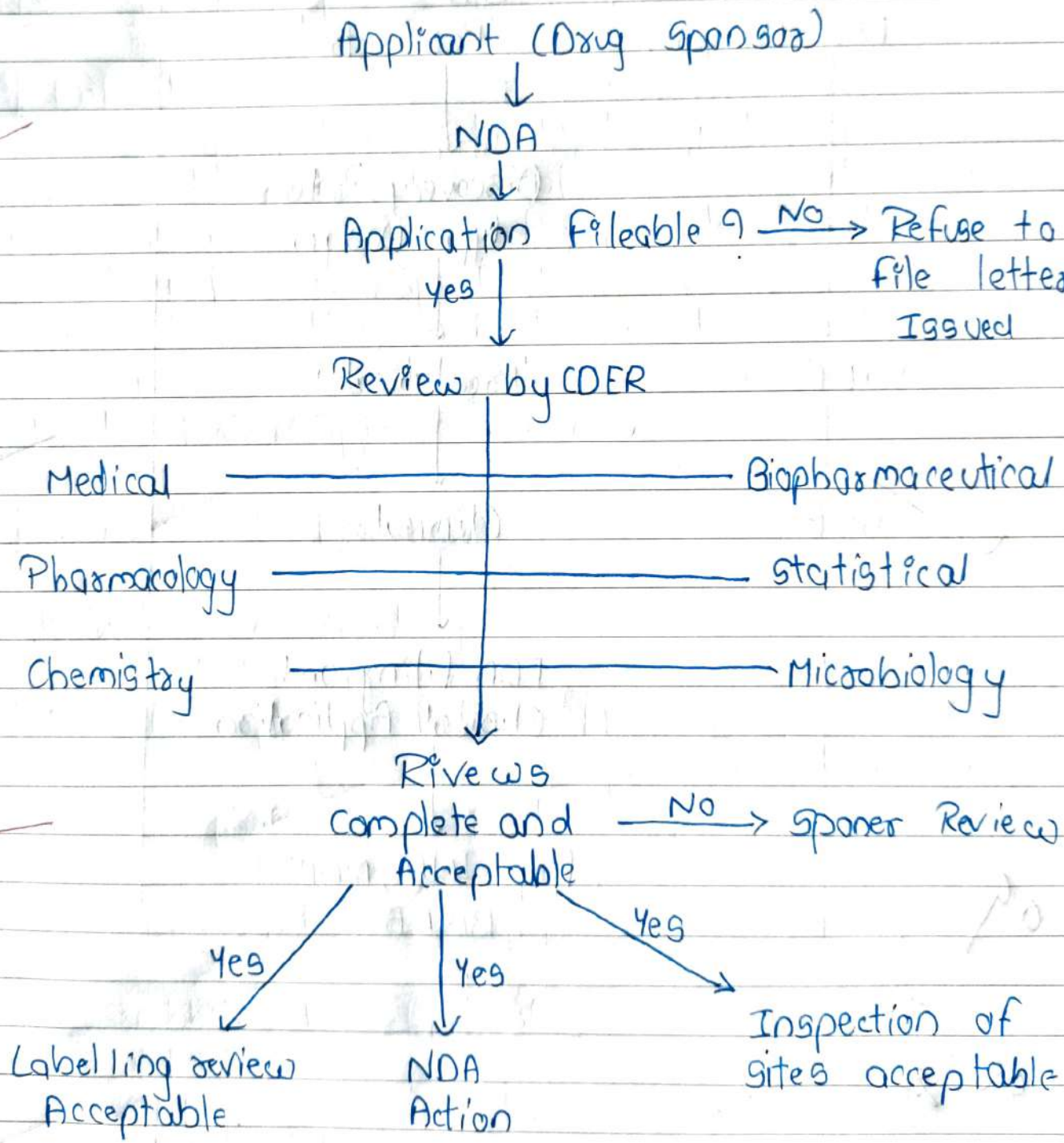
- Microbal spectra
- Mechanism of action

h] Clinical data summary and result :

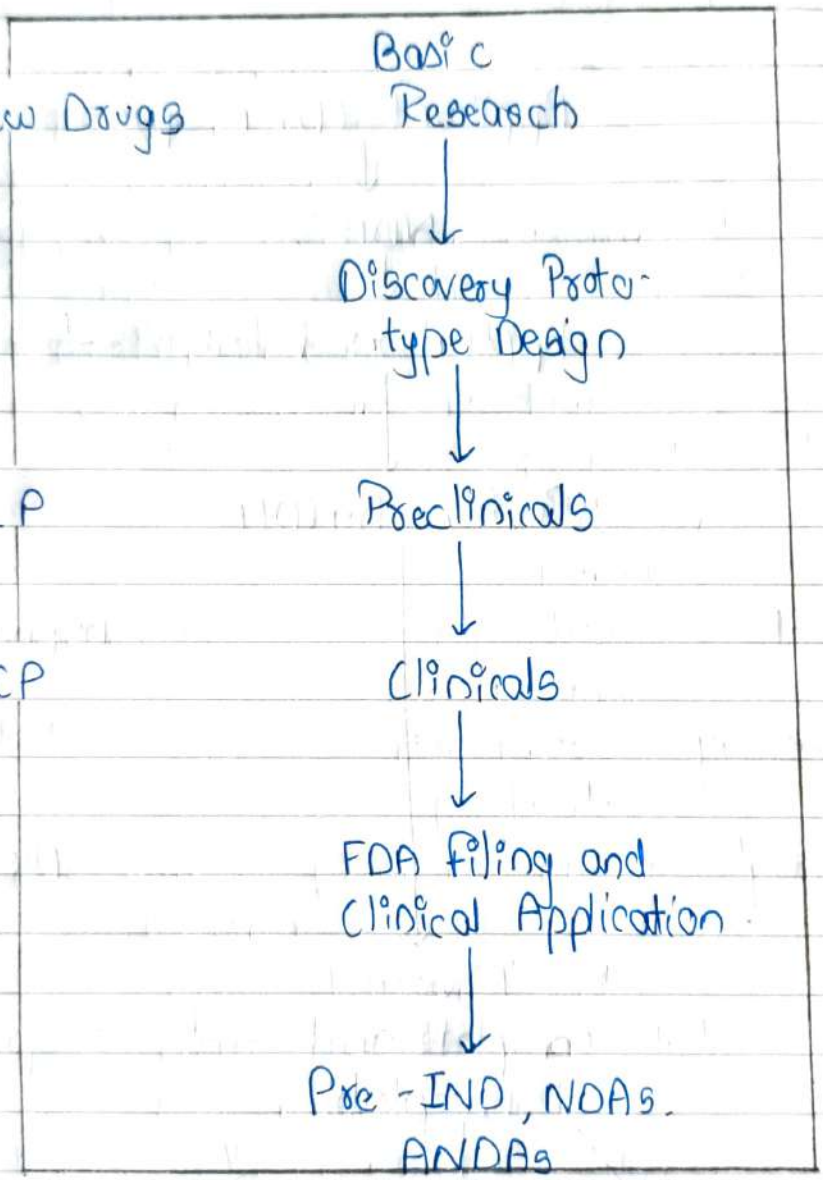
- Clinical pharmacology
- Overview of clinical studies
- Controlled clinical studies
- Uncontrolled clinical studies

Q.2. Explain step involved in NDA and FDA submission

Ans **NDA Review Process :-**



FDA New drug approval process :-



final Year B. pharm. Roll No:- 01.

Assignment : I

Subject → Industrial Pharmacy (08/10) 26/8/2021

Q.1> Write requirement for new drug application.

Ans:- Defn →

An application submitted by the mfg. of a drug to the FDA after clinical trials have been completed for a liense to market the drug for a specified.

NDA is vehicle in the united states through which drug sponsers formally propose that FDA approve a new.

Requirement for NDA →

format requirement :-

(a) no. of copies → Before 1985, 3 copies and now only 2 copies are required.

The copies are of two types,
- Article copy
- Review copy.

(b) Assembling the application →
1) folder
2) Paper size & binding
3) Volm. size & identification
4) Pagination
5) Packing carton.

Basic requirement :-

(a) Archival copy involves →
- Application form (FDA 356th)
- Index

Summary requirements →

(a) Labeling - proposed label

(b) Pharmacological class

(c) foreign marketing history - List of country who approved & withdraw same drug.

(d) chemistry, mfg. control.

- Drug substance - Name
  Physical and chemical properties
  stability
  manufacture.
- Drug product - composition
  Dosage form
  manufacture
  specification
  Analytical method
  containers.
  closures
  stability
  Investigational formulation

(e) Non-clinical pharmacology and toxicology summary →

Pharmacological studies
Acute toxicity studies
Multidose toxicity studies
Mutagenerity studies
Reproduction studies
ADME studies.

(f) Human pharmacokinetic summary.

(g) Microbial summary →
- microbial spectra
- mechanism of action.

(h) clinical data summary and result →
- clinical pharmacology
- oreview of clinical studies
- controlled clinical studies
- uncontrolled clinical studies.

Q.2) Explain step involved in NDA & FDA submission.

Ans:- NDA review process :-

Applicant (Drug Sponsor)

↓

NDA

↓

Application fielable? —NO→ Refuse to file letter issued.

↓ Yes

Review by CDER

medical	Biopharmaceutical
pharmacology	statistical
chemistry	microbiology

Review complete & acceptable —No→ sponser review

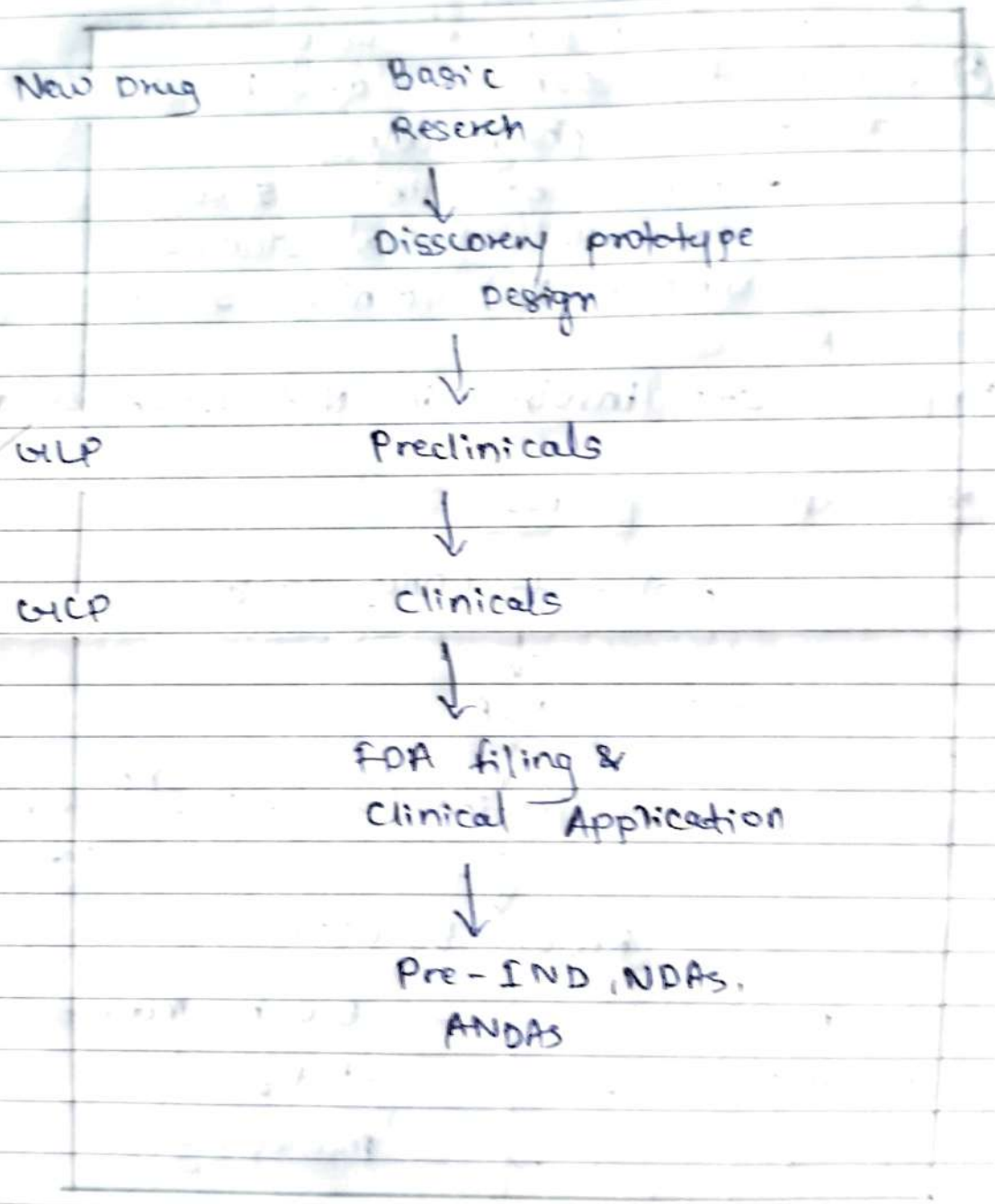
Yes ↙ ↓ Yes ↘ Yes

labelling Review

NDA Action

Inspection of sites acceptance

FDA New drug Approval process →



C. Problem Solving Methodologies

5. Research Activity for UG/PG/Ph. D. students

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14. -

Guide and Topic Allotment for Practice School Academic Year - 2022-2023

Class: Final Year B. Pharm (Sem VII)

Sr. No.	Name of the Guide	Roll. No	Name of the Student	Name of the Topic
01	Mrs. N.M. Sayyad.	1.	Akhade Akshay Balkrishna	Formulation & Evaluation of Sustained Release Tablet.
		2.	Aranya Atharva Ravindra	
		3.	Bhamare Mansi Dipak	
02	Mrs. K.R.Ghule .	4.	Bhapsekar Nikhil Deepak	Analytical Method Development and Validation of Pioglitazone Using UV Spectrophotometer.
		5.	Bhosure Nikita Kaluram	
		6.	Bhujbal Nandini Dashrath	
03	Mrs. B.G Shelar.	7.	Bichukale Snehal Janardan	Formulation and Evaluation of Tablet.
		8.	Choudhary Snehal Shantaram	
		9.	Dake Raj Atul	
04	Mrs. T R Khande	10	Damale Pallavi Suresh	Analytical Method Development and Validation of Some Drugs Using UV-Spectrophotometer and Detection of Some Samples by Using Auto Colorimeter.
		11.	Dhainje Rinku Bhimrao	
		12.	Dhanle Varsha Gautam	
05	Mr. N.S. Neharkar.	13.	Dhavale Sahil Satish	Formulation and Evaluation of Bilayer Tablet Using Some Drugs.
		14.	Gaikwad Pranjal Pramod	
		15.	Galgunde Soham Dnyandev	
06	Prof.Dr V.U. Barge.	16.	Gaware Sonali Ravindra	UV Spectrophotometric Method Development and Validation for Determination of Glimepiride in Marketed Formulation.
		17.	Gund Omkar Dattatray	UV Spectrophotometric Method Development and Validation for Determination of Capecitabine in Marketed Formulation.
		18.	Hake Neha Ashok	UV Spectrophotometric Method Development and Validation for Determination of Hydrochlorothiazide in Marketed Formulation
		19.	Jadhav Santosh Baliram	UV Spectrophotometric Method Development and Validation for

				Determination of Lisinopril in Marketed Formulation.
07	Prof.Dr R.Y Patil	20.	Jagtap Vaishnavi Chandrashekhar	Formulation and Evaluation of Herbal Emulgel of *Lanatana camara* Linn Leaf.
		21.	Jamdade Gayatri Santosh	
		22.	Kabire Dinesh Pandharinath	Formulation and Evaluation of Herbal Emulgel of *Agave tequilana* Trel
		23.	Kalsheitt Aishwarya Revanappa	
		24.	Kamthe Aishwarya Vijay	Studies on the Development of Promising Herbal Emulgel of *Coccinia grandis* Linn Fruit Extract for Dermatological Complications.
		25.	Khaladkar Vaibhav Bhauso	
		26.	Khandve Gauri Vasant	
08	Dr A.J. Kasbe	27.	Khiratkar Shweta Janardan	Formulation and evaluation of Nanogel
		28.	Khobare Abhishek Suresh	
		29.	Khote Shruti Gorakh	Formulation and evaluation of Buccal Patch
		30.	Kokani Deepak Bapu	
09	Mr.V.V.Veer	31.	Kudale Suvarna Gautam	U V. Spectrophotometer Handling and Determination of some Drugs
		32.	Kumbharkar Harshada Shankar	
		33.	Lawande Rutuja Vikas	U V. Spectrophotometer Handling and Determination of some Marketed Formulations.
		34.	Londhe Minakshi Raosaheb	
10	Mr. K. G Kanase	35.	Madure Vaishnavi Sachin	Electrolyte Therapy Using Herbal Extract of Ginger as Antidiarrheal Treatment.
		36.	Mahamavar Shankar Shivaji	
		37.	Mokashi Mansi Mohan	
		38.	Mulla Anisa Imam	
		39.	Nikalje Kiran Balu	Role of Clinical Trials in Pharmaceutical Industry.
		40.	Paigude Shradha Rajendra	
		41.	Pansare Akshay	
11	Mrs. T.P. Sangrapawar.	42.	Pathak Chaitanya Dashrath	Solubility Enhancement of Poorly Water Soluble Drug.
		43.	Patil Anuja Datta	
		44.	Pawar Prajakta Jyotishya	Study of Super-disintegrants.
		45.	Pharate Abhijit Kailas	
12	Mr. S.S. Kakade	46.	Pote Priti Bharat	Solubility Enhancement of Poorly Soluble Drug.
		47.	Puri Ravi Kailas	
		48.	Raghatwan Akshada Uttam	
		49.	Raipure Prachi Nitin	
13	Mr. P.K.Khade	50.	Rajpurohit Rajvirsing	Transdermal Drug Delivery
		51.	Sagar Deepali Rajendra	
		52.	Sarode Pratiksha Balasaheb	Microemulsion and its Evaluation
		53.	Sarode Ravikiran Dattatray	
14	V. B. Ingale	54.	Shaikh Afiya Ramjan	Preparation and Evaluation of Herbal Tooth powder.
		55.	Shelake Komal Kisan	
		56.	Shinde Mayuri Baburao	
		57.	Shinde Sagar Jaysing	
		58.	Shinde Saurabh Shivaji	

2/3

				Preparation and Evaluation of Herbal Hair Gel.
		59.	Shinde Vishal Namdeo	To study and Evaluation of *Psidium guajava* Linn Leaves For Antifungal Activities.
		60.	Shitole Tejas Eknath	
15	Mr. V.V.Dhasade	61.	Surve Sakshi Anil	Herbal skincare cosmetics
		62.	Thorat Rutuja Bapusaheb	
		63.	Ubale Rohan Suresh	
		64.	Ugale Snehal Sunil	Extraction of perfume from flowers
		65.	Undre Darshana Sanjay	
		66.	Waghmare Diksha Mahendra	
		67.	Wakchaure Ajay Balasaheb	Ancient Ayurvedic and Siddha therapies for treatment of various diseases.
		68.	Walanj Sejal Santosh	
		69.	Warghade Rushita Bappu	

Dr R.Y. Patil
Coordinator

Dr Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

3/3

Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical Sciences and Research Centre.
Kharadi Pune- 14.

Practice School Report On

Studies on The Development of Promising Herbal Emulgel of *Coccinia grandis* Linn Fruit Extract for Dermatological Infection By Fungus.

Submitted To

Savitribai Phule Pune University , Pune.

In partial fulfilment of the B. Pharm course.

Submitted By

Ms. Aishwarya Vijay Kamthe.

Mr. Vaibhav Bhauso Khaladkar.

Ms. Gauri Vasant Khandve.

Guided By

Dr. R Y Patil H.O.D.

(Pharmacognosy Department)

Academic Year 2022-2023

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre

Kharadi Pune-14.

Certificate of the Guide

This is to certify that the Practice school report entitled Studies On The Development Of Promising Herbal Emulgel Of *Coccinia Grandis* Linn Fruit Extract For Dermatological Infection By Fungus has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University Pune by Ms.Aishwarya Vijay Kamthe, Mr.Vaibhav Bhauso Khaladkar. and Ms.Gauri Vasant Khandve. students of B.Pharm VII semester during year of 2022-2023 they have carried out their Practice school project under my guidance at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Kharadi ,Pune.

Date: 6/12/2022

Place:- Kharadi

Dr.R.Y.Patil

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14.

Guides and topics Allotment for Practice School Academic Year 2021-2022

Class: Final Year B. Pharm (Sem VII)

Sr. No.	Name of the guide	Roll. No.	Name of the Student	Name of School
01	Prof. Dr V.U.Barge.	1	Ahiraao Chaiitanyaa Deepak	UV Spectrophotometric Assay of Medicinal Substances.
		2	Awhale Harshada Sukhdev	
		3	Barate Rahul Nilkant	
		4	Barde Neha Amoi	Visible Spectrophotometric Assay of Medicinal Substances.
		5	Bhagat Preeti Shahaji	
		6	Bhange Aishwarya Jotiram	
02	Prof. Dr.R.Y.Patil.	7	Birgad Sachin Baalaj	Evaluation of Medicinal Plants (*Caraca Papaya*)
		8	Chaudhari Mukesh Shivlal	
		9	Chaudhary Karan Vajaram	
		10	Chavan Pranita Prabhakar	Screening Of Medicinal Potential In Plant *(Ricinus Cummunis)*
		11	Daundkar Anuradha Shashikant	
		12	Dhumal Rutuja Ravindra	
		13	Gaikwad Shubham Ramdas	
		14	Galande Dnyanesh Anil	Phytochemical Evaluation of (Ficus *Bengalensis)*
		15	Garad Nilesh Bhalchandra	
		16	Garud Shweta Balkrushna	
03	Mr. Vikram Veer.	17	Gote Sima Datta	Analytical Chemistry
		18	Hajare Tanaji Ram	
		19	Hingmire Prasad Tulsidas	
		20	Jadhav Mansi Vijay	Synthetic Organic Chemistry
		21	Jadhav Pratiksha Ajinath	
		22	Jagtap Darshana Balasaheb	
04	Mr. Sujit Kakade.	23	Jagtap Dhiraj Dattatray	Cosmetic Science
		24	Jagtap Rutuja Shantaram	
		25	Janawale Abhishek Vishwambhar	
		26	Kakade Prachi Manohar	Formulation Development
		27	Kakade Suchita Prakash	
		28	Kamble Vijay Sanjay	
05	Mr.Krunal Kanase.	29	Khade Utkarsha Balasaheb	Clinical Research
		30	Kodre Rutuja Khushal	
		31	Kshirsagar Snehal Vishnu	
		32	Kumar Ashutosh	Overview of Pharmacovigilance

		33	Landage Vishwajeet Vikram	
		34	Mahajan Varsha Sahebrao	
		35	Makwana Chandan Sagar	Assessment and Regulatory in Pharmacovigilance
		36	Mungade Maruti Shivaji	
		37	Naikodi Siddhesh Sanjay	
		38	Napte Omkar Lahu	
06	Mr. Prashant Khade	39	Nawale Prajakta Rajesh	Pre-formulation Studies
		40	Nemade Kiran Subhash	
		41	Nikhade Vaibhav Ramesh	
		42	Nimbalkar Tejal Mohan	Formulation Science
		43	Papal Raj Dilip	
		44	Pardeshi Rupesh Shivcharan	
07	Mr. Vivek Ingale.	45	Patil Anmol Basawantarao	Pre-Clinical Trials
		46	Pawar Prashant Balasaheb	
		47	Poul Pratiksha Gopinath	
		48	Prajapati Simran Kantilal	Statistical Analysis
		49	Raikar Manasi Vikas	
		50	Rajpurohit Ranusingh Suresh	
		51	Salunke Priyanka Rajendra	Pharmacological Screening
		52	Satkar Atharwa Tukaram	
		53	Sharma Tushar Kishor	
		54	Shinde Yogita Baban	
08	Dr Amit Kasbe.	55	Shinde Anupama Anil	Analytical Chemistry
		56	Shinde Shreya Dnyaneshwar	
		57	Shitole Pooja Balasaheb	
		58	Tekale Satish Vitthalrao	Organic Chemistry
		59	Tekawade Prasad Amit	
		60	Thorat Mayureshwar Bhagwan	
09	Mr. Vipul Dhasade.	61	Thorat Supriya Sanjay.	Evaluation of Herbal Cosmetics
		62	Thorat Tejas Vilas.	
		63	Tripathi Apoorva Krishnram.	
		64	Varpe Aishwarya Ramesh.	Qualitative And Quantitative Analysis Of Herbs
		65	Vibhute Prajakta Bapu.	
		66	Walke Rutuja Dilip.	
		67	Yadav Tejaswini Avinash.	Isolation of Metabolites from Plant
		68	Yamgar Amit Subhash.	
		69	Waghmare Vaibhav Madukar.	

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

2/2

PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences
And Research Centre

Kharadi Pune 14

A Practice School Report On

TO STUDY PHARMACOGNOSTIC PARAMATER OF RICINUS COMMUNIS LEAF

Submitted To

Savitribai Phule Pune University,Pune

In partial fulfillment of the B Pharm course

Submitted by

Mr.Dnyanesh Anil Galande

Mr.Nilesh Bhalchandra Garad

Ms.Shweta Balkrushn Garud

Guided By

Dr. R Y Patil

H.O.D.

(Pharmacognosy Departement)

Academic Year 2021-2022

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre

Kharadi Pune 14

CERTIFICATE OF THE GUIDE

This is to certify that the practice school project entitled TO STUDY PHARMACOGNOSTIC PARAMATER OF *RICINUS COMMUNIS LEAF* has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University,Pune by **Mr.Dnyanesh Galande, Mr.Nilesh Garad, Ms.Shweta Garud** a student of B.Pharm VII th semester during the academic year 2021-2022. They have carried out Practice school project under my guidance at **Pune district education Association's Shankarrao Ursal college of Pharmaceutical Sciences and Research Centre,Kharadi,Pune.**

Place:-KHARADI

Guide:-Dr.R.Y Patil

Examined & Evaluated
V.V. Dhakda
6/10/22

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14. -

Guide and Topic Allotment for Project Work. Academic Year-2022-2023.

Class Final Year B. Pharm (Sem VIII)

Sr. No.	Name of the Guide	Roll No.	Name of the Student	Name of the Topic
01	Mrs. N.M. Sayyad.	1.	Akhade Akshay Balkrishna	Formulation & Evaluation of Sustained Release Tablet.
		2.	Aranya Atharva Ravindra	
		3.	Bhamare Mansi Dipak	
02	Mrs K.R.Ghule .	4.	Bhapsekar Nikhil Deepak	Method Development and Validation for Simultaneous Estimation of Drugs Using UV-Spectroscopy.
		5.	Bhosure Nikita Kaluram	
		6.	Bhujbal Nandini Dashrath	
03	Mrs. B.G Shelar.	7.	Bichukale Snehal Janardan	Formulation and Evaluation of sublingual tablet of Meclizine hydrochloride.
		8.	Choudhary Snehal Shantaram	
		9.	Dake Raj Atul	
04	Mrs. T.R Kande .	10.	Damale Pallavi Suresh	Analytical method development and validation of Ezetimibe using uv-spectrophotometer
		11.	Dhainje Rinku Bhimrao	
		12.	Dhanle Varsha Gautam	
05	Mr. N.S. Neharkar.	13.	Dhavale Sahil Satish	Formulation and Evaluation of Bilayer Tablet Using Some Drugs.
		14.	Gaikwad Pranjal Pramod	
		15.	Galgunde Soham Dnyandev	
06	Prof.Dr V.U. Barge.	16.	Gaware Sonali Ravindra	Formulation and evaluation of Herbal Shampoo
		17.	Gund Omkar Dattatray	
		18.	Hake Neha Ashok	Formulation and evaluation of Herbal Hair Oil.
		19.	Jadhav Santosh Baliram	
07	Prof.Dr R.Y Patil	20.	Jagtap Vaishnavi Chandrashekhar	Screening of Polyherbal Extract and its Formulation for Anti Arthritic Potential
		21.	Jamdade Gayatri Santosh	
		22.	Kabire Dinesh Pandharinath	Pharmacological Evaluation Of Decoction and Oil prepared from
		23.	Kalsheitt Aishwarya Revanappa	

1/3

				Nyctanthes Arbor-tristis for Anti Arthritic Activity
		24.	Kamthe Aishwarya Vijay	Evaluation of Decoction and formulation prepared from Different Medicinal Plants for its Anti-Arthritic Activity
		25.	Khaladkar Vaibhav Bhauso	
		26.	Khandve Gauri Vasant	
08	Dr A.J. Kasbe	27.	Khiratkar Shweta Janardan	Analytical Method development and validation of diclofenac sodium in marketed formulation by UV spectroscopy
		28.	Khobare Abhishek Suresh	
		29.	Khote Shruti Gorakh	Analytical Method development and validation of pure lamivudine by UV spectroscopy
		30.	Kokani Deepak Bapu	
09	Mr.V.V.Veer	31.	Kudale Suvarna Gautam	Analytical method development and validation of Glibenclamide in marketed formulation by UV spectroscopy
		32.	Kumbharkar Harshada Shankar	
		33.	Lawande Rutuja Vikas	Analytical method development and validation of Nifedipine in marketed formulation by UV spectroscopy
		34.	Londhe Minakshi Raosaheb	
10	Mr. K. G Kanase	35.	Madure Vaishnavi Sachin	A Report On: Antibacterial Activity of Angle Marmelos (Bael)
		36.	Maharnavar Shankar Shivaji	
		37.	Mokashi Mansi Mohan	
		38.	Mulla Anisa Imam	
		39.	Nikalje Kiran Balu	Formulation and Evaluation of Aloe Vera Soap
		40.	Paigude Shradha Rajendra	
		41.	Pansare Akshay	
11	Mrs. T.P. Sangrapawar.	42.	Pathak Chaitanya Dashrath	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Diclofenac Sodium
		43.	Patil Anuja Datta	
		44.	Pawar Prajakta Jyotishya	Formulation and Evaluation of Mouth Dissolving Tablet of Losartan potassium
		45.	Pharate Abhijit Kailas	
12	Mr. S.S. Kakade	46.	Pote Priti Bharat	Solubility Enhancement of Poorly Soluble Drug
		47.	Puri Ravi Kailas	
		48.	Raghatwan Akshada Uttam	
		49.	Raipure Prachi Nitin	
13	Mr. P.K.Khade	50.	Rajpurohit Rajvirsing	Transdermal Drug Delivery
		51.	Sagar Deepali Rajendra	
		52.	Sarode Pratiksha Balasaheb	Microemulsion and its Evaluation
		53.	Sarode Ravikiran Dattatray	
14	V. B. Ingale	54.	Shaikh Afiya Ramjan	Evaluation of Herbal Tooth powder.
		55.	Shelake Komal Kisan	
		56.	Shinde Mayuri Baburao	

2/3

		57.	Shinde Sagar Jaysing	Evaluation of Herbal Hair Gel.
		58.	Shinde Saurabh Shivaji	
		59.	Shinde Vishal Namdeo	Evaluation of *Psidium guajava* Linn Leaves For Antifungal Activities.
		60.	Shitole Tejas Eknath	
15	Mr. V.V.Dhasade	61.	Surve Sakshi Anil	Formulation and evaluation of Antibacterial Herbal Gel
		62.	Thorat Rutuja Bapusaheb	
		63.	Ubale Rohan Suresh	
		64.	Ugale Snehal Sunil	Formulation and evaluation of Herbal Solid Perfume
		65.	Undre Darshana Sanjay	
		66.	Waghmare Diksha Mahendra	
		67.	Wakchaure Ajay Balasaheb	Formulation and Evaluation of Natural Anti- Acne Cream.
		68.	Walanj Sejal Santosh	
		69.	Warghade Rushita Bappu	

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

3/3

Project report on

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical

Sciences and Research Centre.

Kharadi Pune-14.

Project Report On

Pharmacological Evaluation of Decotion and oil prepared from *Nyctanthes arbor-tristis* L. for Anti arthritic activity.

Submitted To

Savitribai Phule Pune University, Pune.
In partial fulfillment of the B.Pharm course.

Submitted by

Mr. Dinesh Pandharinath Kabire.
Ms. Aishwarya Revanappa Kalshetti

Guided By

Dr. R Y Patil

H.O.D.

(Pharmacognosy Department)

Academic Year 2022-2023.

PDEAs SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE KHARADI PUNE-14

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre.
Kharadi, Pune-411014.

Project report on

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical

Sciences and Research Centre.

Kharadi Pune-14.

Certificate

This is to certify that the Project report entitled Pharmacological Evaluation of Decotion and oil prepared from *Nyctanthes arbor-tristis* L. for Anti arthritic activity. has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University Pune by Mr. Dinesh Pandharinath Kabire, Ms Aishwarya Revanappa Kalshetti, students of B.Pharm V IIIth semester during the academic year 2022 - 2023 has carried out their Project report satisfactorily under the guidance of Dr. R Y Patil at **Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune.**

Date :- 31-05-23
Place :- Kharadi

Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014,

Project report on

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical

Sciences and Research Centre.

Kharadi Pune-14.

CERTIFICATE OF THE GUIDE

This is to certify that the project report of Pharmacological Evaluation of Decotion and oil prepared from *Nyctanthes arbor-tristis* L. for Anti arthritic activity. has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University,Pune by Mr. Dinesh Pandharinath Kabire, Ms. Aishwarya Revanappa Kalshetty, students of B.Pharm VIII semester during the academic year 2022-2023. They have carried out Project report under my guidance at **Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,Kharadi,Pune.**

Date:- 31-05-23

Place :- Kharadi

Dr.R.Y.Patil

V.V.Dhumal 04.06.2023

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Center, Kharadi, Pune -14.

Guides and topics Allotted for Project work Academic Year 2021-2022

Class: Final Year B. Pharm (Sem VIII)

Sr. No.	Name of the Guide	Roll No.	Name of the Student	Name of the Topic
1	Dr R.Y Patil	1	Mr.Birgad Sachin Baalaj	Pharmacognostical Evaluation of *Caraca Papaya* leaves
		2	Mr.Chaudhari Mukesh Shivlal	
		3	Mr.Chaudhary Karan Vajaram	
		4	Ms.Chavan Pranita Prabhakar	Phytochemical Screening Of *Ricinus Cummunis* leaves
		5	Ms.Daundkar Anuradha Shashikant	
		6	Ms.Dhumal Rutuja Ravindra	
		7	Mr.Gaikwad Shubham Ramdas	Phytochemical Evaluation of *Ficus Bengalensis* leaves
		8	Mr.Galande Dnyanesh Anil	
		9	Mr.Garad Nilesh Bhalchandra	
		10	Mr.Garud Shweta Balkrushna	
2)	Dr V.U Barge	11	Mr.Ahiraao Chaiitanyaa Deepak	UV spectrophotometric Assay of medicinal substances
		12	Ms Awhale Harshada Sukhdev	
		13	Mr.Barate Rahul Nilkant	
		14	Ms Barde Neha Amol	Visible spectrophotometric Assay of medicinal substances
		15	Ms Bhagat Preeti Shahaji	
		16	Ms Bhange Aishwarya Jotiram	
3)	Dr. Amit Kasabe	17	Ms Shinde Anupama Anil	To perform assay of diclofenac sodium containing marketed formulations..
		18	Ms Shinde Shreya Dnyaneshwar	
		19	Ms Shitole Pooja Balasaheb	
		20	Mr.Tekale Satish Vitthalrao	To perform assay of Ibuprofen containing marketed formulations.
		21	Mr.Tekawade Prasad Amit	
		22	Mr.Thorat Mayureshwar Bhagwan	
4)	Mr. Vikram Veer	23	Ms. Sima D. Gote	Development and validation of the UV-spectrophotometric method for determination of some APIs in bulk and in the formulation.
		24	Mr. Tanaji R. Hajare	
		25	Mr. Prasad T. Hingmire	
		26	Ms. Manasi V. Jadhav	

1/3

		27	Ms. Pratiksha A. Jadhav	Synthesis and characterization of some substituted Benzimidazole derivatives.
		28	Ms. Darshana B. Jagtap	
5)	Mr. Sujit Kakade	29	Mr.Jagtap Dhiraj Dattatray	"Formulation and Evaluation of Natural Sunscreen Cream"
		30	Ms Kakade Suchita Prakash	
		31	Ms Jagtap Rutuja Shantaram	
		32	Mr.Janawale Abhishek Vishwambhar	Formulation & Evaluation Fast Disintegrating Tablet of Aceclofenac
		33	Ms Kakade Prachi Manohar	
		34	Mr.Kamble Vijay Sanjay	
6)	Mr.Krunal kanse	35	Ms. Utkarsha Khade	Clinical Trial in Covid Vaccine"
		36	Ms. Rutuja Kodre	
		37	Ms. Snehal Khirsagar	
		38	Mr. Sidharth Naikwadi	Data entry in Pharmacovigilance"
		39	Mr. Maruti Mungade	
		40	Mr. Chandan Makhwana	
		41	Mr. Omkar Napte	
		42	Ms. Varsha Mahajan	"OTC Drug- Overuse, Side effect and awareness"
		43	Mr Ashotosh Prajapati	
		44	Mr.Vishwajeet Lande	
7)	Mr. P H Khade	45	Ms Nawale Prajakta	Formulation and Evaluation of fast dissolution tablet of solid dispersion.
		46	Ms Nemade Kiran	
		47	Ms.Nikhade Vaibhav	
		48	Mr.Nimbalkar Tejal	Formulation and Evaluation of controlled release tablet.
		49	Mr.Papal Raj	
		50	Mr.Pardeshi Rupesh	
8)	Mr.Vivek Ingale	51	Ms.Salunke Priyanka	Screening of pharmacological activity of polyherbal formulation.
		52	Ms Satkar Atharva	
		53	Ms Paul Pratiksha	
		54	Mr.Sharma Tusha	
		55	Ms Prajapati Simran	
		56	Mr.Pawar Prashant	Screening of pharmacological activity of polyhedral formulation
		57	Mr.Rajpurohit Ranusingh	
		58	Raikar Mansi	Screening of pharmacological activity of polyherbal formulation
		59	Shinde Yogita	
9)	Mr. Vipul Dhasade	60	Ms Tripathi Apoorva Krishnram	Hair care Formulation development and its evaluation.
		61	Ms Thorat Supriya Sanjay	Qualitative and Quantitative estimation of Medicinal Plants.
		62	Mr.Thorat Tejas Vilas	
		63	Ms Varpe Aishwarya Ramesh	
		64	Ms Vibhute Prajakta Bapu	
		65	Ms Walke Rutuja Dilip	
		66	Ms Yadav Tejaswini Avinash	

2/3

		67	Mr.Yamgar Amit Subhash	To perform Assay for determination of curcumin in some marketed herbal formulation .
		68	Mr.Waghmare Vaibhav Madukar	

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

3/3

PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences
And Research Centre

Kharadi Pune 14

A Project Report on

TO STUDY PHYTOCHEMICAL EVALUATION OF AERIAL ROOTS OF FICIUS BENGHALENSIS LINN

Submitted To

Savitribai Phule Pune University, Pune

In partial fulfillment of the B Pharm course

Submitted by

Mr.DNYANESH ANIL GALANDE

Final Year B.Pharm (SEM VIII)

Guided By

Dr. R Y Patil

H.O.D.

(Pharmacognosy Department)

Academic Year 2021-2022

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

PUNE DISTRICT EDUCATION ASSOCIATION'S

Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre

Kharadi Pune 14

CERTIFICATE OF THE GUIDE

This is to certify that the project Report on entitled TO STUDY PHYTOCHEMICAL EVALUATION OF AERIAL ROOTS OF FICIUS BENGHALENSIS LINN has been completed for the partial fulfillment of the academic condition laid down by Savitribai Phule Pune University,Pune by Mr.DNYANESH ANIL GALANDE student of B.Pharm VIIIth semester during the academic year 2021-2022. He has carried out project work under my guidance At Pune District Education Association's Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre, Kharadi, Pune.

Place:-KHARADI

V.V. Dhekade
30/05/2022

Guide:-Dr.R.Y Patil
30/5/2022

3

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

PDEAS International Journal of Research in Ayurved and Allied Sciences
Volume 5 Issue 1; 28th February 2023 ISSN (online): 2583-2018



PDEAS International Journal of Research in Ayurved and Allied Sciences



Research Article

Formulation and evaluation of herbal Emulgel containing *Lantana camara* linn leaves extract for antifungal activity

Vaishnavi Jagtap[1,*], Gayatri Jamdade[2], Tejas Shitole[3], Vishal Shinde[4], Mayuri Shinde[5]
P. G. Scholar[1,2,3,4,5]
Department of Pharmacognosy[1,2,3,4,5]
PDEA's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune, Maharashtra, India-411014

Article Received on: 01/01/2023; Accepted on: 17/02/2023.
***Corresponding Author:** *Vaishnavi Jagtap*, **E-mail:** vaishnavij1515@gmail.com

ABSTRACT:
Herbal medicine has become an item of global importance both medicinal and economics. Although usage of these herbal medicines has increased but quality, safety and efficiency of these medicinal plants are serious concerns in industrialized and developing countries. Herbal remedies are getting increasing patient compliance as they are devoid of typical side effects of allopathic medicines. The present research has been undertaken with the aim to formulate and evaluate the herbal gel containing *Lantana camara linn* leaves extract. The gel formulation was designed by using Carbapol 940, *Lantana camara* leaf Hydro –alcholic extract, propylene glycol, methyl paraben, propyl paraben and required amount of distilled water. The pH (6.8-7) was maintained by drop wise with addition of triethanolamine. The physicochemical Parameters of formulations were determined. Stability studies have carried out as per ICH guidelines.

KEY WORDS: *Lantana Camara,* herbal emulgel, hydroalcoholic extract, antifungal activity. carbopol 940.

1. INTRODUCTION:

Man existence on earth has been made possible only because of the vital role played by the plant kingdom in sustaining his life. Plants were being used as a source of medicine from the times immemorial as they were easily accessible as well as inexpensive; they have provided the basis for the oldest medicinal systems of human history. The earliest mention of medicinal use of plant is found in Rigveda. [1]

It is great to the credit of the people of India that they have been gifted with larger number of medicinal plants than the natives of any country on the face of earth. Natural products have served as an important source of drugs since ancient times and about half of the useful drugs today are derived from natural sources. India is being sitting on a gold mine of well-recorded and traditionally well-practiced knowledge of herbal medicine. This country is perhaps the largest producer of medicinal herbs and is rightly called the botanical garden of the world. It is generally estimated that over 6000 plants in India are used in traditional, folk and herbal medicine, representing about 75% of the medicinal needs of the third world countries. [2]

The effective use of automated procedures and data bases in the isolation, identification and biological profiling of bioactive compounds from natural sources will be a best guarantee to the continued discovery of novel chemotypes from nature. Natural products research continues to explore a variety of lead structure, which may be used as template for the development of new drugs by the pharmaceutical industry, while microbial products have been the maintain of industrial natural product discovery. In recent years, phytochemistry has again become a field of active interest. [3]

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

Emulgel is a combination of emulsion and gel, which is a new approach for topical delivery of drugs. It has a double control release like emulsion and gel. [4] Gel is new class of formulation, it releases the drug faster in comparison ointment, cream and lotion. Incorporation of drug in emulgel formulation is suitable to treat skin disorders. Topical application of therapeutic agents provides various advantages over the other route of administration. The presence of a gelling agent in the aqueous phase converts a classical emulsion into an emulgel. Within the major group of semisolid preparations, like use of transparent gels has expanded both in cosmetics and in pharmaceutical preparations. [5] Emulgels have several complimentary properties for dermatological use such as being thixotropic, greaseless, easily spreadable, easily removable, emollient, non-staining, long shelf life, bio-friendly, transparent and pleasing appearance. [6]

Herbal medicine is still the main stay, about 75-80% of the whole population and the major part of traditional therapy involves the use of plant extract and their active constituents. Following the advent of modern medicine, herbal medicine suffered a setback, but during last two or three decades, advances in phytochemistry and in identification of plant compounds, effective against certain diseases have renewed the interest in herbal medicines. [7]

2 . PLANT PROFILE:

Figure No. 1: *Lantana camara linn leaf*



2.1 Scientific Classification:

- Kingdom: Plantae
- *Clade*: Angiosperms
- Order: Lamiales
- Family: Verbenaceae
- Genus: *Lantana*
- Species: *camara*

2.2 Botanical Name :

Lantana camara

2.3 Synonyms:

Tantani ,Ghaneri.

2.4 Description:

L. camara is a low erect or subscandent vigorous shrub with triangular stem. It grows up to 1–3 m and in width, it can spread to 2.5 m. Leaves are ovate, acute or subacute, crenate serrate, rugose above, and scabrid on both sides. They are green in color, 3–8 cm long, and 3–6 cm wide. Leaves and stems are covered with rough hair. [8]

2.5 Habitat :

L.camara is native to central and northern south America and the carbbean.L. camara is now distributed in nearly 60 countries subtropical. [9]

2.6 Part used:

Leaves

2.7 Traditional uses:

Powdered leaves are used for cuts, wounds, ulcers, and swellings. An infusion of the leaves is used for bilious fever, eczema, and eruptions [10]

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

3. MATERIAL AND METHODS:

Plant material:

3.1 Collection and Drying

Mature leaves of *L. camara* were collected, from the college ground cleaned and dried at room temperature in shade and away from direct sunlight. The dried leaves were coarsely powdered in grinder. Large difference in particle size of crude drug results in long extraction time as the coarse particles increases the extraction time and fine may form bed, so the powdered material was sieved through 60-120 mesh to remove fines and larger particles and the powder was subjected for further study.

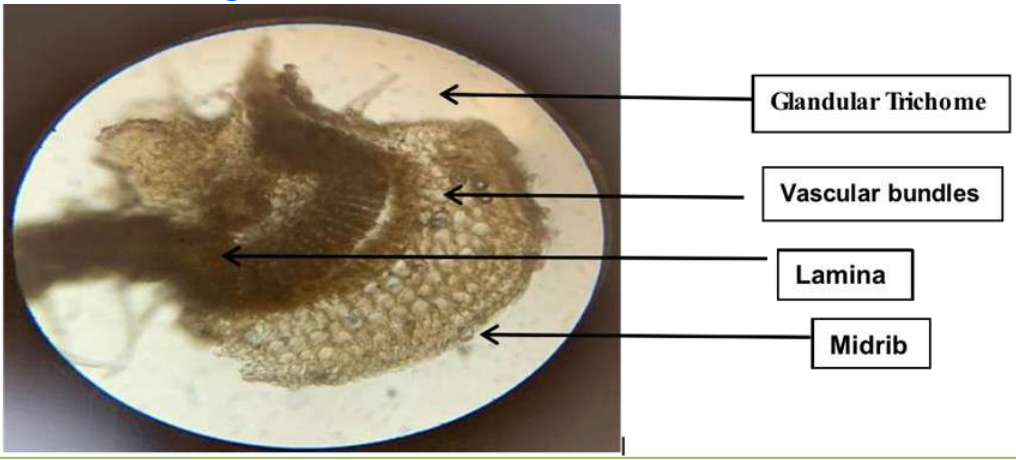
Figure No. 2: Drying of leaves



Figure No. 3: Leaf



Figure No. 4: Trasnverse section of leave



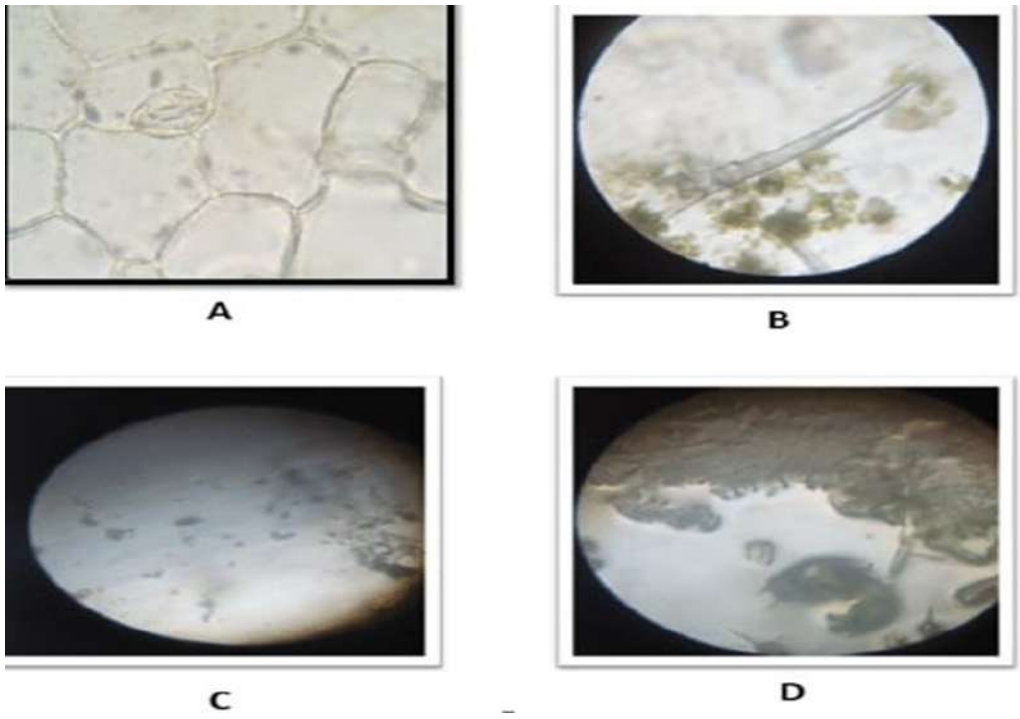
© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

3. Powder microscopy:

The dried Leaves of plant *Lantana camara* Linn were powder and sieved to obtained fine powder. It was taken up for powder microscopy evaluation as follows:

A small quantity of powder was kept on a slide and after mounting on glycerin, 10 min were provided as spared out time. Finally, it was observed for powder microscopical characters under microscope using 10 x lense. [12]

Figure No. 5: Powdered characteristics



4. Determination of Loss on Drying:

Accurately weighed a glass-stoppered, shallow weighing bottle was dried.3g of sample was transferred to the bottle and covered, the weight was taken and sample was distributed evenly to a depth not exceeding 10mm. Then loaded bottle was kept in the oven and stopper was removed. The sample was dried to Constant weight. After drying it was cooled to room temperature in a desiccator. Weighed and calculated the loss on drying in terms of percent w/w. [13]

Observation:

Weights of powdered sample taken = 3 gm

Weights of powdered sample After heating = 2.18gm

Result: The percentage of loss on drying = 72% w/w

5. Physiochemical studies

Physicochemical studies include ash value and extractive value were studied which play an important role to determine the quality and purity of the powder of plant.

5.1 Determination of Ash-Value:

Ash value is used to determine quality and purity of crude drug. Ash value contains inorganic radicals like phosphates, carbonates and silicates of sodium, potassium, magnesium, calcium etc. sometimes, inorganic variables like calcium oxalate, silica, carbonate content of the crude drug affects "Total ash value'.[14]

5.2TOTAL ASH- VALUE:

Weigh accurately previously weighed and tarred crucible. Add 2-4gm of ground material. Ignite the material by increasing the heat to 500- 600° C. Cool in desiccators and weigh. If carbon free ash cannot be obtained in this manner, cool the crucible and moisten the residue with 2ml. of water or a saturated solution of ammonium nitrate R. Dry on a water bath or hot plate and ignite. Allow the residue to cool for 30min. and weigh. Calculate content of total ash -value.[15]

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

Calculation:

Weight of empty silica crucible = 15.78 gm

Weight of powder = 3gm

Weight of silica crucible + powder = 18.78gm

Weight of silica crucible + ash = 16.14 gm

Total ash. = 0.56 gm

Result: The percentage of total ash obtained = 22%w /w

5.3Acid-insoluble ash value :

To the crucible containing total ash, add 25 ml of hydrochloric acid, cover with a watch glass and boil gently for 5 minutes. Rinse the watch glass with 5ml of hot water and add this liquid to crucible. Collect the insoluble matter on an ash less filter paper and wash with hot water until the filtrate is neutral. Transfer the filter paper containing the insoluble matter to the original crucible, and then ignite at 450-500°C to constant weight. Cool in dedicator for 30 min and weigh without delay. Calculate the content of acid-insoluble ash in mg per gram of air-dried material. [16]

5.3 Water-soluble ash:

To crucible containing total ash, add 25ml. of water and boil for 5min. collect mater on ash less filter paper. Wash with hot water and ignite for 15min. at temperature not exceeding 450°C. Subtract the weight of this residue in mg obtained from total weight of total ash.[17]

6. Extraction Methodology:

The solid extraction of drug represents a solid from solid separation. The liquid- liquid extraction is one, in which any of the two immiscible liquids are used for the extraction (Solvent extraction).

Extraction process comes to a halt when the distribution of the extractive substance between miscella and drug residue reaches the value 'K', i.e. when the concentration gradient between miscella and reduces has become zero. [18]

$$K = \frac{\text{Concentration of extracted substances in the miscella}}{\text{Concentration of extractive substance in the drug resistance}}$$

Figure No. 6: Solvent extraction of leave powdered.



6.1 Percentage Yield of Extract:

The Extraction of any crude drug with a particular solvent yields a solution containing different phyto-constituents. The composition of these phytoconstituents in that particular solvent depends upon the nature of the drug and solvent used. [19]

Procedure:

It indicates the approximate measures of the chemical constituent plant. All the values were taken in triplicate and the mean average was taken.

100 gms of the powdered drug was taken in a weighing bottle and transfer it in 1000 ml graduated flask was filled with the solvent (90 % alcohol).

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

Flask was closed and set aside for 24 hours, shaking frequently. (Maceration) extract was filtered into a 100 ml cylinder.

When sufficient filtrate has collected, 200 ml of the filtrate was and Evaporated to dryness on a water-bath and complete the drying in an oven at 100° C.it wasCool in a desiccator and weigh [20]

Weight of powdered leaves taken. = 100 gm
Weight of Extract obtained in hydro-alcohol = 7.45 gm

Result:

Percentage yield of Hydro-alcoholic Extract was obtained = 7.45 % w/w

7.Preliminary Phytochemical Screening:

Extracts of leaves wasprepared using Aqueous, Ethyl Acteate, Methanol solvents and the extracts were subjected to Preliminary Phytochemical Screening.

1. Test for Steroids [21]

a) Salkowski test

One ml of concentrated sulphuric acid was added to 10 mg of extract dissolved in 1 ml of chloroform. A reddish brown color exhibited by chloroform layer and green fluorescence by the acid layer suggests

b) Liebermann test

To 2 mg of the residue few ml of acetic anhydride was added and gently heated. The contents of the test tube were cooled and 2 ml of concentrated sulphuric acid was added from the side of the test tube. Development of blue colour gave the evidence for presence of sterols.

c) Liebermann-Burchard test

10 mg extract was dissolved in 1 ml of chloroform and 1 ml of acetic anhydride was added following the addition of 2 ml of concentrated sulphuric acid from the sides of the test tube. Formation of reddish violet colour at the junction indicates the presence of steroids.

2. Test for Saponins [22]

a) Foam formation test

One ml solution of the extract was diluted with distilled water to 20 ml and shaken in a graduated cylinder for 15 minutes. The development of stable foam indicates the presence of saponins.

3.Test for Alkaloids [23]

a) Dragendorff's test

0.1 ml ditute hydrochloric acid and 0.1 ml Dragendorff's reagent was added in 2 ml of extracts in test tube. Formation of orange brown precipitate indicates the presence of alkaloids.

b) Mayer's test

2 ml of extract was taken in test tube. 0.2 ml of dilute hydrochloric acid and 0.1 ml of Mayer's-reagent were added. Formation of yellowish buff precipitate indicates the presence of alkaloids.

c) Wagner's test

2 ml of extract was treated with 0.2 ml dilute hydrochloric acid and 0.1 ml of Wagner's reagent. Formation of reddish-brown precipitate indicates the presence of alkaloids.

d) Hager's test

2 ml of extract was allowed to react with 0.2 ml dilute hydrochloric acid and 0.1 ml of Hager's reagent. Formation of yellowish precipitate indicates the presence of alkaloids.

4. Test for Glycoside [24]

Modified Borntrager's test

The extract was treated with ferric chloride solution and heated on a boiling water bath for 5 min. The mixture was cooled and shaken with equal volume of benzene. The benzene layer was separated and treated with half its Volume of ammonia solution. The formation of rose pink or cherry red colour in the ammoniacal layer indicates the presence of anthraquinones.

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

5. Test for Tannins [25]

a) Ferric Chloride test

Five ml of extract solution was allowed to react with 1 ml of 5 per cent ferric chloride solution. Greenish black colouration indicates the presence of tannins.

b) Lead Acetate test

Five ml of extract was treated with 1 ml of 10 per cent aqueous lead acetate solution. Development of yellow coloured precipitate indicates the presence of tannins.

c) Potassium Dichromate test

Five ml of extract was treated with 1 ml of 10 per cent of aqueous potassium dichromate solution. Formation of yellowish brown precipitate suggests the presence of tannins.

6. Test for Proteins [26]

a) Biuret test

The extract was treated with 1 ml of 10 per cent sodium hydroxide solution and heated. A drop of 0.7 per cent copper sulphate solution was added to the above mixture. The formation of purplish violet colour indicates the presence of proteins.

b) Xanthoproteic test

A little test residue was taken in 2 ml of water and to it 5 ml of concentrated nitric acid was added. Formation of yellow colour indicates tine presence of proteins.

c) Million's test

The extract was treated with 2 ml of million's reagent. The formation of site precipitate, which tuns to red upon heating, indicates the presence of proteins and amino acids,

7. Test for Amino Acids [27]

a) Ninhydrin test

The extract was treated with Ninhydrin reagent at pH range of 4-8 and boiled. Development of purple colour indicates the presence of amino acids.

8. Test for Carbohydrates [28]

a) Molish test

Two ml of extract solution was treated with few drops of 15 per cent ethanolic alpha-naphthol solution in a test tube and 2 ml of concentrated sulphuric acid was added carefully along the sides of the test tubes. The formation of a reddish violet ring at the junction of two layers indicates the presence of carbohydrates.

b) Barfoed's test

The test residue was dissolved in water and heated with a little quantity of Barfoed's reagent. Development of brick red precipitate within two minutes shows the presence of monosaccharide.

9. Test for Reducing sugars [29]

a) Benedict's test

Equal volumes of Benedicts reagent and extract in test tube and boiled for grin, solution appeared green, yellow or red depending upon the amount of reducing sugar present.

Figure No. 7: Preliminary test (1)



Figure No. 8: Preliminary test (2)



© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

Table No. 1: preliminary phytochemical screening for various extracts of Lantana camara

Chemical Test	Ethyl Acetate	Methanol	Aqueous
Test For Steroids	-	+	+
Test For Saponins	+	+	-
Test For Alkaloids	+	+	-
Test For Glycosides	-	+	-
Test For Flavonoids	+	+	+
Test For Tannis	-	-	-
Test For Proteins	-	+	+
Test For Amino Acids	+	+	-
Test For Carbohydrates	+	+	-
Test For Sugar	-	-	+

Test Organisms

Fungi used as the test organisms in this study were Escherichia coli, Staphylococcus aureus, Proteus mirabilis, Salmonella sp, Shigella sp., Enterococci faecalis, Pseudomonas aeruginosa, Klebsiella pneumonia, Candida tropicalis and Fusarium sp. All the clinical isolates were acquired from PD EAs Waghire college of Arts, Commerce and Science college Saswad Dist.- Pune tal- Purandhar.

Antifungal Assay

Antifungal activity, the appropriate fungal test pathogens were seeded in potato dextrose agar (PDA) in Petri dishes (11). Paper disks of 6 mm in diameter were laid on the inoculated test organism after being soaked with 15 ml of the *Lantana camara* of 50 mg/ml, antifungal 1 activity was determined by measuring the zone of inhibition around the disk. Streptomycin was used as positive control of the growth DMSO (dimethyl sulfoxide) solution was used.

Table No. 2: Antifungal activities of EMULGEL of leaves of Lantana camara leaves against fungal organism

Antifungal Activity (zone of inhibition)			
Concn. In (µg/ml)	Zone of inhibition in mm A . Niger.	Rhizopus	Mucor
5	17	18	15
25	18	20	17
50	19	21	19
100	20	22	20

Antifungal activities of the extracts increased linearly with increase in concentration of extracting (µg/ml). As compared with standard drugs, the results revealed that in the extracts for fungal activity, Rhizopus shows good result as compare with Aspergillus, niger and Mucor The growth inhibition zone measured ranged from 11 to 20mm for all the sensitive bacteria, and ranged from 14 to 20 mm for fungal strain.

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

Figure No. 9: A. niger, Rhizopus Mucor

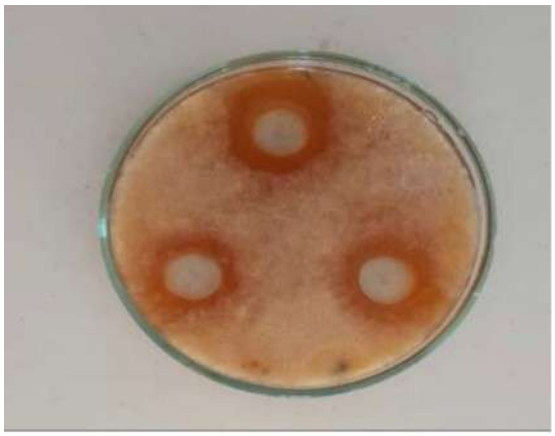


Figure No. 10: concentration



9. Formulation study for Herbal Emugel:

Method for Preparation of Gel Containing Extract:

1 g of Carbopol 934 was dispersed in 50 ml of distilled water kept the beaker aside to swell the carbopol 934 for half an hour and then stirring should be done to mix the carbopol 934 to form gel. Take 5 ml of distilled water and required quantity of methyl paraben and propyl paraben were dissolved by heating on water bath. Solution was cooled and Propylene glycol 400 was added. Further required quantity of *Lantana camara* leaves extract was mixed to the above mixture and volume made up to 100 ml by adding remaining distilled water. Finally full mixed ingredients were mixed properly to the Carbopol 934 gel with continuous stirring and triethanolamine was added drop wise to the formulation for adjustment of required skin pH (6.8-7) and to obtain the gel at required consistency.[30]

Formulation:

As per method described above the formulae were tabulated in Table 1. Along with control sample gel were prepared with addition of 2.5g and 5g of *Lantana camara* leaves extract to prepared 2.5% and 5% *Lantana camara* gel respectively. [31]

Sr. No.	Ingredients	Quantity taken 2.5% *L.camara* gel	Quantity Taken 5% *L.camara* gel
1.	Hydroalcoholic extract	5gm	5gm
2.	Carbopol 934	0.75gm	0.85gm
3.	Liquid paraffin	2.5ml	5ml
4.	Span 60	0.45ml	0.45ml
5.	Tween 80	0.50ml	0.50ml
6.	Propylene glycol	3.5ml	6.5ml
7.	Methyl paraben	0.01gm	0.01gm
8.	Distilled Water	Up to q.s	Up to q.s

Figure No. 8: Formulatuion of herbal emulgel



© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

10. Evaluation of topical gel formulation

A. Physical Evaluation:

Physical parameters such as color and appearance were checked.

B. Measurement of pH:

pH of the gel was measured by using Ph meter.

C. Viscosity;

Viscosity of gel was measured by using Brookfield viscometer with spindle.

D. Spreadibility:

Spreadibility was determined by the apparatus which consists of a wooden black,which was provided by a pulley at an end. By this method spreadibility was nearest on the basis of slip and drag characteristics of gel. An excess of gel (about 2g) under study was placed on the ground slide. The gel was then sandwiched between this slide and another glass side having the dimension of fixed ground slide and provided with the hook. A. one kg weighted was placed on the top of the two sides for 5 minutes to expel air and to provide a uniform film of the gel between the slides. Excess of the gel was scrapped off from the edges. The top plate was then subjected to pull of 80 gm. With the help of string attached to the hook and the time (in seconds) required by the top slide to cover a distance of 7.5cm be noted. A shorter interval Indicate better spreadibilty. Spreadability was calculated using the following formula:

S=M=L/T

Where,

S=Spreadibility,

M-Weight in the pan (tied in the upper slide)

1-Length moved by the glass side

T=Time (in sec.) takes to separate the să de completely each other. E. Stability Study :

The stabilty study was performed as per ICH guidelines & The Formulated gel were filled in the collapsible tubes and stored at different temperatures and humidity conditions, vix 250 C/20C/ 60% 5% RH 300 C 20C/65% /5% RH 400 C20C/ 75% 15% RH for a period of three months and studied for appearance, pH, and spreadability.

12. Therapeutic Uses:

A number of therapeutic uses of various parts of *Lantana camara* have been documented which indicate that *Lantana camara* leaf is being used for treatment of various aliments in many regions of the world since ancient time. It has been documented that leaf and root decoction of *Lantana camara* was used to treat stomach ache and vomiting in infants in West Africa. Beside these the same parts of the *Lantana camara* have been used against quinine resistant malaria. At the same time the leaves are also have been used medicinally for treatment of sore throat cough, conjunctivitis toothache, skin rates and itching and the vapor of boiling leaves are used for headache and cold. In West Africa the leaves have also been used as diaphoretic simulant, and treatment of jaundice and rheumatism. [12]. In Nigeria and Senegal *Lantana camara* leaf infusions have been used in management of cough, colds, asthma and pyrexia. [13]. In Central and South America and Ghana *Lantana camara* leaves and flowers have been used against lever, influenza and stomach ache sores chicken pox and measles high blood pressure. Beside these the plant parts have been employed for the treatment of cancers and tumors. Along with these the therapeutic use of the *Lantana camara* have been documented in treatment of cuts, rheumatism, ulcers, vermifuge, leprosy and scabies in. Additionally, the *Lantana camara* have also been used in relieving gastrointestinal diseases .[14] plant is also ben used for treating ENT disorders like cold, cough, tonsillitis, otitis-media.[15] leaf extract of *Lantana camara* plant has been found to cure several skin diseases like leprosy, fungal problems etc. [16], In Southern Western Ghats of India)[17] aerial parts are been used to treat rheumatism and pulmonary diseases [18]. In addition to that *Lantana camara* have also been reported to be used in management of bilious fevers, catarrhal infections, tetanus,atoxy of abdominal viscera[19].

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

13. Application of herbal gel and skin irritation study

0.5 gm the herbal gel was used as the test substance was applied on rat to area approximately 6 cm^2 and covered with a guaze patch. The patch was loosely held is contact with the skin by means of a semi-occlusive dressing for the duration of 1 hour and guaze was removed. At the end of the exposure period

i.e, 1 hour, residual test substance was removed, without altering the existing response a integrity of the epidermis. Observations have recorded after removal of the patch. Control animals were prepared in the same manner and 0.5 gm of the gel base ie, gel formulated using all ingredients except the herbal mixture was applied to the contral animals and observations were made as similar to the test animal. The gel was applied to the skin once a day for 7 days and observed for any sensivity and the reaction if any was graded .

RESULTS AND DISCUSSION:

Lantana camara linn leaves under microscope T.S shows mesophyll cells, palisade cell. L.S. shows Xylem Phloem and Fibres, poweder shows Fibres and Stomata.

Lantana camara linn. leaves after drying calculation of loss of drying was to be obatained 9.877% w/w and powder under muffle furnance gives ash Value of 22% w/w.

Lantana camara linn leaves after maceration extraction and constant stirring in water bath gives the product, that product was calculated 7.45% w/w to be obtained.

Lantana camara linn showing Preliminary Phytochemical screening HydroAlcoholic Extract shows presence of Steroids, Saponins, Tannins, Flavonoids.

Methanol Extract shows presence of Steroids, Saponins, are present.

The herbal gel was prepared and subjected to Evaluation of the various parameters. The herbal gel was dark greenish in color and translucent in appearance and had a cool and smooth feeling on application pH also maintained constant throughout the study which was found to be 6.90 to 7.0 and the gel was non -irritant upon application on the skin. Spreadibility were also measured and found be less variant than the initially prepared gel after Performing stability study.

CONCLUSION:

Hydro-alcoholic Extract of *Lantana camara* linn leaves showed prominent anti-fungal activity against human pathogenic, thus *Lantana camara* linn leaves can be used as a potential antifungal drug against human pathogenic fungal infection.

REFERENCES:

[1] Patwardhan B, Hooper M (1992): Ayurveda and future drug development. Int. J. Alter-native Complement Med 10: 9-11.
[2] Hook DJ, Pack EJ, Yacobucci JJ and Guss J (1997): Approaches to automating the dereplication of bioactive natural products. The key step in highthroughput screening of bio active materials from natural sources. J Biomol Screening 2: 145-52.
[3] Borris J (1996): Natural Product Research; Perspectives from a major pharmaceutical company Merck Research laboratories. J. Ethnopharmacol 51:29.
[4] Anu Hardenia, Sonali Jayronia, Sanjay Jain. Emulgel: an emergent tool in topical drug delivery. International journal of pharma-ceutical sciences and research.2014; 5 (5):1653-1660.
[5] Kumar L, Verma R. In vitro evaluation of topical gel prepared using natural polymer. International Journal of Drug Delivery. 2010; 2: 58-63.
[6] Joel LZ, Gregory PK, Liberman HA, Rieger MM, Banker GS.Pharmaceutical dosage forms: disperse systems. Marcel Dekker. New York. 1989; 502.
[7] Ahmed L, Mohammed Z, Mohammed F. Screening of some Indian medicinal plants for their antimicrobial properties. J.Ethnopharmacol. 1998; 62:183-193.
[8] Dahanukar S, Thatte U (2002): Ayurveda Revisited. Popular Prakashan,Mumbai. 3rd ed. pp. 10. Dahl JB, Moiniche S (2004): "Pre-emptive analgesia" Br Med Bull 71: 13 -27

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

[9] Rol Prakash RP, Rao 7]R. Lpharmaceutical and clinical research.2010; 3: 126-129.
[10]Jyothi M Joy. Vamsi S, Satish C, Nagaveni K. Lantana camara Linn: A Review. Inter. J. of Phytotherapy. 2012; Vol 2, Issue 2: 66-73.
[11]Mukharjee PK (2002): "Quality Control of Herbal Drug", business horizon publication, New Delhi. 1st ed. pp. 133, 193, 176-193, 380-422, 405407, 492.
[12]Tetali P., Waghchaure C., Daswani P.G., Antia N.H. and Birdi T.J., "Ethnobotanical survey of antidiarrhoeal plants of Parinche valley, Pune district, Maharashtra, India", Ethnopharmacology, 123:2009: 229-236.
[13]Costa J. G. M., Rodrigues F. F. G., Sousa E. O., Junior D. M. S., Campos A. R., Coutinho H. D. M., and de Lima S. G., "Composition and larvicidal activity of the essential oils of Lantana camara and Lantana montevidensis", Chemistry of Natural Compounds, 2; 2010:46.
[14]Nayak B.S., Raju S.S., Eversley M. and Ramsubhag A., "Evaluation of wound healing activity of Lantana camara L. - A preclinical study", Phytother. Res., 23, 2009:241-245.
[15]Nguta J.M., Mbaria JM., Gakuya D.W., Gathumbi P.K. and Kiama S.G., "Traditional antimalarial phytotherapy remedies used by the South Coast community, Kenya", J. of Ethnopharmacology, 131; 2010: 256-267.
[16]Kokate, C.K. Purohit, AP. And Gokhale, S.B Text Book Pharmacognosy, edition 4, Pune:Nirali Prakashan, 2006.
[17]Indian pharmacopeia,1996,(Third edition)
[18]Mukharjee PK (2002): "Quality Control of Herbal Drug", business horizon.
[19]WHO 2002. WHO traditional medicine strategy. World Health Organization, Geneva. 223-225.
[20]Farnsworth NR. Ethno pharmacology and future drug development, The North American experience,J Ethnopharmacol.,1993;38:145–52.
[21]Houghton PJ. The role of plants in traditional medicine and current therapy. J Alter Complement Med. 1995;1:131–43.
[22]Dubey NK, Kumar R, Tripathi P. Global promotion of herbal medicines:India's opportunity. Curr Sci. 2004;86:37–41.
[23]Ramasamy S, Charles MA. Antibacterial effect of volatile components of selected medicinal plants against human pathogens. Asian J Microbial Biotech Env. 2009; 209–210.
[24]Lam KS. New aspects of natural products in drug discovery. Trends Microbiol. 2007;15: 279–289.
[25]Dahanukar SA, Kulkarni RA, Rege NN. Pharmacology of medicinal plants and natural products. Indian J Pharmacol. 2000;32:S81–118.
[26]Cowan MM. Plant products as antimicrobialagents. Clin Microbiol Rev. 1999;12: 564–582.
[27]Harborne JB (1998): Phytochemical Methods, A Guide to modern technique of Plant Analysis. Springer international ed. 3rd page no 134
[28]Khandelwal KR practical pharamacognocy Nirali publication 3 rd edition 2017, 78-87.
[29]Hawk PB, Oster BL, Summerson WH (1954): The Practical Physiological Chemistry, McGraw Hill Book Co., New York, 13th Edn: 1999, 111-119.
[30]Rosenthaler L (1930): Chemical Investigations of Plants, G. Bell and Sons, London,:1st edition 1999, 23-29 and 119-132.

Cite this article as:

Vaishnavi Jagtap, Gayatri Jamdade, Tejas Shitole, Vishal Shinde, Mayuri Shinde, Formulation and evaluation of herbal Emulgel containing Lantana camara linn leaves extract for antifungal activity, PDEAS Int. J. R. Ayu. & A. Sc., 5(1); Feb 2023, p. 10-21.

© All Rights reserved. Pune District Education Association | Journal Hosting by RASAMRUT

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

Formulation and Evaluation of Herbal Emulgel from CoccinaGrandis Linn Fruit Extract for Fungal Dermatological Infection.

Miss. Gauri V. Khandve[1] Miss.Aishwarya V. Kamthe* Mr. Vaibhav B. Khaladkar*Mr.R.Y.Patil

Department of pharmacognosy..

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Science And Research Centre Kharadi , Pune – 411014

Submitted: 01-04-2023 Accepted: 08-04-2023

ABSTRACT

Herbs have been prized for their healing abilities and today we still rely on the curative properties of plants. After nearly two centuries of inexorable decline in the use of herbal medicines, Herbs, which have always been the principal form of medicine in developing countries, are once again gaining popularity throughout the developed world. Emulgel is the unique combination of gels and emulsions, theses possess several merits over conventional dosage forms like creams and ointments like thixotropic, nongreasy, non-adhesive, etc. These are safe, effective and also economical in nature. The present review on the recent scientific advances related to the development and evaluation of emulgel formulations with plant- based drugs and related products.Coccinia is a medicinal plant that is used in ancient times for relieving insect bite itching and swelling. The aim of the present research work was to evaluate the potential and develop future scope of emulgel formulation for enhancing the topical delivery of coccinia grandis fruit extract.

Key words: coccinia grandis linn fruit, herbal emulgel, hydroalcoholic extract, antifungal activity.

I. INTRODUCTION

Man's existence on earth has been made possible only because of the vital role played by the plant kingdom in sustaining his life. Plants were being used as a source of medicine from the times immemorial as they were easily accessible as well as inexpensive, plants have provided the basis for the oldest medicinal systems of human history. The earliest mention of medicinal use of plant is found in Rigveda. [1,2]

It is great to the credit of the people of India that they have been gifted with larger number of medicinal plants than the natives of any country on the face of earth. Natural products have served as an important source of drugs since ancient times and about half of the useful drugs today are derived from natural sources, India is being sitting on a gold mine of well-recorded and traditionally well-practiced knowledge of herbal medicine. This country is perhaps the largest producer of medicinal herbs and is rightly called the botanical garden of the world. It is generally estimated that over 6000 plants in India are used in traditional, folk and herbal medicine, representing about 75% of the medicinal needs of the world countries. [3,4]

The effective use of automated procedures and data bases in the isolation, identification and biological profiling of bioactive compounds from natural sources will be a best guarantee to the continued discovery of novel chemotypes from nature.[5,6] Natural products research continues to explore a variety of lead structure, which may be used as template for the development of new drugs by the pharmaceutical industry, while microbial products have been the mainstay of industrial natural product discovery.[7]

Emulgel is a combination of emulsion and gel, which is a new approach for topical delivery of drugs. It has a double control release like emulsion and gel. [8] Gel is new class of formulation, it releases the drug faster in comparison ointment, cream and lotion. Incorporation of drug in emulgel formulation is suitable to treat skin disorders. Topical application of therapeutic agents provides various advantages over the other route of administration. The presence of a gelling agent in the aqueous phase converts a classical emulsion into an emulgel. Within the major group of semisolid preparations, like use of transparent gels has expanded both in cosmetics and in pharmaceutical preparations.[9]Emulgels have several complimentary properties for dermatological use such as being thixotropic, greaseless, easily spreadable, easily removable,

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

emollient, non-staining, long shelf life, bio-friendly, transparent and pleasing appearance.[10] Herbal medicine is still the main stay,about 75-80% of the whole population and the major part of traditional therapy involves the use of plant extract and their active constituents. Following the advent of modern medicine, herbal medicine suffered a setback, but during last two or three decades, advances in phytochemistry and in identification of plant compounds, effective against certain diseases have renewed the interest in herbal medicines. [11]Coccinia grandis belongs to the family Cucurbitaceae, is a growing wild throughout India and also cultivated in various parts of India. It is commonly known as kundru. The whole plant is traditionally used for various medicinal purposes. Leaves of this plant are used in Indian folk medicine for treatment of number of ailments including diabetes, wounds, ulcers, inflammation.Scientific investigation of crude extract of Coccinia grandishave showed that it possesses hepatoprotective [12,13] antioxidant [14,15] anti-inflammatory anti-diabetic [16,17] hypolipidemic [18] anti-bacterial [19,20] and antitussive activities [21,22]. The aim of the present study was to formulate Emulgel by using hydroalcoholic extract of coccinia grandis fruit and evaluate for antifungal potential. [23]

II. PLANT PROFILE



fig.1Coccinia grandis linn

2.1 Scientific classification

- Kingdom: - Plantae
- Clade: -Angiosperms
- Order: -Cucurbitales
- Family: -Cucurbitaceae
- Genus: -Coccinia
- Species: -C.grandis

2.2 Binomial Name

Coccinia grandis

2.3 Synonyms

Ivy gourd(Eng)
Kundru (Hindi)
Tondli(Marathi)
Dondakaya (Telagu)

2.4 Description

Coccinia grandis plants from Asia have white flowers, while plants from Africa and the Arab Peninsulahave pale-yellow flowers. The white flowered form is a noxious weed in Hawaii, many tropical islands and WesternAustralia, and is an important target of biological controlresearch. The yellow-flowered form was long considered a separate species called as Coccinia schimperi Naudin, but in 2015 this namewas synonymized asCoccinia grandis[21].

2.5 Habitat

Coccinia grandis (Ivy gourd) is occasionally cultivated as a garden vegetable in the tropical and sub-tropical regions of the world. It is believed to be native to central Africa, India, and Asia. Its long history of usage, cultivation, and transportation by people has obscured its base. It is a common weed in South East Asia. It is considered a valuable wild vegetable by the indigenous people of southeast Asia and India [`22].

2.6 Part Used

Fruit

2.7 Traditional Uses

The whole plant is traditionally used for various medicinal purposes and leaves are used in Indian folk medicine for treatment of number of ailments includingdiabetes, wounds, ulcers, inflammation, in eruptions of skin, fever, asthma and cough. Scientific investigations have shown that the crude extract possesses hepatoprotective, antioxidant, anti-inflammatory, anti-nociceptive, anti-diabetic, hypolipidemic, antibacterial and antitussive activities. Though the plant has been reported for many biological activities. The present investigation was therefore, taken up to establish identity of fresh and dried leaves morphologically microscopically and physiochemically for the standardization of the drug. [23]

III. MATERIAL AND METHODS

Plant material:

Collection and Drying

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

Fresh Fruits of Coccinia grandis linn were collected from the fields of LohegaonDist-Pune, Maharashtra India. cleaned and cut into small pieces of and dried at a room temperature. The dried fruits were coarsely powdered in grinder. Large difference in particle size of crude drug results in long extraction time as the coarse particles increases the extraction time and fine may form bed,so the powdered material was sieved through 60 to 120 mesh to remove fines and larger particles and the powder was subjected for further study.





fig.2 Collection of fruitsfig.3 Fresh fruits

3.2. Pharmocognostic Study of Fruits
3.2.1 Macroscopy
Size: 25-60 mm long,15-35mm in diameter.
Shape: Broadly ovate, Subpentagonal to orbicular in shape.
Color: Green with White stripes
Odor: Characteristics
Taste: Characteristics

3.2.2 Microscopy
Thin transverse section of middle part of the fresh fruit was taken stained with Phloroglucinol+Conc.Hcl (1:1), observed under 10X, and45X.

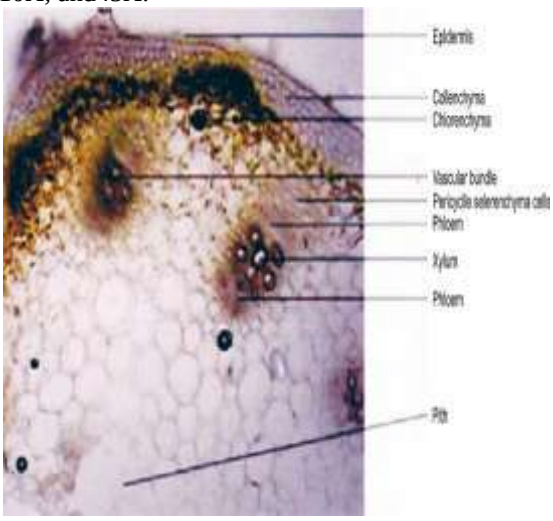


fig.4

3.2.3.Microscopic studies of Powder characteristics

The microscopic examination of powdered fruit material was performed to detect and to establish various peculiar microscopic characters in order to differentiate between the adulterated and the substituted powdered or intact leaves supply. Slides of powdered leaf material was prepared using formalin, glycerine and water (8:1:1 v/v/V) and were thus embedded and seen under microscope on different magnifications at 10x, 40x, and 100x after staining with phloroglucinol andconc HCL [24]

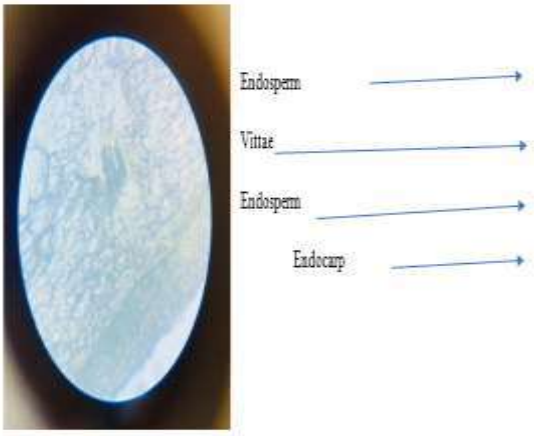


Fig.5 Powder Characteristics

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

3.3 Determination of Loss on Drying

Fresh fruit (5 gm) was taken without preliminary drying and was placed on a tarred evaporating dish and dried at 105°C for six hours and weighed.

The drying was continued until two successive reading matches each other or the difference between two successive weighing after drying for 30 minutes in a desiccator, showed not more than 0.01 g difference.

Weighed and calculated the loss on drying in terms of percent w/w.[25]

Observation

Weights of powdered sample taken = 5 gm

Weights of powdered sample After drying = 0.49 gm

Result:

The percentage of loss on drying = 92 % w/w

3.4 Determination of ash Value

Ash value is useful in determining authenticity and purity of drug and also these values are important quantitative standards. Ash value is used to determine quality and purity of crude drug. Ash value contains inorganic radicals like phosphates, carbonates and silicates of sodium, potassium, magnesium, calcium etc. sometimes, inorganic variables like calcium oxalate, silica, carbonate content of the crude drug affects. [26]

Procedure:

2 gm of the air dried powdered drug was taken in a crucible and ignited in the furnance at 150^0C for 45 minutes and weighed same procedure was followed for 4 times till constant weight of the ash, wasformed weight of the ash was taken and calculated the percentage of total ash with reference to the air dried sample of the crude drug.

Before ignition of powder:

- Weight of empty silica crucible = 15.78 gm
- Weight of powder = 2gm
- Weight of silica crucible + powder = 17.78gm

After ignition of powder:

- Weight of silica crucible + ash = 16.27 gm
- Total ash = 0.49 gm

Result

The percentage of total ash obtained = 24.5 % w/w

3.5. Extraction Methodology

Material and Methods

Preparation of the plant extract

Powder sample of fruit coccinia grandis measuring 100 gm was extracted using 500 ml of hydroalcoholic solvent by maceration method after filtration the extract was concentrated using a rotatory vacuum evaporated and the semidried extract were dried kept in air tight

3.6 Percentage yield of Extract

It indicates the approximate measures of the chemical constituent plant. All the values were taken in triplicate and the mean average was taken.50 gmsof thepowdered drug was taken in a weighing bottle and transfer it in 500 ml graduated flaskfilled with the solvent (90 % alcohol).

Flask was closed and set aside for 24 hours, shaking frequently. (Maceration) extract was filtered into a 50 ml cylinder. When sufficient filtrate hascollected, 100 ml. of the filtrate was takenand evaporated to dryness on a water-bath and complete the drying in an oven at 100° C.it was cooled in a desiccator and weighed[27]

percentage w/w of extract was calculated with reference to the air-dried drug.

- Weight of powderedtaken. = 50gms
- Weight of Extract obtained = 2.5gms

Result

Percentage yield of hydro-alcoholic extract was found to be 5.0 % w/w.

3.7Preliminary Phytochemical Screening

1.Test for Steroids[28]

a) Salkowski test

One ml of concentrated sulphuric acid was added to 10 mg of extract dissolved in 1 ml of chloroform. A reddish brown colour exhibited by chloroform laver and green fluorescence by the acid layer suggests the presence of steroids.

b) Liebermann test

2 mg of the residue few ml of acetic anhydride was added and gently heated. The contents of the test tube were cooled and 2 ml o f concentrated sulphuric acid was added from the side of the test tube. Development of blue colour gave the evidence for presence of sterols.

c) Liebermann-Burchard test

10 mg extract was dissolved in 1ml of chloroform and 1ml ofacetic anhydride was added following the addition of 2 ml of concentrated sulphuric acid

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

from the sides of the test tube. Formation ofreddish violet colour at the junction indicates the presence of steroids.

2.Test for Saponins[29]

a) Foam formation test

1ml solution of the extract was diluted with distilled water to 20 ml And shaken in a graduated cylinder for 15 minutes. The development of stable foam indicates the presence of saponins.

3. Test for Alkaloids[30]

a) Dragendorff's test

01 ml dilute hydrochloric acid and 0.1 ml Dragendorff's reagent was added in 2 ml of extracts in test tube. Formation of orange brown precipitate indicates the presence of alkaloids.

b) Mayer's test

02 ml of extract was taken in test tube. 0.2 ml of dilute hydrochloric acid and 0.1 ml of Mayer's reagent were added. Formation of yellowish buff precipitate indicates the presence of alkaloids.

c) Wagner's test

2mI of extract was treated with 0.2 ml dilute hydrochloric acid and 0.1 ml of Wagner's reagent. Formation of reddish brown precipitate indicates the presence of alkaloids.

4.Test for Glycoside[31]

a) ModifiedBorntrager's test

The extract was treated with ferric chloride solution and heated on Bolling water bath for 5 min. The mixture was cooled and shaken with equal volume of benzene. The benzene layer was separated and treated with half its volume of ammonia solution. The formation of rose pink or cherry red colour in the ammoniacal layer indicates the presence of anthraquinones.

b) Million's test

The extract was treated with 2 ml of Million's reagent. The formation of white precipitate, which turns to red upon heating indicates the presence of proteins and amino acids,

5.Test for Tannins [32]

a) Ferric Chloride test

Five mi of extract solution was allowed to react with 1 ml of 5 per cent ferric chloride solution. Greenish black colouration indicates the presence of tannins.

b) Lead Acetate test

5 ml of extract was treated with I ml of 10 per cent aqueous lead acetate solution. Development of yellow coloured precipitate indicates the presence of tannins.

c) Potassium Dichromate test

Five ml of extract was treated with 1 ml of 10 per cent of aqueous potassium dichromate solution. Formation of yellowish-brown precipitate suggests the presence of tannins.

6. Test for Proteins [33]

a) Biuret test

The extract was treated with 1 ml of 10 per cent sodium hydroxide solution and heated. A drop of 0.7 per cent copper sulphate solution was added to the above mixture. The formation of purplish violet colour indicates the presence of proteins.

b) Xanthoproteic test

A little test residue was taken in 2 ml of water and to it 5 ml of concentrated nitric acid was added. Formation of yellow colour indicates tine presence of proteins.

c) Million's test

The extract was treated with 2 ml of million's reagent. The formation of site precipitate, which tuns to red upon heating, indicates the presence of proteins and amino acids.

7. Test for Amino Acids [34]

a) Ninhydrin test

The extract was treated with Ninhydrin reagent at pH range of 4-8 and boiled. Development of purple colour indicates the presence of amino acids.

8. Test for Carbohydrates [35]

a) Molish test

Two ml of extract solution was treated with few drops of 15 per cent ethanolic alpha-naphthol solution in a test tube and 2 ml of concentrated sulphuric acid was added carefully along the sides of the test tubes. The formation of a reddish violet ring at the junction of two layers indicates the presence of carbohydrates

b) Barfoeds test

The test residue was dissolved in water and heated with a little quantity of Barfoed's reagent. Development of brick red precipitate

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

within wt.0 minutes shows the presence of monosaccharide.

9.Test for Reducing sugars [36]

a) Fehling's test

Five ml of extract solution was mixed with 5 ml of Fehling's solution equal mixture of Fehling's solution A&B & boiled. Formation of brick red Precipitate indicates the presence of reducing sugars.

b) Benedict's test

Equal volumes of Benedict's reagent and extract in test tube boiled for min solution appeared green, yellow or red depending upon the amount of reducing sugar present



Fig: preliminary test (1)



Fig: preliminary test (2)

Table:1 Preliminary Phytochemical Screening

Chemical tests	Hydroalcoholic Extract	Benzene
Test for Steroids	+	-
Test for Saponins	+	-
Test for Alkaloid	+	+
Test for Glycosides	+	-
Test for Reducing sugars	-	+
Test for Tannins	+	+
Test for Flavonoids	+	-
Test for Amino acids	+	-
Test for Carbohydrates	+	-

3.8 Formulation of emulgel

Formulations with different quantity of ingredient were made as shown in Table 1. The gel portion of the emulgel was made by dissolving carbopol-934 in cold water with constant stirring at a moderate speed until uniform mixture was made. The pH was then adjusted to 6-6.5 using triethanolamine (TEA). Tween 80 was dissolved in distilled water to prepare the aqueous phase of the emulsion while for the preparation of the oil phase of the emulsion; span 80 was dissolved in liquid paraffin. To preserve the emulsion, methyl parabene was dissolved in propylene glycol and the extract was dissolved in ethanol then both solutions were mixed with the aqueous phase. Both the aqueous and the oil phase were heated in a water bath at 70 °C separately. Then the oil phase was added drop wise to the aqueous phase with continuous stirring using homogenizer at speed of 3000 rpm for 10 min then cold to room temperature.At the end the gel and emulsion portions were mixed in 1:1 ratio with moderately stirring to prepare emulgel [37]

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

Table: 3

Sr.No.	Ingredient	Quantity Taken
1	Hydroalcoholic **e**xtract	5gm
2	Carbopol 934	0.75 gm
3	Liquid paraffin	2.5ml
4	Span 60	0.45ml
5	Tween 80	0.50ml
6	Propylene glycol	3.5ml
7	Methyl paraben	0.01gm
8	Distilled water	Up to q.s.

3.9Antifungal Assay

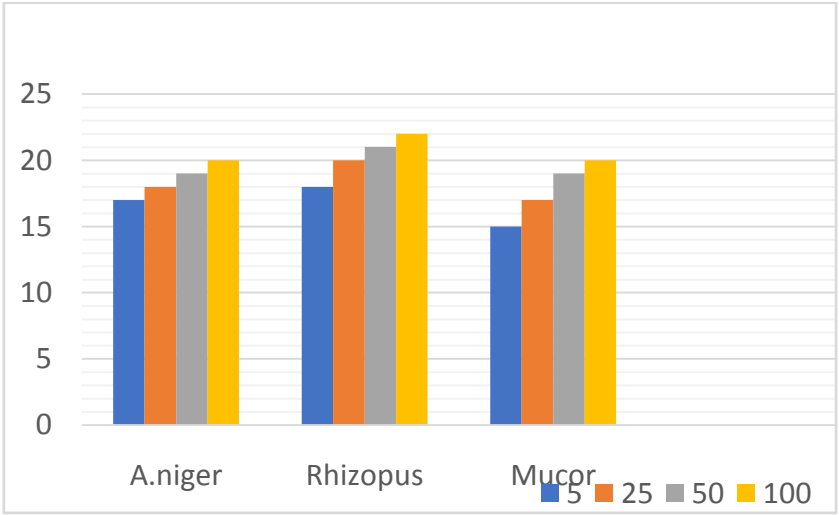
Three fungal strains (Aspergillus niger. Rhizopus, mucor) These strains have been selected for the basis of its application purpose of further formulation study.antifungal potential of emulgel was assessed in terms of zone of inhibition of bacterial growth. The results of the antifungal activities are presented in Table.2

Table:2
Antifungal activities of EMULGEL of fruit coccinia grandis against fungal organism

Antifungal Activity (zone of inhibition)			
Concn. In (µg/ml)	Zone of inhibition in mm A . Niger.	Rhizopus	Mucor
5	17	18	15
25	18	20	17
50	19	21	19
100	20	22	20

Antifungal activities of the extracts increased linearly with increase in concentration of extracting (µg/ml). As compared with standard drugs, the results revealed that in the extracts for fungal activity, Rhizopus shows good result as compare with Aspergillus Niger and Mucor The growth inhibition zone measured ranged from 11 to 20mm for all the sensitive bacteria, and ranged from14 to 20mm for fungal strain.

Table:3



International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

3.10. Evaluationof Topical Gel Formulation

A.Physical Evaluation:

Physical parameters such as color and appearance were checked.

B. Measurement of pH:

pH of the gel was measured by using Ph meter.

C.Viscosity;

Viscosity of gel was measured by using Brookfield viscometer with spindle.

D.Spreadibility:

Spreadibility was determined by the apparatus which consists of a wooden black,which was provided by a pulley at an end. By this method spreadibility was nearest on the basis of slip and drag characteristics of gel. An excess of gel (about 2g) under study was placed on the ground slide. The gel was then sandwiched between this slide and another glass side having the dimension of fixed ground slide and provided with the hook. A one kg weighted was placed on the top of the two sides for 5 minutes to expel air and to provide a uniform film of the gel between the slides. Excess of the gel was scrapped off from the edges. The top plate was then subjected to pull of 80 gm. With the help of string attached to the hook and the time (in seconds) required by the top slide to cover a distance of 7.5cm be noted. A shorter interval Indicate better spreadibilty. Spreadibility was calculated using the following formula:

S=M=L/T

Where,

S=Spreadability,

M-Weight in the pan (tied in the upper slide)

1-Length moved by the glass side

T=Time (in sec.) takes to separate the side completely each other.

E. Stability Study:

The stability study was performed as per ICH guidelines & The Formulated gel were filled in the collapsible tubes and stored at different temperatures and humidity conditions, vix 250 C/20C/ 60% 5% RH 300 C 20C/65% /5% RH 400 C20C/ 75% 15% RH for a period of three months and studied for appearance, pH, and spread ability.

IV. RESULT AND DISUSSION

Coccinia grandis Linn fruit under microscope T.S shows mesophyll cells, palisade cell. L.S. shows Xylem Phloem and Fibres, poweder shows Fibres and Stomata. Coccinia grandis Linn fruit after drying calculation of loss of drying was to be obtained 21.6% w/w and powder under muffle furnace gives ash Value of 23% w/w.Coccinia grandis Linn fruit after maceration extraction and constant stirring in water bath gives the product, that product was calculated 5% w/w to be obtained.Coccinia grandis Linn showing Preliminary Phytochemical screening Hydroalcoholic Extract shows presence of Steroids, alkaloids,Glycosides, Saponins, phenols, Tannins, Flavonoids. Benzene shows presence of reducing sugars , alkaloids , tannins are present**.**

V. CONCLUSION

Emulgel of Coccinia grandis linn fruitshowed prominent anti-fungal activity against human pathogenic, thus Coccinia grandis linn fruit can be used as a potential antifungal drug against human pathogenic fungal infection.Lupeol and Taraxerone are measureconstituents of Hydroalcoholic extract of Cocciniagrandis fruit. In-vivo studies performed foractivities like mouth ulcer, wound healing and anti-fungal showed the beneficial use of 20%w/w of hydroalcoholic extract of Coccinia grandis fruit for the said activities. It was also supported by molecular docking study carried out for Lupeol andTaraxerone which gives better Dock score for mentioned activity.

REFERENCE

[1]. Anu Hardenia, Sonali Jayronia, Sanjay Jain. Emulgel: an emergenttool in topical drug delivery. International journal of pharmaceutical sciences and research.2014; 5(5):1653-1660.

[2]. Kumar L, Verma R. In vitro evaluation of topical gel prepared using natural polymer. International Journal of Drug Delivery.2010; 2: 58-63.

[3]. Joel LZ, Gregory PK, Liberman HA, Rieger MM, Banker GS. Pharmaceutical dosage forms: disperse systems. Marcel Dekker. New York. 1989; 502.

[4]. Ahmed L, Mohammed Z, Mohammed F. Screening of some Indian medicinal plants for their antimicrobial properties. J. Ethnopharmacol. 1998; 62:183-193.

[5]. Vadivu R, A. Krithika, C. Biplab, P. DedeepyaShoeb, K.S. Lakshmi. Evaluation of Hepatoprotective Activity of the Fruits of Coccinia grandis Linn. International Journal of Health Research. 2008; 3: 163-168.

[6]. Rao G.M.M, M. Vijayakumar, C.V. Rao, A.K.S. Rawat, S. Mehrotra. Hepatoprotective effect of Coccinia indica

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

against CCl4induced hepatotoxicity. Natural Product Sciences. 2003; 9: 1317.

[7]. Gopalakrishnan V, K.N.V. Rao, M. Devi, N. Padmaja, Manju P, Lakshmi T, Srividya G. Vadivukarasi. Anti-hepatotoxic activity of Coccinia indica. Ancient Science of life.2001; 21: 12-15.

[8]. Umamaheswari M, T.K. Chatterjee.In vitro antioxidant activities ofthe fractions of Coccinia grandis L. leaf extract. African journal ofTraditional Complementary and Alternative Medicine. 2008; 5: 61-73.

[9]. Kamble S.M, G.S. Jyotishi, P.L. Kamalakar. Efficacy of Cocciniaindica W & A in diabetes mellitus. Journal of Research inAyurveda and Siddha.1996; 17: 77-84.

[10]. Juneja D, P.N. Shrivastava, M.K. Guha, R.C. Saxena, Preliminary Phytochemical Screening of Some Folklore Medicinal Plants fortheir anti-inflammatory activity. PharmacoMagzine. 2007; 11: 201-203.

[11]. Rao G.M.M, M. Sudhakara, M.M. Pandey. Anti-inflammatory and antinociceptive activities of Coccinia indica W & A. Natural Product Sciences.2004; 10: 20-23.

[12]. Venkateswaram S, L. Pari. Effect of Coccinia indica leaves on antioxidant status in J. streptozocin-induced diabetic rats. Journal of Ethnopharmacology. 2003; 84: 163-168.

[13]. Dhanabal S. P, C.K. Kokate, M.B. Patil, K. Elango, B. Suresh.Hypoglycemic effect of Coccinia indica: influence on biochemicalparameters. National Convention on Current Trends in Herbal Drugs and Annual Conference of Indian society of Pharmacognosy: The Herb: The Natural Alternate. 2003; 1: 17-18.

[14]. Eshrat, Halim M. Effect of Coccinia indica and Abromaaugustaon glycemia, lipid profile and on indicators of end-organ damagein streptozotocin induced diabetic rats. Indian Journal of Clinical Biochemistry. 2003; 18: 54-63

[15]. Prasanna K.G, S. Sudheesh, N.R. Vijayalakshmi. Hypoglycemiceffect of Coccinia indica of Mechanism of Action.Planta Medica.1993; 59: 330-332.

[16]. Kiruthika T, S. Ramachandran. Hypoglycemic activity of gourd vegetables. Nutrition society of India. 2003; 73.

[17]. Umbreen F, S. Huma, M. Shaukat, A.S. Ali, H.G. Rizwani.Antibacterial Activities of Coccinia grandis L. Pakistan Journal of Botany. 2008; 40: 1259-1262.

[18]. Wasantwisut Emorn and Viriyapanich Thara, Ivy Gourd(Coccinia grandis Voigt, Coccinia cordifolia, Coccinia indica) in Human Nutrition and Traditional Applications in: Plants in Human Health and Nutrition Policy, World Reviews of Nutrition and Dietetics, Basel, Karger, 2003, 91, pp 60-66.

[19]. Vadivu R, Krithika A, Biplab C, Dedeepya P, Shoeb and Lakshmi KS, Evaluation of hepatoprotective activity of the fruits of Coccinia grandis Linn., Inter J Health Res, 2008, 3, 163-168.

[20]. Rao GMM, Vijayakumar M, Rao CV, Rawat AKS andSKamble SM, Jyotishi GS, Kamalakar PL and Vaidya SMEfficacy of Coccinia indica W. & A. in diabetes mellitus, J Res in Ayur and Sid, 1996, 17(1-2), 77-84.

[21]. Ivy gourd (Coccinia grandis) - Technigro. Available fromwww.technigro.com.au/wp-content/uploads/2016/10/24-Ivy-Gourd.pdf [Assessed on: May 2011].

[22]. Ivy Gourd Risk Assessment - Department of Agriculture and Fisheries. Available from: https://www.daf.qld.gov.au/-data/assets/pdf.../IPA-Ivy-Gourd-Risk-Assessment.pdf.Steve Csurhes. [First published 2008, Updated 2016].

[23]. Wasantwisut Emorn and Viriyapanich Thara, Ivy Gourd (Coccinia grandis Voigt, Coccinia cordifolia, Coccinia indica) in Human Nutrition and Traditional Applications in: Plants in Human Health and Nutrition Policy, World Reviews of Nutrition and Dietics, Basel, Karger, 2003, 91, pp 60-66.

[24]. Vadivu R, Krithika A, Biplab C, Dedeepya P, Shoeb and Lakshmi KS, Evaluation of hepatoprotective activity of the fruits of Coccinia grandis Linn., Inter J Health Res, 2008, 3, 163-168.

[25]. Rao GMM, Vijayakumar M, Rao CV, Rawat AKS and Mehrotra S, Hepatoprotective effect of Coccinia indica against CCl4 induced hepatotoxicity, Nat Pro Sci, 2003, 9(1), 13-17.

[26]. Gopalakrishnan V, Rao KNV, Devi M, Padmaja N, Manju Lakshmi P, Srividya T

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 2 Mar-Apr 2023, pp: 899-908 www.ijprajournal.com ISSN: 2249-7781

and Vadivukarasi G, Antihepatotoxic activity of C. indica, Ancient Sci Life, 2001, 21(1), 12-15.

[27]. Umamaheswari M and Chatterjee TK, In vitro antioxidant activities of the fractions of Coccinia grandis Linn. leaf extract, African J Trad Comply Alter Med, 2008, 5(1), 61-73.

[28]. Kamble SM, Jyotishi GS, Kamalakar PL and Vaidya SM,Efficacy of Coccinia indica W. & A. in diabetes mellitus, J Res in Ayur and Sid, 1996, 17(1-2), 77-84.

[29]. Juneja D, Shrivastava PN, Guha MK and Saxena RC, Preliminary phytochemical screening of some folklore medicinal plants for their anti-inflammatory activity, Pharmacog Mag, 2007, 11, 201-203.

[30]. Rao GMM, Sudhakara M, Pandey MM, Rawat AKS, Sirwaikar A and Joshi AB, Anti-inflammatory and antinociceptive activities of Coccinia indica W. & A., Nat Pro Sci, 2004, 10(1), 20-23.

[31]. Venkateswaram S and Pari L, Effect of Coccinia indicaleaves on antioxidant status in streptozocin-induced diabetic rats, J Ethnopharmacol, 2003, 84, 163-168.

[32]. Dhanabal SP, Kokate CK, Patil MB, Elango K and Suresh B, Hypoglycemic effect of C. indica: influence on biochemical parameters, National Convention on Current Trends in Herbal Drugs and Annual Conference of Indian society of Pharmacognosy, Herbs The Nat Alt, 2003, A-01,17-18.

[33]. Eshrat Halim M, Effect of Coccinia indica and Abroma augusta on glycemia, lipid profile and on indicators of endorgan damage in streptozotocin induced diabetic rats, Ind J

[34]. Clin Biochem, 2003, 18(2), 54-63.

[35]. Presanna Kumar G, Sudheesh S and Vijayalakshmi NR, Hypoglycemic effect of Coccinia indica mechanism of action, Planta Med, 1993, 59(4), 330-332.

[36]. Kiruthika T and Ramachandran S, Hypoglycemic activity of gourd vegetables, Nutrition society of India, 35th Annual meeting NIN Hyderabad, 2003, pp.73.

[37]. Farrukh Umbreen, Shareef Huma, Mahmud Shaukat, Ali Ayub Syed and Rizwani H Ghazala, Antibacterial activities of Coccinia grandis L, Pak J Bot, 2008, 40(3), 1259-1262.

[38]. Rahuman A and Venkatesan P., Larvicidal efficacy of five cucurbitaceous plant leaf extracts against mosquito species, Parasitol Res, 2008, 103(1), 133-139.

[39]. Pattanayak Prasad Shakti and Sunita Priyashree, In vivoantitussive activity of Coccinia grandis against irritant aerosol and sulfur dioxide-induced cough model in rodents, Bangla J Pharmacol, 2009, 4, 84-87.

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Formulation And Evaluation Of Herbal Emulgel Of *Psidium Guajava* Leaves Extract For Antifungal Activity.

Tejas E. Shitole, Viashnavi C Jagtap, Gayatri S. Jamdade, Dinesh P. Kabire

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre Kharadi, Pune.

1.ABSTRACT:

Herbal medicine has become an item of global importance both medicinal and economics. Although usage of these herbal medicines has increased but quality, safety and efficiency of these medicinal plants are serious concerns in industrialized and developing countries. Herbal remedies are getting increasing patient compliance as they are devoid of typical side effects of allopathic medicines. The present research has been undertaken with the aim to formulate and evaluate the herbal Emugel containing *Psidium guajava* leaves extract. The Emugel formulation was designed by using Carbopol 934, *Psidium guajava* leaves Hydro – alcoholic extract, propylene glycol, methyl paraben, propyl paraben and required amount of distilled water. The pH (6.8-7) was maintained by drop wise with addition of triethanolamine. The physicochemical Parameters of formulations were determined. Stability studies have carried out as per ICH guidelines. The present study was designated to evaluate the antifungal activities of ethanolic, methanolic, ethyl acetate and hot water extract from leaves of Psidium guajava. Compare to all parts, the leaves were showing the best activity and the zone of inhibition was obtained 25 mm in hydroalcoholic extract of leaves against Aspergillus Niger.

Key words: Antifungal property, *Psidium guajava* leaf, Hydroalcoholic Extract, Zone of inhibition.

2. INTRODUCTION:

Study of traditional medical practice, is an integral part of the culture and the interpretation of health by indigenous populations in many parts of the world. For example, Indian Ayurveda and traditional Chinese medicine are among the most enduring folk medicines still practiced. These systems try to promote health and improve the quality of life, with therapies based on the use of indigenous drugs of natural origin. Given that plants have been widely used as herbal medicines, several approaches are now being carried out to discover new bioactive compounds. *Psidium guajava* L., popularly known as guava, is a small tree belonging to the myrtle family (Myrtaceae). Native to tropical areas from southern Mexico to northern South America, guava trees have been grown by many other countries having tropical and subtropical climates, thus allowing production around the world. Traditionally, preparations of the leaves have been used in folk medicine in several countries, mainly as anti-diarrheal remedy. Moreover, other several uses have been described elsewhere on all continents, with the exception of Europe. [1] Depending upon the illness, the application of the remedy is either oral or topical. *Psidium guajava* is evergreen shrub native to tropical. The Psidium guajava leaves and fruits were collected from America that has neutralized in South East Asia. The part of guava has been reported the wide range of activity against the human ailments 4,5, There are over 20 compounds have been reported present in leaves, stems, bark and roots of *P. guajava*. Guava leaves were used to treat diarrhoea and stomach. 'The leaves were used in TSA as an antibiotic in the form of poultice or decoction for wounds. ulcers and toothache. Guava fruits also contain vitamin C vitamin, iron calcium and phosphorus. Emulgel is a combination of emulsion and gel, which is a new approach for topical delivery of drugs. It has a double control release like emulsion and gel. [2] Gel is new class of formulation, it releases the drug faster in comparison ointment, cream, and lotion. Incorporation of drug in emulgel formulation is suitable to treat skin disorders. [3] Topical application of therapeutic agents provides various advantages over the other route of administration. The presence of a gelling agent in the aqueous phase converts a classical emulsion into an Emulgels. Within the major group of semisolid preparations, like use of transparent gels has expanded both in cosmetics and in pharmaceutical preparations. [4] Emulgels have several complimentary properties for dermatological use such as being thixotropic, greaseless, easily spreadable, easily removable, emollient, non-staining, long shelf life, bio-friendly, transparent and pleasing appearance. [5

3.Plant Profile



fig.1 *Psidium guajava*

3.1Scientific Classification:

- Kingdom: Plantae
- Clade: Angiosperms
- Order: Myrtales
- Family: Myrtaceae
- Genus: *Psidium*
- Species: *P. guajava*

3.2 Botanical Name:

Psidium guajava

3.3 Synonyms:

Guava, Guajava pyrifera.

3.4 Description:

Leaves opposite, simple; stipules absent, petiole short, 3-10 mm long; blade oblong to elliptic, 5-15 x 4-6 cm, apex obtuse to bluntly acuminate, base rounded to subcuneate, margins entire, somewhat thick and leathery, dull grey to yellow-green above, slightly downy below, veins prominent, gland dotted. [6]

3.5 Habitat:

It is native to central America from Mexico to northern South America. [7]

3.6 Part used:

Leaves.

3.7 Traditional uses:

Powdered leaves are used for Anti-diarrhoeal, Antifungal. Other reported uses include gastroenteritis, dysentery, stomach, antibacterial colic pathogenic germs of the intestine. Its medicinal usage has been. An infusion of the leaves is used for bilious fever, eczema, and eruptions. [8

4.Material and Methods

Plant material:

Collection and Drying

Fresh Leaves of *Psidium gujava* were collected from the fields of Kharadi goan Dist -Pune, Maharashtra India. cleaned and dried at a room temperature. The dried leaves were coarsely powdered in grinder. Large difference in particle size of crude drug results in long extraction time as the coarse particles increases the extraction time and fine may form bed, so the powdered material was sieved through 60 to 120 mesh to remove fines and larger particles and the powder was subjected for further study [9]

.



fig.2 Collection of leaves

5. Pharmacognostic Study-

5. 1Macroscopy

Size: 5-15cm long leaves.

Shape: The leaf is elliptic to oblong in shape

Color: Dark-Green

Odor: Myrtates

Taste: Slightly bitter

5.2. Microscopy

Thin Transverse section of middle part of fresh leaf was taken, stained with Phloroglucinol- con. HCI (1:1), observed under 10X, 45X. [10]

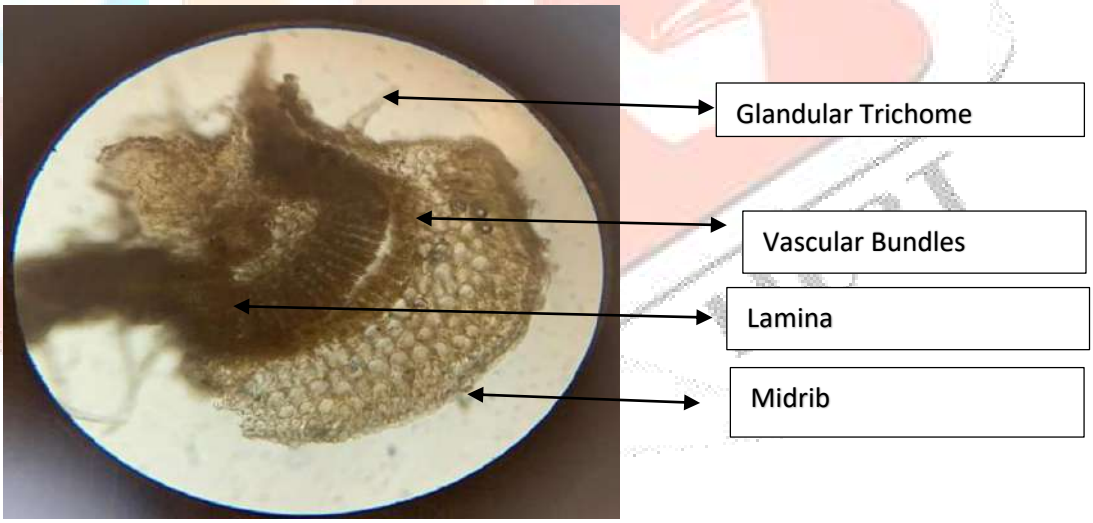


fig.4 TC of Leaves

5.3. Microscopic studies of Powder characteristics

The microscopic examination of powdered leaves material was performed to detect and to establish various peculiar microscopic characters in order to differentiate between the adulterated and the substituted powdered or intact leaves supply. Slides of powdered leaf material was prepared using formalin, glycerine and water (8:1:1 v/v/V) and were thus embedded and seen under microscope on different magnifications at 10x, 40x, and 100x after staining with phloroglucinol and conc HCL [11]

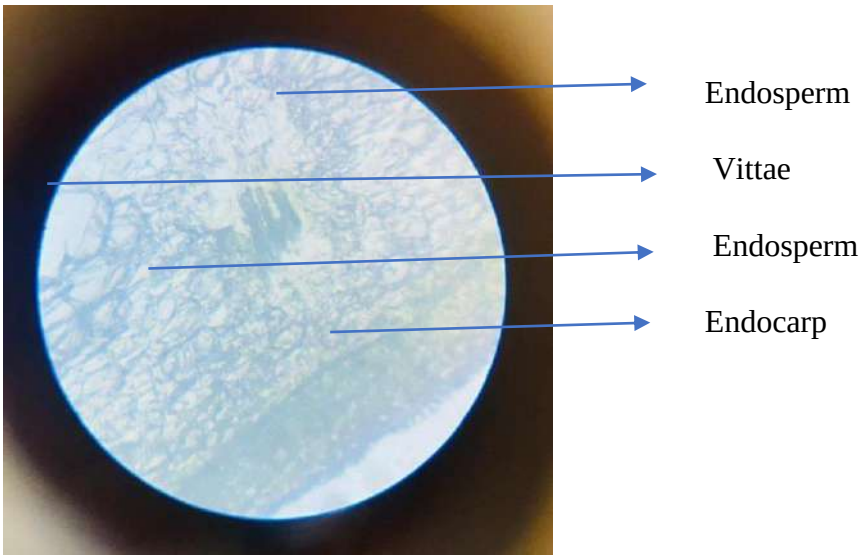


Fig.5 Powder Characteristics

5.4. Determination of Loss on Drying

Fresh leaves (3 gm) was taken without preliminary drying and was placed on a tarred evaporating dish and dried at 105°C for six hours and weighed. The drying was continued until two successive reading matches each other or the difference between two successive weighing after drying for 30 minutes in a desiccator, showed not more than 0.01 g difference.

Weighed and calculated the loss on drying in terms of percent w/ w. [12]

Observation

Weights of powdered sample taken = 3 gm

Weights of powdered sample After drying = 2.18gm

Result:

The percentage of loss on drying = 72 % w/w

5.5. Determination of ash Value

Ash value is useful in determining authenticity and purity of drug and also these values are important quantitative standards. Ash value is used to determine quality and purity of crude drug. Ash value contains inorganic radicals like phosphates, carbonates and silicates of sodium, potassium, magnesium, calcium etc. Sometimes, inorganic variables like calcium oxalate, silica, carbonate content of the crude drug affects.[26]

Procedure

2 gm of the air dried powdered drug was taken in a crucible and ignited in the furnance at 150^0C for 45 minutes and weighed same procedure was followed for 4 times till constant weight of the ash, was formed weight of the ash was taken and calculated the percentage of total ash with reference to the air dried sample of the crude drug. [13]

Before ignition of powder:

- Weight of empty silica crucible = 15.78 gm
- Weight of powder = 3gm
- Weight of silica crucible + powder = 18.78gm

After ignition of powder:

- Weight of silica crucible + ash = 16.49 gm
- Total ash = 0.71 gm
- **Result**

  The percentage of total ash obtained = 23 % w/w

5.5. Extraction Methodology:

Material and Methods:

Preparation of the plant extract:

Powder sample of leaves *Psidium gujava* measuring 100 gm was extracted using 500 ml of hydroalcoholic solvent by maceration method after filtration the extract was concentrated using a rotatory vacuum evaporated and the semidried extract were dried kept in air tight. [14]

5.6 Percentage yield of Extract:

It indicates the approximate measures of the chemical constituent plant. All the values were taken in triplicate and the mean average was taken**.** 50 gms of the powdered drug was taken in a weighing bottle and transfer it in 500 ml graduated flask filled with the solvent (90 % alcohol).

Flask was closed and set aside for 24 hours, shaking frequently. (Maceration) extract was filtered into a 50 ml cylinder. When sufficient filtrate has collected, 100 ml. of the filtrate was taken and evaporated to dryness on a water-bath and complete the drying in an oven at 100° C.it was cooled in a desiccator and weighed [15]

percentage w/w of extract was calculated with reference to the air-dried drug.

- Weight of powdered taken. = 50 gms
- Weight of Extract obtained = 7.45gms

Result:

Percentage yield of hydro-alcoholic extract was found to be 7.45% w/w.

5.7 Preliminary Phytochemical Screening

1.Test for Steroids[16]

a) Salkowski test:

One ml of concentrated sulphuric acid was added to 10 mg of extract dissolved in 1 ml of chloroform. A reddish brown colour exhibited by chloroform laver and green fluorescence by the acid layer suggests the presence of steroids.

b) Liebermann test:

2 mg of the residue few ml of acetic anhydride was added and gently heated. The contents of the test tube were cooled and 2 ml o f concentrated sulphuric acid was added from the side of the test tube. Development of blue colour gave the evidence for presence of sterols.

c) Liebermann-Burchard test:

10 mg extract was dissolved in 1ml of chloroform and 1ml ofacetic anhydride was added following the addition of 2 ml of concentrated sulphuric acid from the sides of the test tube. Formation ofreddish violet colour at the junction indicates the presence of steroids.

2.Test for Saponins.[17]

a) Foam formation test:

1ml solution of the extract was diluted with distilled water to 20 ml And shaken in a graduated cylinder for 15 minutes. The development of stable foam indicates the presence of saponins.

3. Test for Alkaloids[18]

a) Dragendorff's test:

01 ml dilute hydrochloric acid and 0.1 ml Dragendorff's reagent was added in 2 ml of extracts in test tube. Formation of orange brown precipitate indicates the presence of alkaloids.

b) Mayer's test:

02 ml of extract was taken in test tube. 0.2 ml of dilute hydrochloric acid and 0.1 ml of Mayer's reagent were added. Formation of yellowish buff precipitate indicates the presence of alkaloids.

c) Wagner's test:

2 mI of extract was treated with 0.2 ml dilute hydrochloric acid and 0.1 ml of Wagner's reagent. Formation of reddish brown precipitate indicates the presence of alkaloids.

4.Test for Glycoside. [19]

a) Modified Borntrager's test:

The extract was treated with ferric chloride solution and heated on Bolling water bath for 5 min. The mixture was cooled and shaken with equal volume of benzene. The benzene layer was separated and treated with half its volume of ammonia solution. The formation of rose pink or cherry red colour in the ammoniacal layer indicates the presence of anthraquinones.

b) Million's test:

The extract was treated with 2 ml of Million's reagent. The formation of white precipitate, which turns to red upon heating indicates the presence of proteins and amino acids,

5.Test for Tannins [20]

a) Ferric Chloride test:

Five mi of extract solution was allowed to react with 1 ml of 5 per cent ferric chloride solution. Greenish black colouration indicates the presence of tannins.

b) Lead Acetate test:

5 ml of extract was treated with I ml of 10 per cent aqueous lead acetate solution. Development of yellow coloured precipitate indicates the presence of tannins.

c) Potassium Dichromate test:

Five ml of extract was treated with 1 ml of 10 per cent of aqueous
potassium dichromate solution. Formation of yellowish-brown precipitate suggests the presence of tannins.

6. Test for Proteins [21]

a) Biuret test:

The extract was treated with 1 ml of 10 per cent sodium hydroxide solution and heated. A drop of 0.7 per cent copper sulphate solution was added to the above mixture. The formation of purplish violet colour indicates the presence of proteins.

b) Xanthoproteic test:

A little test residue was taken in 2 ml of water and to it 5 ml of concentrated nitric acid was added. Formation of yellow colour indicates tine presence of proteins.

c) Million's test:

The extract was treated with 2 ml of million's reagent. The formation of site precipitate, which tuns to red upon heating, indicates the presence of proteins and amino acids.

7. Test for Amino Acids. [22]

a) Ninhydrin test:

The extract was treated with Ninhydrin reagent at pH range of 4-8 and boiled. Development of purple colour indicates the presence of amino acids.

8. Test for Carbohydrates. [23]

a) Molish test:

Two ml of extract solution was treated with few drops of 15 per cent ethanolic alpha-naphthol solution in a test tube and 2 ml of concentrated sulphuric acid was added carefully along the sides of the test tubes. The formation of a reddish violet ring at the junction of two layers indicates the presence of carbohydrates

b) Barfoeds test:

The test residue was dissolved in water and heated with a little quantity of Barfoed's reagent. Development of brick red precipitate within wt.0 minutes shows the presence of monosaccharide.

9.Test for Reducing sugars [24]

a) Fehling's test:

Five ml of extract solution was mixed with 5 ml of Fehling's solution equal mixture of Fehling's solution A&B & boiled. Formation of brick red Precipitate indicates the presence of reducing sugars.

b) Benedict's test:

Equal volumes of Benedict's reagent and extract in test tube boiled for min solution appeared green, yellow or red depending upon the amount of reducing sugar present



Fig: preliminary test (1)



Fig: preliminary test (2)

Table:1 Preliminary Phytochemical Screening

Chemical tests	Hydroalcoholic Extract	Methanol
Test for Steroids	+	-
Test for Saponins	+	+
Test for Alkaloid	+	+
Test for Glycosides	+	+
Test for Reducing sugars	-	-
Test for Tannins	-	+
Test for Flavonoids	+	-
Test for Amino acids	+	-
Test for Carbohydrates	+	-

5.8 Formulation of emulgel:

Formulations with different quantity of ingredient were made as shown in Table 1. The gel portion of the emulgel was made by dissolving carbopol-934 in cold water with constant stirring at a moderate speed until uniform mixture was made. The pH was then adjusted to 6-6.5 using triethanolamine (TEA). Tween 80 was dissolved in distilled water to prepare the aqueous phase of the emulsion while for the preparation of the oil phase of the emulsion; span 80 was dissolved in liquid paraffin. To preserve the emulsion, methyl parabene was dissolved in propylene glycol and the extract was dissolved in ethanol then both solutions were mixed with the aqueous phase. Both the aqueous and the oil phase were heated in a water bath at 70 °C separately. Then the oil phase was added drop wise to the aqueous phase with continuous stirring using homogenizer at speed of 3000 rpm for 10 min then cold to room temperature.At the end the gel and emulsion portions were mixed in 1:1 ratio with moderately stirring to prepare emulgel [25]

Table: 3

Sr.No.	Ingredient	Quantity Taken
1	Hydroalcoholic **e**xtract	5gm
2	Carbopol 934	0.75 gm
3	Liquid paraffin	2.5ml
4	Span 60	0.45ml
5	Tween 80	0.50ml
6	Propylene glycol	3.5ml
7	Methyl paraben	0.01gm
8	Distilled water	Up to q.s.

5.9 Antifungal Assay:

Three fungal strains (*Aspergillus niger*. Rhizopus, mucor) These strains have been selected for the basis of its application purpose of further formulation study. antifungal potential of emulgel was assessed in terms of zone of inhibition of bacterial growth. The results of the antifungal activities are presented in Table.2[26]

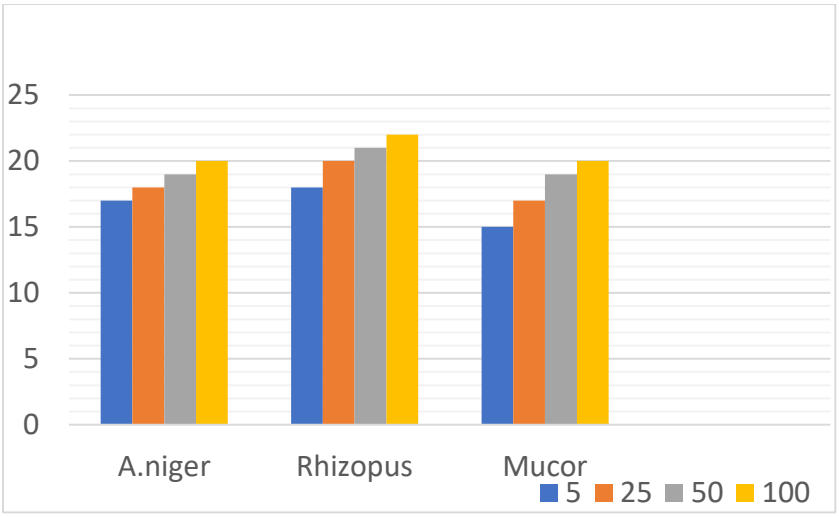
Table:2

Antifungal activities of EMULGEL of leaves Psidium gujava against fungal organism

Antifungal Activity (zone of inhibition)			
Concn. In (µg/ml)	Zone of inhibition in mm A . Niger.	Rhizopus	Mucor
5	17	18	15
25	18	20	17
50	19	21	19
100	20	22	20

Antifungal activities of the extracts increased linearly with increase in concentration of extracting (µg/ml). As compared with standard drugs, the results revealed that in the extracts for fungal activity, Rhizopus shows good result as compare with Aspergillus Niger and Mucor The growth inhibition zone measured ranged from 11 to 20mm for all the sensitive bacteria, and ranged from14 to 20mm for fungal strain·

Table:3



5.10. Evaluation of Topical Gel Formulation

A. Physical Evaluation:

Physical parameters such as color and appearance were checked.

B. Measurement of pH:

pH of the gel was measured by using Ph meter.

C. Viscosity:

Viscosity of gel was measured by using Brookfield viscometer with spindle.

D. Spreadibility:

Spreadibility was determined by the apparatus which consists of a wooden black, which was provided by a pulley at an end. By this method spreadibility was nearest on the basis of slip and drag characteristics of gel. An excess of gel (about 2g) under study was placed on the ground slide. The gel was then sandwiched between this slide and another glass side having the dimension of fixed ground slide and provided with the hook. A one kg weighted was placed on the top of the two sides for 5 minutes to expel air and to provide a uniform film of the gel between the slides. Excess of the gel was scrapped off from the edges. The top plate was then subjected to pull of 80 gm. With the help of string attached to the hook and the time (in seconds) required by the top slide to cover a distance of 7.5cm be noted. A shorter interval Indicate better spreadibilty. Spreadibility was calculated using the following formula:

S=M=L/T

Where,

S=Spreadability,

M-Weight in the pan (tied in the upper slide)

1-Length moved by the glass side

T=Time (in sec.) takes to separate the să de completely each other.

E. Stability Study:

The stability study was performed as per ICH guidelines & The Formulated gel were filled in the collapsible tubes and stored at different temperatures and humidity conditions, vix 250 C/20C/ 60% 5% RH 300 C 20C/65% /5% RH 400 C20C/ 75% 15% RH for a period of three months and studied for appearance, pH, and spread ability.

6.Result and Disussion:

Psidium guajava leaves under microscope T.S shows Midrib, lamina, vascular bundles. L.S. shows Xylem Phloem and Fibers. *Psidium guajava* leaves after drying calculation of loss of drying was to be obtained 72% w/w and powder under muffle furnace gives ash Value of 23% w/w. *Psidium guajava* leaves after maceration extraction and constant stirring in water bath gives the product, that product was calculated 14.90% w/w to be obtained. *Psidium guajava* showing Preliminary Phytochemical Screening Hydro-Alcoholic Extract shows presence of Steroids, Saponins, Flavonoids. Hexane Extract shows presence of flavonoids, glycosides are present.

7.Conclusion:

Emulgel of, *Psidium guajava* leaves showed prominent anti-fungal activity against human pathogenic, thus *Psidium guajava* leaves can be used as a potential antifungal drug against human pathogenic fungal infection. Lupeol and Taraxerone are measure constituents of Hydro alcoholic extract of *Psidium guajava* leaves. In-vivo studies performed for activities like anti-Bacterial, anti-microbial and anti-fungal showed the beneficial use of 20%w/w of hydroalcoholic extract of *Psidium guajava* leaves for the said activities. It was also supported by molecular docking study carried out for Lupeol and Taraxerone which gives better Dock score for mentioned activity.

8.Reference

1. Patwardhan B, Hooper M (1992): Ayurveda and future drug development. Int. J. Alternative Complement Med 10: 9-11.

2.Hook DJ, Pack EJ, Yacobucci JJ and Guss J (1997): Approaches to automating the dereplication of bioactive natural products. The key step in highthroughput screening of bio active materials from natural sources. J Biomol Screening 2: 145-52.

3.Borris J (1996): Natural Product Research; Perspectives from a major pharmaceutical company Merck Research laboratories. J. Ethnopharmacol 51:29.

4.Chaudhari SR, Chavan MJ, Gaud RS (2004): Anti-inflammatory and analgesic activity of Capparis zeylanica root extracts. Indian J Nat Prod20(1): 36-39.

5.Weber, Frederic Albert Constantin. Bulletin du Muséum d'Histoire Naturelle 8(3): 220-223, f. 1-2. 1902.

6.Cowan MM. Plant products as anti- microbialagents. Clin Microbiol Rev. 1999; 12:564-82. [PMC free article] [PubMed] [Google Scholar]

7.Anonymous (1996): Indian Pharmacopoeia, Controller of Publications, 4thed. New Delhi: Vol. II: A-52, A-54; A-089, 405. Anonymous (2006): The Wealth of India- Raw Materials, National Institute of Dahanukar S, Thatte U (2002): Ayurveda Revisited. Popular PrakashanMumbai. 3rd ed. pp. 10. Dahl JB, Moiniche S (2004): "Pre-emptive analgesia" Br Med Bull 71: 13-27

8.Rol Prakash RP, Rao R. Lpharmaceutical and clinical research.

2010; 3: 126-129.

9.Saxena M., Saxena J. and Khare S., "A brief review on: Therapeutical values of Lantana camara plant", Int. J. of Pharmacy & Life Scie. (IJPLS), 3(3); 2012:1551- 1554.

10. montevidensis", Chemistry of Natural2010:46. Oyedeji O. A., Ekundayo O. and Konig W. A., "VolatileJyothi M Joy. Vamsi S, Satish C, Nagaveni K. Lantana camara Linn: A RevieInter. J. of Phytotherapy. 2012; Vol 2, Issue 2: 66-73.

11.CSIR. Wealth of India, Vol VI. Council of Scientific and Industrial Directorate, New Delhi, 1962:31

12.CSIR. The Useul Plants of India. Publication and Information Directorate. CSIR, New Delhi, 1992:316.

13.International Journal of Pharmacy &4pKhare, Sarita Life Sciences. 2012, Vol. 3 Issue 3, p1551-1554. • Author(s): Saxena, Mamta; Saxena, Jyoti;

14.Department of Agronomy, Faculty of Agriculture, Universities Padjadjaran Jl. Raya, Bandung Sumedang KM 21 Sumedang, Jawa Barat 45363, Indonesia Author to whom correspondence should be addressed.

15.Khandelwal KR (2005): Practical Pharmacognosy. Nirali Prakashan, Pune.13th ed. pp.146-159.

16.Indian pharmacopeia,1996, (Third edition)

17.Mukharjee PK (2002): "Quality Control of Herbal Drug", business horizon. publication, New Delhi. 1st ed. pp. 133, 193, 176-193, 380-422, 405-407, 492.

18. Hawk PB, Oster BL, Summerson WH (1954): The Practical Physiological Chemistry, McGraw Hill Book Co., New York, 13th Edn: 54 and 111.

19.. Rosenthaler L (1930): Chemical Investigations of Plants, G. Bell and Sons, London, 23-29 and 119-132.

20.Middeltone H (1956): Systematic Qualitative Analysis, Edward ArnoldPublishers Ltd., London, : 91-94.

21. Shellard EJ (1957): Practical Plant Chemistry for Pharmacy Students, pitam medical publishing co. Ltd London pg:34-35.

22 Harborne JB (1998): Phytochemical Methods, A Guide to modern technique of Plant Analysis. Springer international ed. 3rd page no 134

23.Khandelwal KR practical pharamacognocy Nirali publication 3 rd edition 2017, 78-87.

24. Hawk PB, Oster BL, Summerson WH (1954): The Practical Physiological Chemistry, McGraw Hill Book Co., New York, 13th Edn: 1999, 111-119.

25.. Rosenthaler L (1930): Chemical Investigations of Plants, G. Bell and Sons, London,1st edition 1999, 23-29 and 119-132.

26.Treas and EvansWC Pharmacognosy WB Saunders Company London 15th Edition1983.228

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune 14.

List of Dissertation topics guided for M. Pharm. Students

Specialization: Pharmaceutics

Academic Year: 2018-19 to 2022-23

Sr. No.	Name of Students	Guide Name	Title of Dissertation	Year of Passing
Academic Year: 2018-19				
1.	Ms. Adsul Ketakee Rajendra	Dr. Ashok Bhosale; Co-guide: Mr. Sujit Kakade	Solubility Enhancement, Formulation and evaluation of Mouth Dissolving Tablet of Meloxicam.	2018-19
2.	Mr. Dugad Ankit Rajendra	Mr. Sujit Kakade	Formulation and development of sustained released oral drug delivery system using Caffeine as a model drug	2018-19
3.	Ms. Pokale Pratima Hanumant	Mr. Prashant Khade	Formulation and development of Fast Dissolving Buccal Film of Norethisterone.	2018-19
4.	Mr. Wable Somnath Pralhad	Mrs. T.P.Shangrapawar	Formulation, Development and Evaluation of Gastroretentive Bilayer Tablet of Losartan Potassium.	2018-19
Academic Year: 2019-20				
5.	Mr. Aphale Kiran Balasaheb	Dr. Ashok Bhosale; Co-guide: Mr. Sujit Kakade	Development, Formulation and Evaluation of Ethambutol and Isoniazid Combination Tablet for Anti-TB Kit.	2019-20
6.	Ms. Bhandari Dipali Subhash	Dr. Ashok Bhosale; Co-guide: Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Fast Dissolving Tablets of Solid Dispersion of Lamotrigine	2019-20
7.	Mr. Ghube Kundan Dattatray	Guide: Dr. Ashok Bhosale Co-guide: Mr. Prashant Khade	Formulation and Evaluation of Gymnema Sylvestre Extract Enteric Coated Tablet	2019-20
8.	Ms. Kale Anjali Rajendra	Mr. Sujit Kakade	Solubility Enhancement of Domperidone and Development of it's Mouth Dissolving Tablet	2019-20

9.	Ms. Lalage Monali Bharatkumar	Mr. Sujit Kakade	Formulation, Development and Evaluation of Mouth Dissolving Tablet of Lansoprazole by Natural and Synthetic Superdisintegrant	2019-20
10.	Ms. Lokhande Priyanka Sunil	Mr. Sujit Kakade	Formulation Development and *in vitro* Evaluation of Extended Release Tablet of Antianginal Drug	2019-20
11.	Ms. Magar Prajakta	Mr. Prashant Khade	Formulation, Development and Evaluation of Mouth Dissolving Tablet Using Solid Dispersion of Clopidogrel Bisulphate.	2019-20
12.	Mr. Pawar Indrajit	Mr. Prashant Khade	Stability Analysis of Formulated Monoclonal Antibody Against *Streptococcus Pneumoniae*	2019-20
13.	Ms. Sable Ashwini Ramdas	Mrs. T.P.Shangrapawar	Formulation and Characterization of Nanostructured Lipid Carriers Based Nanogel for Topical Delivery of Clarithromycin	2019-20
14.	Ms. Satav Komal Ramesh	Mrs. T.P.Shangrapawar	Process Optimization and Validation of Colorimetric Serum Bactericidal Assay for *Neisseria meningitidis.*	2019-20
15.	Mr. Tanawade Omkar Gorakh	Mrs. T.P.Shangrapawar	Formulation and Evaluation of Sustained Release Matrix Tablets of Valsartan.	2019-20
Academic Year: 2020-21				
16.	Biranje Sangram Balasaheb	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Effervescent Tablet of Glucosamine Sulphate and Diclofenac sodium for the Treatment of Osteoarthritis.	2020-21
17.	Gavhane Utkarsha Rajendra	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Fast Disintegrating Tablets of Solid Dispersions of Loratadine.	2020-21
18.	Humbe Tushar Rajendra	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Bilayer Tablet of Mefenamic Acid.	2020-21
19.	Kale Tushar Ramesh	Mrs. T.P. Shangrapawar	Formulation and Evaluation of Dispersible Antacid Tablet of Aluminum Hydroxide for Geriatric Patients	2020-21
20.	Kalugade Darshan Raghunath	Dr. Ashok Bhosale	Preparation, characterization of self micro emulsifying drug delivery system of Nifedipine	2020-21

21.	Kamthe Kiran Ananda	Dr. Ashok Bhosale	Design, Development & Evaluation of Solid Self Micro-Emulsifying Drug Delvery System of Amlodipine Besilate	2020-21
22.	Ketaki Vivek Thorat	Dr. Ashok Bhosale	Formulation and Evaluation of Fast Dissolving Oral Film of Domperidone by Solvent Casting Method	2020-21
23.	More Akshata Manoj	Mr. Sujit Kakade	Formulation and Evaluation of Microwave Generated Nanocomposites for Solubility Enhancement of Rosuvastatin Calcium	2020-21
24.	Nangare Aarti Chandrakant	Mr. Sujit Kakade	Formulation and Evaluation of Fast Disintegrating tablet containing Griseofulvin Solid Dispersion.	2020-21
25.	Patil Basavanita Surykant	Mr. Sujit Kakade	Development and evaluation of Sublingual tablet of amlodipine besylate by direct compression method.	2020-21
26.	Pawar Sweta Vilas	Mr. Sujit Kakade	Formulate and Evaluate of Microwave Generated Nanocomposites for Solubility Enhancement of Poorly Water Soluble Drug.	2020-21
27.	Raje Onkar Sunil	Mr. Prashant Khade	Formulation and Evaluation of Fast Dissolving Oral Film of Venlafaxine Hydrochloride by Solvent Casting Method	2020-21
28.	Raut Neena Ashok	Mr. Prashant Khade	Design development and evulation of microsponge based topical drug delivery system by using Ciclopirox Olamine.	2020-21
29.	Suryawanshi Amar Chandrakant	Mr. Prashant Khade	Formulation and evaluation of floating tablet based gastroretentive drug delivery system by using ciprofloxacin Hydrochloride	2020-21
30.	Thongire Ashwini Dattatray	Mr. Prashant Khade	Solubility enhancement of Azilsartan medoxomil by self emusifying drug delivery system	2020-21
Academic Year: 2021-22				
31.	Gaike Shubham Suresh	Mr. Prasahnt Khade	Formulation and Evaluation of Rosuvastatin Calcium Micro-Emulsion for Transdermal Drug Delivery	2021-22

32.	Gavhane Akshada Rajaram	Mr. Prashant Khade	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Carvedilol	2021-22
33.	Jadhav Jaydeep Prabhakar	Mr. Prashant Khade	Formulation and Evaluation of Mouth Dissolving Film of Ziprasidone	2021-22
34.	Jadhav Neeta Vijay	Mr. Prashant Khade	Formulation and Evaluation of Floating Tablets Metoprolol Succinate	2021-22
35.	Kale Monika Haribhau	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Irbesartan	2021-22
36.	Kale Saroj Gangadharrao	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Floating Tablet of Metformin hydrochloride	2021-22
37.	Kamble Shrutika Shaileshkumar	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Colon Targeted Suppository of Mesalazine	2021-22
38.	Khade Swapnil Dattatray	Dr. Ashok Bhosale;	Formulation and Evaluation Mouth Dissolving Tablet of Losartan Potassium	2021-22
39.	Korde Sujeet Anil	Dr. Ashok Bhosale;	Formulation and Evaluation of Mouth Dissolving Tablet of Thiocolchicoside	2021-22
40.	Mane Pankaj Sanjay	Dr. Ashok Bhosale;	Formulation and Evaluation of Bilayer Tablets of Sustained Release Nifedipine and Immediate Release Pioglitazone	2021-22
41.	Narawade Shweta Keshav	Mr. Sujit Kakade	Formulation and Evaluation of Mouth Dissolving Tablet of Pitavastatin by Solid Dispersion Method	2021-22
42.	Ramasane Gajanan Ram	Mr. Sujit Kakade	Formulation and Evaluation of Gliclazide Immediate Release Metformin Sustain Release Bilayer Tablet	2021-22
43.	Rodge Vikram Madhukar	Mr. Sujit Kakade	Formulation and Evaluation of Bilayer Antidiabetic Tablet	2021-22
44.	Yennuwar Dhiresh Pramod	Mr. Sujit Kakade	Formulation and Development of Fast Disintegrating Tablet of Piroxicam by Solid Dispersion Technique	2021-22
Academic Year: 2022-23				
45.	Beldar Aditi Rameshwar	Mr. Sujit Kakade	Formulation and Evaluation of Solid Self Micro Emulsifying Drug Delivery System of Valsartan	2022-23

46.	Bhalerao Ruchita Arvind	Mr. Sujit Kakade	Formulation and Evaluation of Mouth Dissolving Tablets of Solid Dispersion of Fenofibrate	2022-23
73	Bhondve Riya Rahul	Mr. Sujit Kakade	Formulation and Evaluation of Solid Self Microemulsifying Drug Delivery System of Olmesartan Medoxomil.	2022-23
74	Biradar Pramod Sanjay	Mr. Sujit Kakade	Formulation and Evaluation of Bilayer Tablet of Enalapril Maleate and Metformin HCl	2022-23
75	Brahmne Jayashree Annasaheb	Mr. Prashant Khade	Formulation and Evaluation of Mouth Dissolving Tablet of Solid Dispersion of Pioglitazone HCl	2022-23
76	Gaysamudare Priyanka Balasaheb	Mr. Prashant Khade	Formulation and Evaluation of Sustained Release Matrix Tablet of Azathioprine	2022-23
77	Jadhav Shraddha Kiran	Mr. Prashant Khade	Formulation and Evaluation of Bilayer Tablet of Sustain Release Glibenclamide and Immediate Release Enalapril Maleate	2022-23
78	Joshi Shubhangi Rajeshwarrao	Mr. Prashant Khade	Formulation and Evaluation of Sustained Release Matrix Tablet of Lamivudine.	2022-23
79	Mahajan Vishal Bhimashankar	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Sublingual Tablet of Lansoprazole.	2022-23
80	Nagargoje Sandesh Balasaheb	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Orodispersible Tablets of Meclizine Hydrochloride.	2022-23
81	Patil Damini Sanjay	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Piroxicam.	2022-23
82	Pawar Ajay Shivaji	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Sustained Release Tablet of Glipizide	2022-23
83	Rokade Amol Bhausaheb	Dr. Ashok Bhosale; Co-guide: Mr. Sujit Kakade	Formulation and Evaluation of Antidiabetic Bilayer Tablet of Pioglitazone HCl and Glimepiride.	2022-23
84	Shinde Harshal Mohan	Dr. Ashok Bhosale; Co-guide: Mr. Prashant Khade	Preparation, Evaluation and Optimization of Nanosuspension of Poorly Water-soluble Rosuvastatin Calcium.	2022-23
85	Thorat Tanvi Vivek	Dr. Ashok Bhosale; Co-guide: Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Mouth Dissolving Tablet of Ketorolac Tromethamine	2022-23

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

A Research Report

On

"FORMULATION AND EVALUATION OF GLICLAZIDE IMMEDIATE RELEASE AND METFORMIN SUSTAIN RELEASE BILAYER TABLET"

Submitted to

SAVITRIBAI PHULE PUNE UNIVERSITY

In partial fulfilment for the degree of Master of Pharmacy in Pharmaceutics

Submitted By

Mr. Gajanan R. Ramasane

(M.Pharm. IVth Semester)

Guided By

Mr. Sujit Kakade

(Head of Pharmaceutics Department)

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER, KHARADI, PUNE-411014

2021-2022

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER,

KHARADI, PUNE-411014

CERTIFICATE

This is to certify that the research work entitled "Formulation & Evaluation of Gliclazide Immediate Release and Metformin Sustain Release Bilayer Tablet" has been completed for the partial fulfilment of degree of Master of Pharmacy in Pharmaceutics by Mr. Gajanan Ram Ramasane, a student of M. Pharm IVth Semester during academic year 2021-2022. He has carried out his project satisfactorily under the guidance of Mr. Sujit Kakade at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune -411014.

Date: 30-05-22

Place: Kharadi

B. K.
Mr. K. R. Bobe

Dr. Ashok Bhosale
PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
(Principal)
P.D.E. A's S.U.C.O.P.S. & R.C.

Kharadi.

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTER,

KHARADI, PUNE-411014

CERTIFICATE OF THE GUIDE

This is to certify that the research work entitled "Formulation & Evaluation of Gliclazide Immediate Release and Metformin Sustain Release Bilayer Tablet" has been completed for the partial fulfilment of degree of Master of Pharmacy in Pharmaceutics by Mr. Gajanan R. Ramasane, a student of M. Pharm IVth Semester during academic year 2021-2022. He has carried out his project satisfactorily under my guidance at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Center, Kharadi, Pune -411014.

Date: 30-05-22

Mr. Sujit Kakade

Research Guide

Place: Kharadi

P.D.E.A's S.U.C.O.P.S. & R.C.

Kharadi

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-411014

List of Dissertation topics guided for M. Pharm Students
Specialization: Pharmaceutical Quality Assurance
(Academic Year: 2018-19 to 2022-23)

Sr. No.	Name of Students	Guide Name	Title of Dissertation	Year of Passing
1	Ms. Supriya Kangude	Mr. Vikram Veer	Developement And Validation of RP-HPLC Method For Estimation of 2PE In IPV(Inactivated Poliomyelitis Vaccine)	2018-19
2	Ms. Nayna Khedekar	Mr. Vikram Veer	Development And Validation Of RP-HPLC Method For Estimation Of Formaldehyde In IPV	2018-19
3	Ms. Akshada Khaladkar	Mr. Vikram Veer	Development And Validation Of RP-HPLC Method For Estimation Of Human Serum Albumin In Rabbies Vaccine	2018-19
4	Ms. Kiran Ghule	Dr. Vijaya Barge	The use of UPLC in the biological comparison of candidate Biosimilar with innovator MAB	2018-19
5	Ms.Priyanka Kamthe	Dr. Vijaya Barge	Physicochemical characterization of Monoclonal Antibody	2018-19
6	Ms. Dipali Kolekar	Dr. Amit Kasbe	RP-HPLC Method development and validation of Amlodipine and Celecoxib in bulk and Pharmaceutical Dosage Form.	2018-19
7	Ms. Poonam Kailas Bramhadandi	Dr. Ashok Bhosale	Formulation, characterization & optimization of dissolution on containing celecoxib solid dispersion	2019-20
8	Mr. Vinayak Uttam Madane	Dr. Amit Kasbe	Formulation, Development & evaluation of sustained release bilayer tablet containing Pioglitazone & Glucosum in management of hypoglycemic diabetes	2019-20

9	Ms. Shruti Chandrakant Sonawane	Dr. Amit Kasbe	Formulation, Development & evaluation of sustained release tablet containing Tamoxifen Citrate & Ibuprofen in treatment of Metastatic Breast Cancer.	2019-20
10	Mr. Sandeep Markad	Dr. Amit Kasbe	Analytical method development and validation for Estimation OF Valsartan bulk and Pharmaceutical Formulation by QBD Approach	2019-20
11	Ms. Poonam Ashok Ingalwad	Mr. Vikram Veer	Development, production, purification and characterization of monoclonal antibody against Poliomyelitis	2019-20
12	Mr. Kanifnath Gawali	Mr. Vikram Veer	Analytical method development and validation of Antipsychotic drug Trifluoperazine	2019-20
13	Ms. Ankita Kasabe	Mrs. Archana Yadav	Development and Validation of HPLC method for determination of Clotrimazol in dosage form	2019-20
14	Ms. Kanchan Jambhale	Mrs. Archana Yadav	Formulation and evaluation of oral in-situ gel system for treatment of mouth ulcer	2019-20
15	Mr. Sagar Lohot	Mrs. Archana Yadav	Triamcinolone acetonide microsponges embedded biocompatible gels for controlled and effective antipsoriasis activity	2019-20
16	Mr. Abhilash Bhosale	Dr. Vijaya Barge	Upscaling , production , purification and characterization of monoclonal antibody against Streptococcus Pneumoniae	2019-20
17	Ms. Shubhang Darekar	Dr. Vijaya Barge	Formulation and evaluation of nanoparticulate matrix tablet of Eprosartan Mesylate	2019-20
18	Ms. Shubhangi Ramesh Darade	Dr. Amit Kasabe	Analytical method development & validation for estimation of Amlodipine in bulk and pharmaceutical formulation by QbD approach	**2020-21**
19	Mr. Rohidas Gurunath Dede	Dr. Amit Kasabe	Formulation, Development & evaluation of transdermal drug delivery system	2020-21

20	Ms. Jyoti Bahiru Darkunde	Dr. Amit Kasabe	Formulation and evaluation of sustain release matrix tablets of Dicofenac sodium and Chlorzoxazone	2020-21
21	Mr. Shyam D. Dhamane	Dr. Amit Kasabe	Analytical method development & validation of simultenous estimation for Ibuprofen and Camylofin dihydrochloride by using RP-HPLC	2020-21
22	Ms. Ashwini Nandkumar Gadage	Dr. Vijaya Barge	Formulation and evaluation of mouth dissolving tablet of Azelnidipine by using solvent evaporation technique	2020-21
23	Ms. Madhuri Gadekar	Dr. Vijaya Barge Co-guide : Dr. Amit Kasabe	Busting particles dispersed in compressed tablet to deliver active drug as immediate and sustain release	2020-21
24	Mr. Dhairysheel surykant Gund	Dr. Vijaya Barge Co-guide : Dr. Amit Kasbe	Mouth dissolving sugar free medicated lolitab in treatment of multiple disorders	2020-21
25	Mr. Haribhu Pandurang Raskar	Mr. Vikram Veer	Mouth dissolving medicated chewing gum in the treatment of multiple disorder of Chlorpromazine by direct compression method	2020-21
26	Mr. Pravin Prakash kambale	Dr. Vijaya Barge	Formulation,evaluation and stability testing of ayurvedic tablet for post opertaive anorectal wound healing	2020-21
27	Mr. Shashikant Ganesh Mhasade	Mr. Vikram Veer	Method development and validation of RP-HPLC method for simultaneous estimation of Nebivolvol and Cilndipine in combined tablet dosage form	2020-21
28	Mr. Nitin Sheshrao Neharkar	Mr. Vikram Veer Co-guide- Dr. Amit Kasbe	Formulation and evaluation of coated tablet with waiting solution containing active pharmaceutical ingredient for the treatment of multiple disorders	2020-21
29	Mr. Yadnesh Gajan Shende	Mr. Vikram Veer	Method development and validation of RP-HPLC method for simultaneous estimation of Dapagliflozin and Saxagliptin	2020-21
30	Ms. Vaishali Anna Shingade	Mr. Vikram Veer	A validated stability indicationg HPLC method for Cephalexin tablet formulation in the presence of degradation products and its process related impurity	2020-21
31	Ms. Snehal Mahadeo Khade	Dr. Vijaya Barge	Formulation and evaluation of buccoadhesive tablet of Acyclovir	2020-21

32	Pate Abhijit Nagnath	Dr. Vijaya Barge	Analytical method development and validation for estimation of Dolutegravir in tablet dosage form.	**2021-22**
33	Sakpal Bhavana Ramesh	Dr. Vijaya Barge	Formulation development and analytical method development of gel formulation containing antibiotic and antihistaminic agents.	2021-22
34	Shinde Trupti Shrirang	Dr. Vijaya Barge	Formulation development and analytical method development of microemulsion containing Griseofulvin.	2021-22
35	Sukre Manisha Ankush	Dr. Vijaya Barge	Formulation development and analytical method development of microemulsion containing Econazole nitrate.	2021-22
36	Suryawanshi Parijat Sunil	Dr. Vijaya Barge	Formulation development and analytical method development for drugs used in treatment of severe burn.	2021-22
37	Awatade Prajkata Raosaheb	Mr. Vikram Veer	Analytical method development and validation of Rivaroxaban in bulk & pharmaceutical dosage form by using RP-HPLC	2021-22
38	Burte Gayatri Bhagwant	Mr. Vikram Veer	Formulation development and analytical method development of Ibuprofen containing combinational tablets for rheumatoid arthritis.	2021-22
39	Dhepe Sayali Dattu	Mr. Vikram Veer	Formulation development and analytical method development of microemulsion containing ketoprofen	2021-22
40	Jadhav Snehal Anil	Dr. Ravindra Patil	Formulation of Rifampicin tablet by using ricinus communis oil as a binder & its evaluation & method development	2021-22
41	Madde Kiran Madhukar	Dr. Ravindra Patil	Formulation and evaluation of mouth dissolving tablet of Glicazide by using natural superdisintegrant	2021-22
42	Kandge Manasi Gorakh	Dr. Amit Kasbe	Formulation , evaluation, & method development of microemulsion containing Miconazole	2021-22
43	Karkhile Shubhangi	Dr. Amit Kasbe	Formulation development & analytical method development of tablet formulation containing antibiotic and antihistaminic agents.	2021-22
44	Kulkarni Onkar Shamrao	Dr. Amit Kasbe	Formulation development & analytical method development of oral dispersible tablet containing Sarratiopeptidase and salbutamol	2021-22

45	Kerle Vikram Namdev	Dr. Amit Kasbe	Formulation development & analytical method development of tablet containing Dapsone and Actazolamide	2021-22
46	Arjun Nakul Ramdas	Mr. Vikram Veer	Method development and validation of Azilsartan medoxorrin by using RP-HPLC	2021-22
47	Wanave Kiran Gahininath	Dr. Ravindra Patil	Method development and validation of Rosuvastatin calcium by using RP-HPLC	2021-22
48	Pratiksha Bhagwan Avhad	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for sustained release tablet containing Glibenclamide	**2022-23**
49	Pallavi Sarjerao Borase	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for nanogel containing kojic acid	2022-23
50	Kamlesh Ravindra Deshmane	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for mouth dissolving tablet containing Bromelin	2022-23
51	Rajratna Deepak Gaikwad	Dr. Vijaya U. Barge	Formulation development and analytical method development and validation for transdermal patch containing Glibenclamide	2022-23
52	Ghawate Dipti Popat	Dr. Amit J. Kasbe	Analytical Method Development and Validation of Verapamil Hydrochloride by Using RPHPLC.	2022-23
53	Jadhav Purva Suresh	Dr. Amit J. Kasbe	Analytical method development and validation of Eberconazole by HPLC method	2022-23
54	Jadhav Rutuja Pravinkumar	Dr. Amit J. Kasbe	Analytical Method Development and Validation of Rivaroxabane in Bulk and its Dosage Form by Using RPHPLC.	2022-23
55	Kalamkar Tanmayi Dattatray	Mr. Vikram S. Veer	Formulation Development and Analytical Method Development for Nanofibrous tablet of Glibenclamide	2022-23
56	Kendre Komal Anand	Mr. Vikram S. Veer	Analytical Method Development And Validation of Allopurinol In Bulk And It's Dosage Form By Using RP- HPLC	2022-23
57	Patil Dipti Sambhaji	Mr. Vikram S. Veer	Formulation development and analytical method development of nanofibrous gel containing Ketoconazole and Clotrimazole	2022-23
58	Gavhane Mayuri Vaibhav	Dr. Ravindra Y. Patil Co-guide: Mr. Vikram S. Veer	Analytical Method Development and Validation of Lamivudine by using RP-HPLC	2022-23
59	Pawal Suvarna pradip	Mr. Krunal G. Kanase Co-guide : Dr. Amit J. Kasbe	Analytical Method Development and validation of Sparfloxacin by using RP-HPLC	2022-23

60	Pinjari Pranali vasant	Mr. Krunal G. Kanase Co-guide: Dr. Vijaya U. Barge	Analytical method Development and validation of Econazole Nitrate by using RP-HPLC	2022-23
61	Rode Mangesh Mohan	Mr. Vivek B. Ingale Co-guide: Dr. Vijaya U. Barge	Formulation development and MTT assay of herbal Vitamin C powder and its HPLC method development	2022-23
62	Shaikh Almisba Faruk	Mr. Vivek B. Ingale Co-guide: Mr. Vikram S. Veer	Analytical Method Development And Validation of marketed formulation of Nefopam HCl	2022-23

Prof. Vikram Veer
Coordinator

Dr. V. U. Barge
Vice-Principal

VICE - PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune - 411014

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

A THESIS REPORT
ON

"FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACETAZOLAMIDE FOR TRETMENT OF SEVERE BURN"

SUBMITTED TO
SAVITRIBAI PHULE PUNE UNIVERSITY
IN PARTIAL FULFILLMENT FOR THE DEGREE OF MASTERS OF PHARMACY IN PHARMACEUTICAL QUALITY ASSURANCE

SUBMITTED BY
SURYAWANSHI PARIJAT SUNIL
(M. PHARM. SEMESTER-IV)

GUIDED BY
DR. V. U. BARGE
(VICE PRINCIPAL & PROFESSOR,
PHARMACEUTICAL CHEMISTRY)

PUNE DISTRICT EDUCATION ASSOCIATION'S SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
KHARADI, PUNE-411014
2021-2022

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL
SCIENCES AND RESEARCH CENTRE
KHARADI, PUNE-411014
2021-2022

A Thesis Report

On

"FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACETAZOLAMIDE FOR TRETMENT OF SEVERE BURN"

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

In partial fulfillment for the degree of masters of

Pharmacy in Pharmaceutical Quality Assurance

SUBMITTED BY

SURYAWANSHI PARIJAT SUNIL

(M. Pharm. Semester-IV)

GUIDED BY

Dr. V. U. Barge

(Vice Principal & Professor, Pharmaceutical Chemistry)

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL
SCIENCES & RESEARCH CENTRE, KHARADI,
PUNE-411014

CERTIFICATE

This is to certify that the thesis work presented entitled "FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACETAZOLAMIDE FOR TRETMENT OF SEVERE BURN" has been completed for the partial fulfillment of degree of **Master of Pharmacy in Pharmaceutical Quality Assurance** by **Mr. Suryawanshi Parijat Sunil** , a student of **M. Pharm Sem-IV** during academic year 2021-22. He has carried out his project satisfactory under the guidance of **Dr. Mrs. V. U. Barge** at **Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune- 411014.**

Date: 03/07/2022

Place: Kharadi

Dr. Ashok Bhosale
PRINCIPAL
Principal
P.D.E.A'S S.U.C.O.P.S & R.C Kharadi, Pune
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL
SCIENCES & RESEARCH CENTRE, KHARADI,
PUNE-411014

CERTIFICATE OF THE GUIDE

This is to certify that the thesis work presented entitled "FORMULATION DEVELOPMENT AND ANALYTICAL METHOD DEVELOPMENT OF TABLET FORMULATION CONTAINING COMBINATION OF DAPSONE AND ACEAZOLAMIDE FOR TRETMENT OF SEVERE BURN" has been completed for the partial fulfillment of degree of **Master of Pharmacy in Pharmaceutical Quality Assurance** by **Mr. Suryawanshi Parijat Sunil**, a student of **M. Pharm Sem-IV** during academic year 2021-22. He has carried out his project satisfactory under my guidance **at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune- 411014.**

Date:03/05/2022

Place: Kharadi

Dr. V. U. Barge
(Vice- Principal & Professor,
Pharmaceutical Chemistry)
P.D.E.A'S S.U.C.O.P.S & R.C Kharadi, Pune

Formulation Development and Evaluation for Mouth Dissolving Tablet Containing Bromelain

Deshmane Kamlesh [1*], Dr. Barge Vijaya [2], Dr. Kasabe Amit [3], Avhad Pratiksha [1], Borase Pallavi [1], Gaikwad Rajratna [1], Pawar Ajay [4]

[1]*Research Scholar, Department of Pharmaceutical Quality Assurance, PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Pune, Maharashtra, India.*

[2]*Vice Principal, Department of Pharmaceutical Quality Assurance, PDEA's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune, Maharashtra, India.*

[3]*Associate Professor, Department of Pharmaceutical Quality Assurance, PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune, Maharashtra, India.*

[4]*Research Scholar, Department of Pharmaceutics, PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Pune, Maharashtra, India.*

For Correspondence- Deshmane Kamlesh Ravindra

Kamleshdeshmane2299@gmail.com

ABSTRACT:

Bromelain is a proteolytic enzyme that is used as an anti-inflammatory drug. Administration of Bromelain through the oral route is a challenge in children, who have difficulty swallowing tablets. In the present study, six batches of Bromelain Mouth Dissolving tablets (MDT) dosage form at the dose of 100 mg were formulated and evaluated. Results showed that the thickness, weight variation, friability, hardness, and content uniformity of all six formulations were within acceptable limits. But in the in-vitro dissolution study formulation 3 demonstrated better cumulative drug release than other formulations. Hence the study concludes that Bromelain month dissolving tablets formulated using crospovidone (Formulation 3) showed better characteristics of mouth dissolving tablets.

KEYWORDS: Bromelain, Mouth dissolving tablets, Drug-Excipient Compatibility, Crospovidone.

INTRODUCTION:

Many patients, particularly old find it difficult in swallowing tablets, capsules, and fluids and subsequently do not comply with prescriptions, which results in a high frequency of resistance situated research has resulted in bringing out many secure, safe new drug delivery system. Among the several dosage forms developed to improve the difficulty of administration, the Mouth Dissolving Tablet (MDT) is the most favoured commercial product. [1] The oral cavity is an appealing site for the administration of drugs because of the simplicity of administration. Several dosage forms like Tablets, Capsules, and Liquid preparations are administered by oral route. During the most recent decade, Mouth Dissolving Tablet (MDT) advances that make tablets disintegrate in the mouth without chewing and additional water intake have drawn a lot of consideration. The MDTs are also known as fast liquefying, rapid dispersing, rapid dissolve, rapid melt, as well as speedy disintegrating tablets. [2-4] MDTs can be prepared by various conventional methods like direct compression, wet granulation, molding, spray drying, freeze-drying, and sublimation. Firstly, MDTs disintegrate and then dissolve quickly in the saliva without any need for solvents, releasing the drug. A few drugs are absorbed from the mouth, pharynx, and oesophagus as the saliva goes down into the stomach. In many cases, the bioavailability of these drugs is significantly more than those observed from conventional tablet dosage forms. [5,6]

Bromelain is a proteolytic enzyme with anti-inflammatory activity. It is found in pineapple juice and in the pineapple stem. Anti-inflammatory activity by activation of plasmin production from plasminogen and reduction of kinin via inhibition of the conversion of kininogen to kinin. Bromelain has low oral bio-availability because of high first pass metabolism rate. Hence, the formulation in orodispersible form of Bromelain upgrades the bioavailability, decreases side effects, low dosing, patient compliance, and rapid onset of action with great steadiness. In the present work, Orodispersible tablets of Bromelain were prepared by direct compression method using sodium starch glycollate, and crosspovidone as the superdisintegrants. The aim of the study was to evaluate the effect of the superdisintegrants on the wetting time, disintegration time, and drug release profile of the orodispersible tablets. The present investigation deals with the improvement of an effective and stable MDT of Bromelain having a sufficient hardness, low disintegration time, and pleasant taste.

MATERIAL AND METHODS:

Materials:

Bromelain was obtained from Arti Pharma, Mumbai, India. Crospovidone and sodium starch glycolate were obtained from Research Lab Fine Chemical Industries Pvt. Ltd. Mumbai. Microcrystalline cellulose and mannitol were also obtained from Research Lab Fine Chemical Industries Pvt. Ltd. Mumbai. All other chemicals of analytical grade were purchased from commercial sources.

Methods:

Preparation of Mouth Dissolving Tablets by Direct Compression Method:

Mouth dissolving tablets of Bromelain were prepared by direct compression. All the ingredients (except granular directly compressible excipients) were passed through # 60-mesh separately. The ingredients were then weighed and mixed in geometrical order and compressed into tablets of 250 mg using 6 mm round concave punches on an 8-station rotary tablet machine (Table 1).

Table 1: Formulation Table of Bromelain Mouth Dissolving Tablet

Formulations	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**
Ingredient	**Unit Formula (mg per tablet)**					
Bromelain	100	100	100	100	100	100
Crosspovidone	5	10	15	-	-	-
Sodium starch glycolate	-	-	-	5	10	15
Mannitol	50	50	50	50	50	50
Menthol	10	10	10	10	10	10
Avicel PH 102	81	76	71	81	76	71
Sodium stearate	2	2	2	2	2	2
Talc	2	2	2	2	2	2
Total	250	250	250	250	250	250

Evaluation of Bromelain Mouth Dissolving Tablet:

Evaluation of pre-compression parameters of powder:

Preformulation study:

Angle of repose (Ɵ) [7]

The angle of repose was determined by using the funnel method. The accurately weighed blend was taken in a funnel. The height of the funnel was adjusted in such a way that the tip of funnel just touched the apex of the heap and the drug-excipient blend was allowed to flow through the funnel freely to the surface. The diameter of the powder cone was measured and angle of repose calculated using the following equation.

$$\mathbf{Tan\ \theta = h/r}$$

Different ranges of flowability in terms of angle of repose (Table II) are given below (Bikshapathi et al., 2011).

Table 2: Relationship Between Angle of Repose and Flowability

Flow property	Angle of repose
Excellent	25-30
Good	31-35
Fair (aid not needed)	36-40
Passable (may hang up)	41-45
Poor (must agitate, vibrate)	46-55
Very Poor	56-65
Very Very Poor	>66

Bulk Density [8]

Bulk density was determined by pouring presieved drug excipient blend into a 100 ml graduated cylinder. The sample occupied volume and its weight has been recorded It is expressed in g/mL and calculated by using following formula:

$$\mathbf{\rho b = M / Vp}$$

Where,

ρb = Bulk density

M = Weight of sample in grams

Vp = Final volumes of Powder in cm3

Tapped Density [9]

It was carried out by pouring powder blend in 100ml graduated cylinder. The cylinder was tapped mechanically by Tap density apparatus until a constant volume was obtained. Volume occupied by the sample after tapping were recorded and tapped density was calculated by using following formula:

$$\rho t = M / VT$$

Where,

ρt = Tap density

M = Weight of sample in grams

VT = final tap volume of powder in cm3

Hausner's ratio [10]

Hausner's ratio is the ratio of tapped density to bulk density. The lower the value of Hausner's ratio the better the flow property. The ratio is calculated by the following formula

$$\text{Hausner's ratio} = \frac{\text{Tapped density}}{\text{Bulk density}}$$

Lower Hausner's ratios (<1.25) indicate better flow properties than higher ratios (>1.25) (Sayeed et al., 2011).

Carr's Index (Compressibility Index) [10]

It is also one of the simple methods to evaluate flow property of a powder by comparing the bulk density and tapped density. The percentage compressibility of a powder is a direct measure of the potential powder arch or bridge strength and stability. The grading of compressibility of powder according to carr's index is shown in table no.3. It can be calculated by following formula:

$$\text{Carr's Index} = \frac{\text{Tapped density} - \text{Bulk density}}{\text{Tapped density}} \times 100$$

Table 3: Relationship Between Carr's Index and Flowability

Carr's Index	Flow property
5-10	Excellent
12-16	Good
18-21	Fair to possible
23-35	Poor
33-38	Very poor
>40	Extremely poor

Drug-excipient compatibility study

Studies of drug-excipient compatibility are important to as certain drug and excipients are compatible with each other. IR spectra are used to study drug-excipient compatibility.

FTIR study [11]

The study was carried out to determine the molecular structure, serving as an identification test to ascertain the purity of the molecule. IR spectroscopy was obtained by a FTIR spectrophotometer (H400-84100, Shimadzu, Japan) using KBr pellets. The scanning range used was 4400 to 400 cm-1 at a scan period of 1min. Spectra of pure drug and the blend are shown in Figures 1 and 2. There is no change in the shape of the peak or shift of the peak, hence the drug and excipients are compatible (Prameela et al., 2010).

Evaluation of Post-Compression Parameters of Tablets:

Weight variation test [12]

Weight variation was calculated as per method described in Indian pharmacopeia (I.P.2007). Twenty tablets were weighted individually by using Electronic balance (Shimatzu) and the average weight is calculated. The tablets meet the test if no more than 2 tablets are outside the percentage limit and no tablet differs by more than 2 times the percentage limit. The limit of weight variation in tablet are listed in Table 4.

Table 4: Limits for Weight Variation in Tablet as Per I.P. 2007

Average weight of tablet (mg)	Percentage deviation allowed
80 mg or less	± 10
More than 80 mg but less than 250 mg	±7.5
or more	±5

Hardness test [13]

Hardness indicates the ability of a tablet to withstand mechanical shocks while handling. The hardness of the tablets was determined using Digital hardness tester. It is expressed in Kg/cm2. Digital hardness tester was used to measure hardness of the tablet. In which the tablet was placed in the tester and pressure needed to break the tablet was measured.

Thickness [14]

The thickness of the tablets was determined using a Vernier Caliper. Ten tablets from formulation batch were used and average values were calculated.

Friability [15]

Friability is the measure of tablet strength. It was carried out by using Roch friability apparatus, in which the accurately weighed 20 tablets was allowed to rolling and free fall at 25 rpm, after 100 revolutions weight of tablet was again measured and % friability was calculated by following formula

$$\% \text{ Friability} = \frac{\text{Initial weight of tablet} - \text{Final weight of tablet}}{\text{Initial weight of tablet}} \times 100$$

Disintegration time [16]

The disintegration time of tablet was determined by using Disintegration test apparatus. Tablets were placed in disintegration test assembly and disc was placed was placed on tablets in each glass tube of assembly. The assembly was dipped in a vessel containing 900 ml phosphate buffer 6.8 pH. The time for disappearance of tablet residue above mesh was noted as disintegration time.

Wetting time [17]

About 6-8 ml of phosphate buffer 6.8 pH was taken in 10 mL of measuring cylinder. Tablet was placed in the cylinder and complete dispersion of tablet in the cylinder was recorded as the disintegration time. Wetting time in that the tissue paper has been folded twice and placed in petri dish above that tablet is placed. A small quantity of amaranth red color was put on the upper surface of the tablet and 10 ml distilled water was added. The time required to get the tablet completely wet and indicate red color was measured.

Uniformity of drug content [18]

This method is performed as per Indian Pharmacopoeia. Two tablets were crushed and added to 30 ml of 0.1M NaOH in 100 ml volumetric flask sonicated to disintegrate, then diluted by acetonitrile, then this solution was filtered and diluted the filtrate with a mixture of seven volumes acetonitrile and three volumes of 0.1M NaOH. Absorbance was measured by UV spectroscopy at 280 nm and drug content was calculated.

In-vitro Dissolution study [16]

The dissolution study of selected Bromelain formulations was conducted by using USP dissolution apparatus Type – II (Electrolab Mumbai) by taking 900 ml phosphate buffer pH 6.8 as dissolution medium which maintained at 37 ± 0.5°C. At every 5 min interval upto 30 min 1 ml samples was withdrawn and the same volume was replaced to maintain the sink condition. The samples were analyzed using UV spectroscopy at wavelength maxima 280 nm. The % drug release was calculated and is reported in Table 10.11 and drug release profile of selected formulations tablets are depicted in Figure 12.

RESULTS AND DISCUSSION:

Spectroscopic Analysis:

UV spectroscopy:

Determination of λmax of Bromelain in Water:

In UV spectroscopy study, the maximum wavelength (λmax) of Bromelain in water was found to be 279.40 nm. The reported λmax value of Bromelain in water was also 279.40 nm respectively, so the values similar with the reported values indicates that the given sample of Bromelain was in pure form.

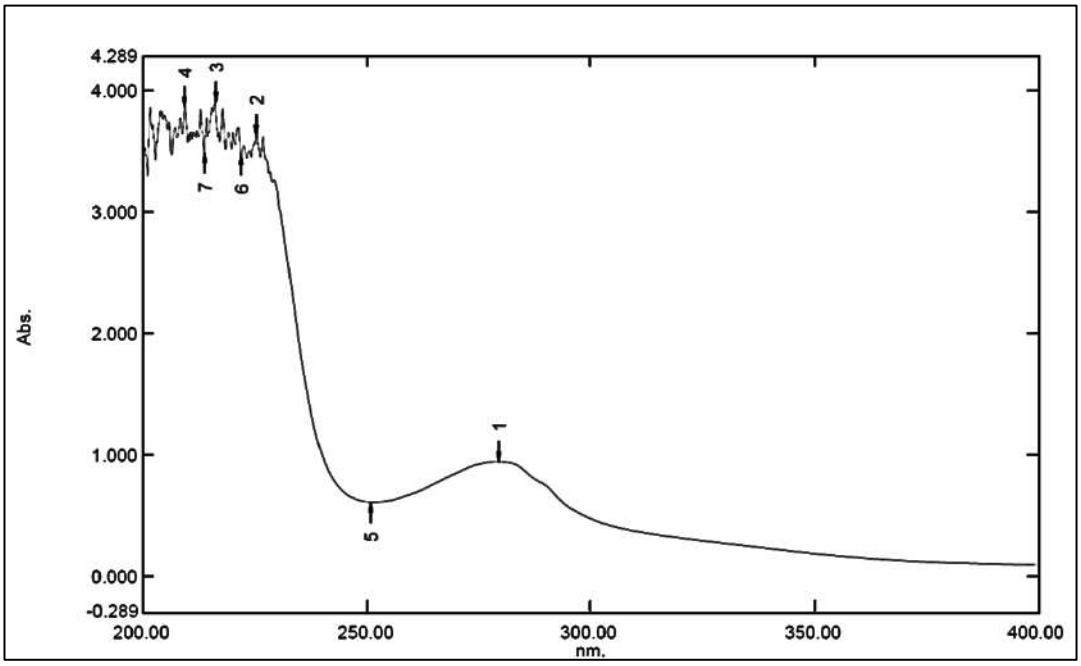


Figure 1: UV spectra of Bromelain in water at 279.40 nm

Calibration Curve of Bromelain in Water:

The linearity of the response of Bromelain was verified at 2–10 µg/ml concentrations. The calibration curve was obtained by plotting the absorbance versus the concentration data and was treated by linear regression analysis. The equation of the linearity curve for Bromelain was y = 0.0127x +0.0033. The linearity curve was found to be linear in the a for mentioned concentrations (the correlation coefficient (r^2) of determination was 0.9922) (Figure 2).

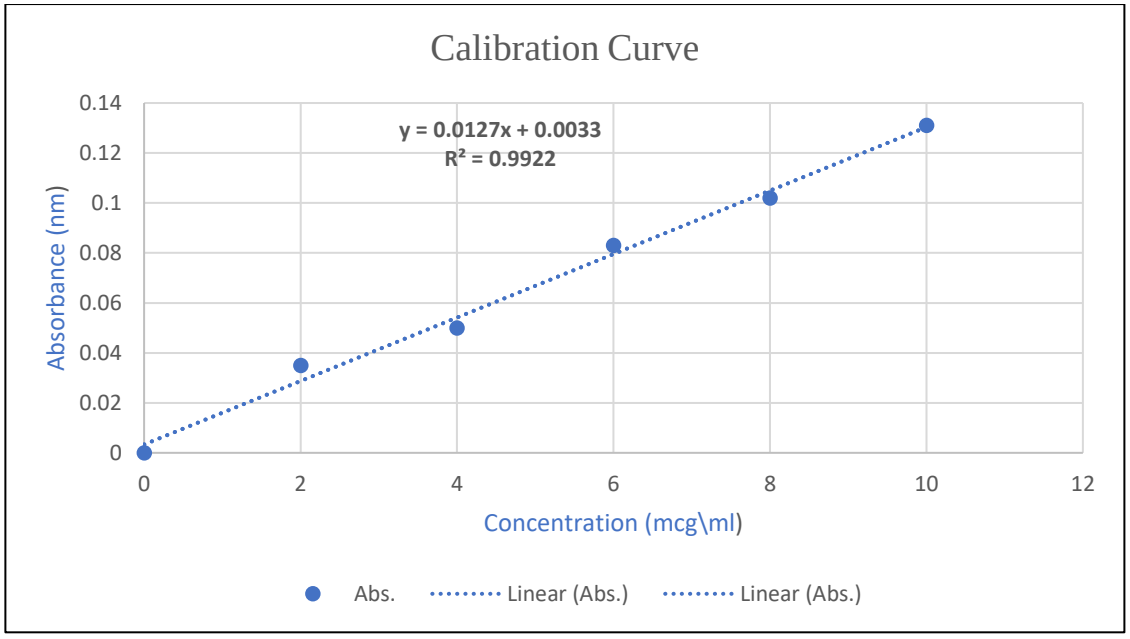


Figure 2: Calibration Curve of Bromelain in Water

FTIR spectroscopy:

The FTIR spectrums of pure Bromelain and physical mixtures of drugs and polymers were studied separately as per the excipients used in the formulation. It was observed that there were no major shifts in the main peaks of either drug. This indicates that there were no compatibility problems with the drug with the polymers and excipients used in the formulation. Bromelain had peaks at 3433 (-OH elongation), 1643 (CO elongation), 3487 (NH stretch), 1384 (C-N stretch), 2862 (C-H).

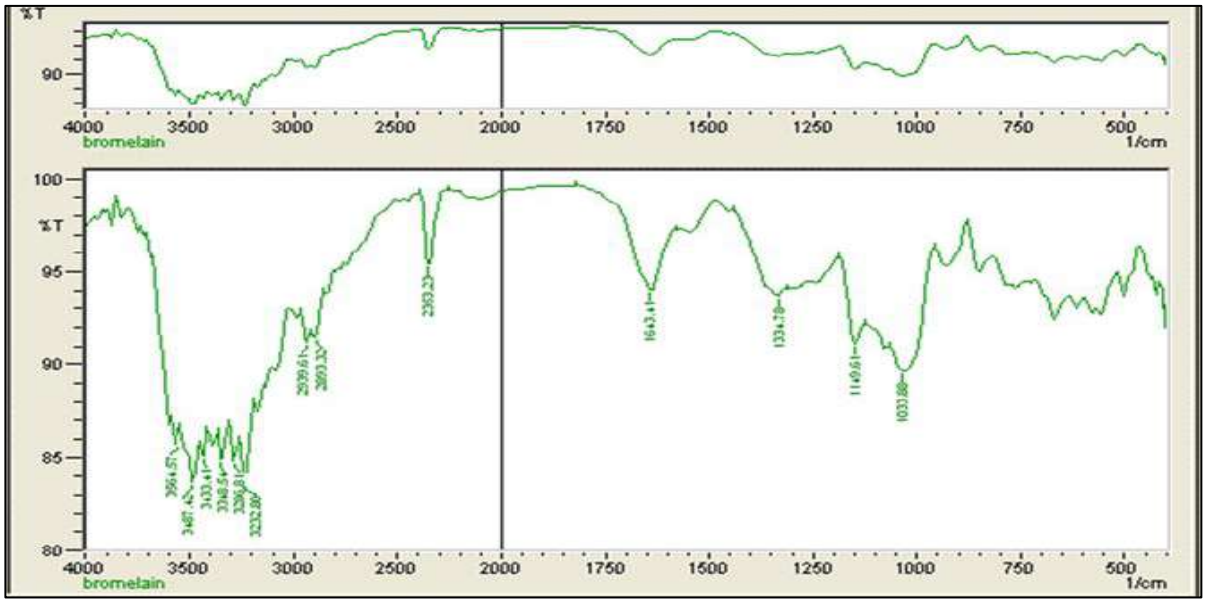


Figure 3: FTIR Studies of Bromelain

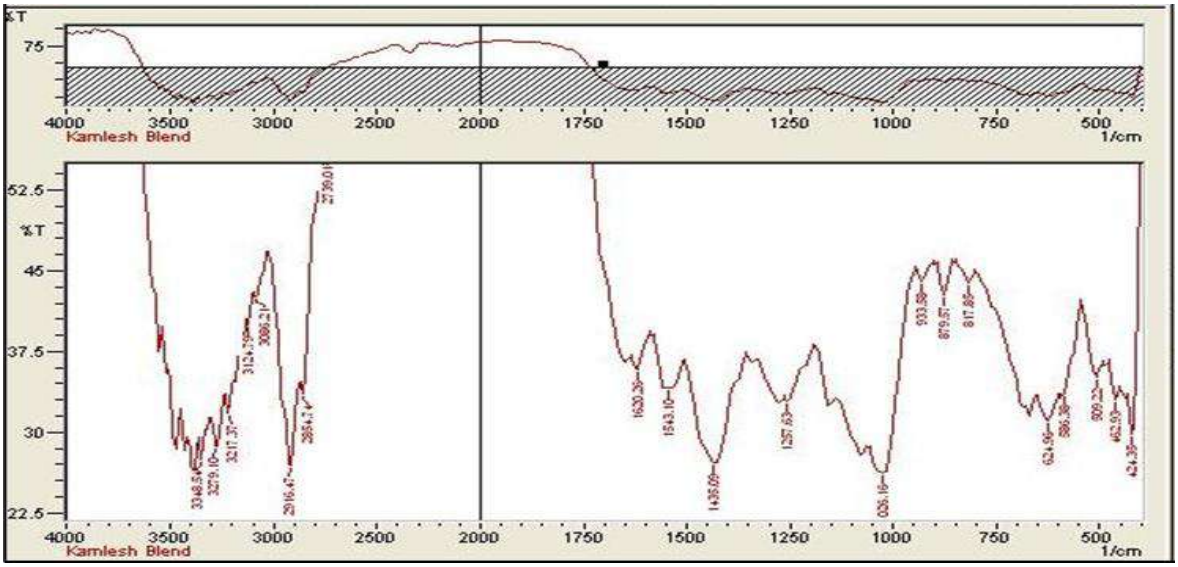


Figure 4: FTIR Studies of Bromelain Tablet Blend

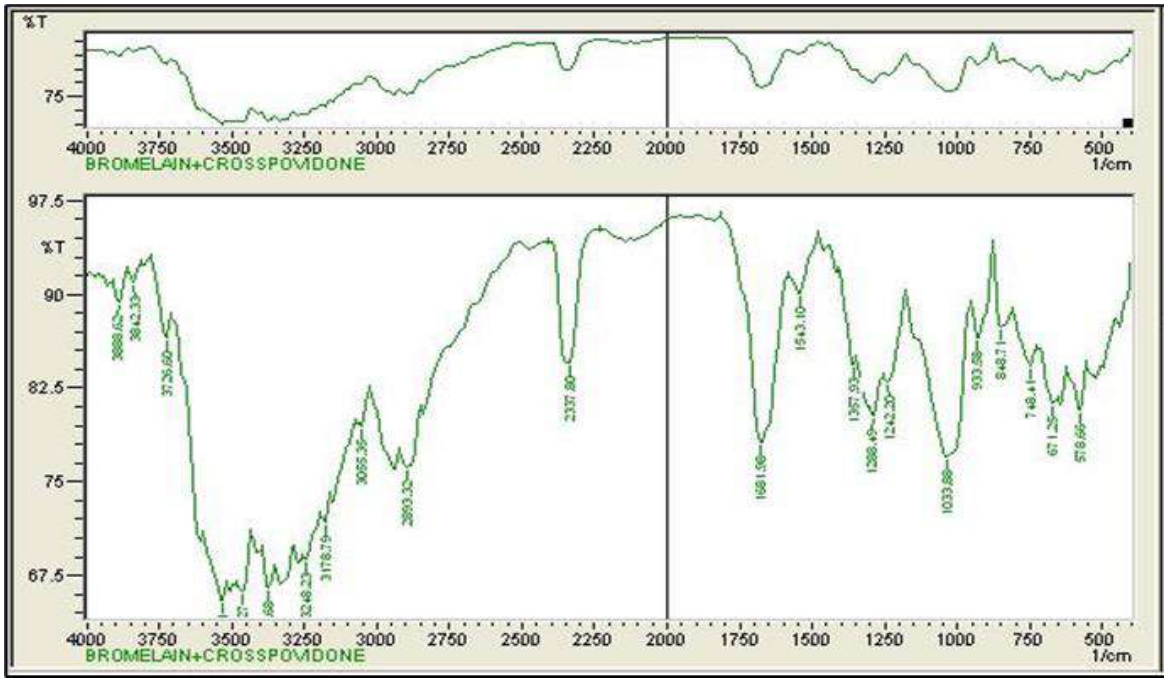


Figure 5: FTIR Studies of Bromelain + Crospovidone

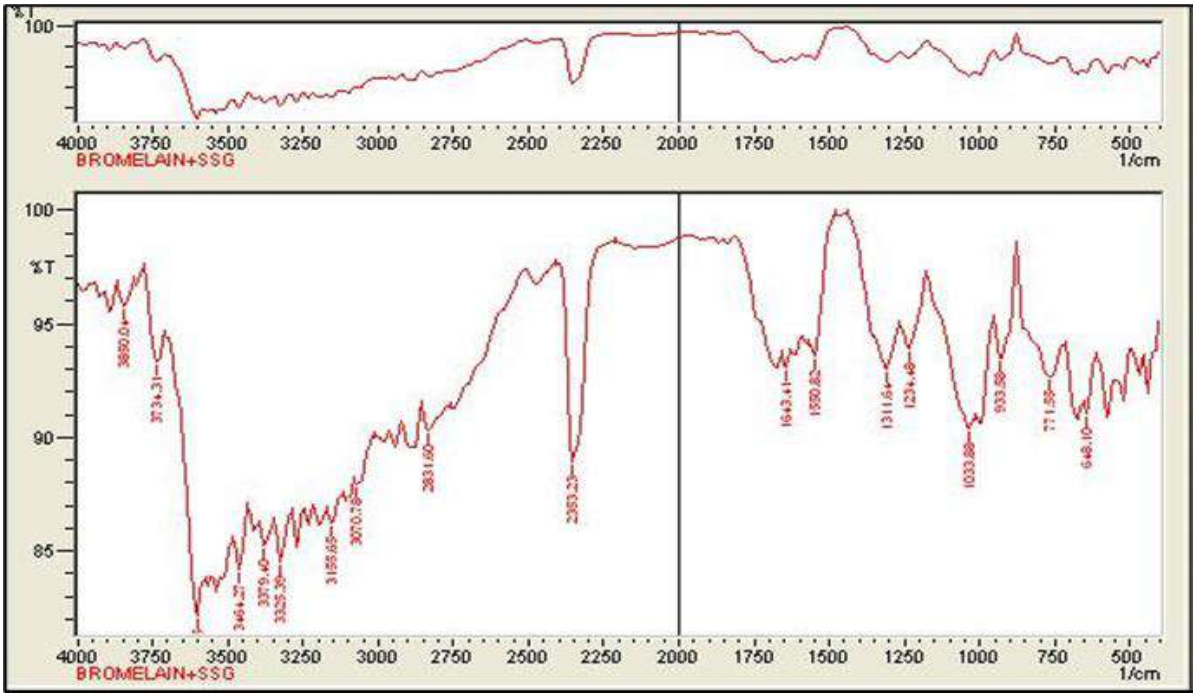


Figure 6: FTIR Studies of Bromelain + SSG

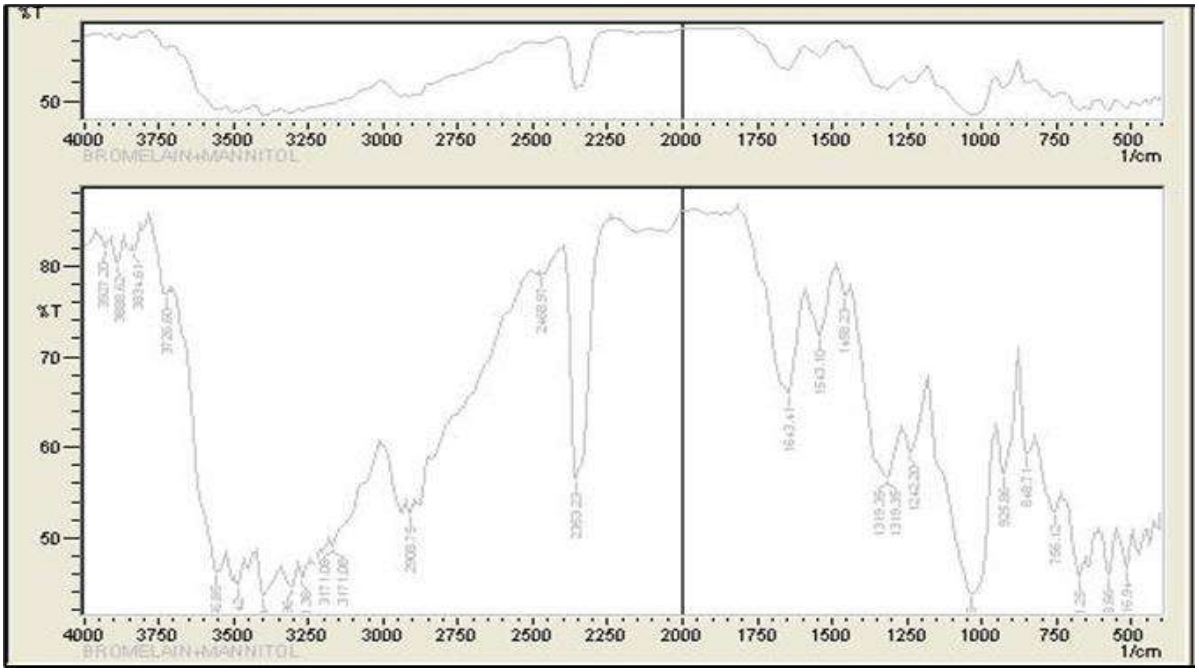


Figure 7: FTIR Studies of Bromelain + Mannitol

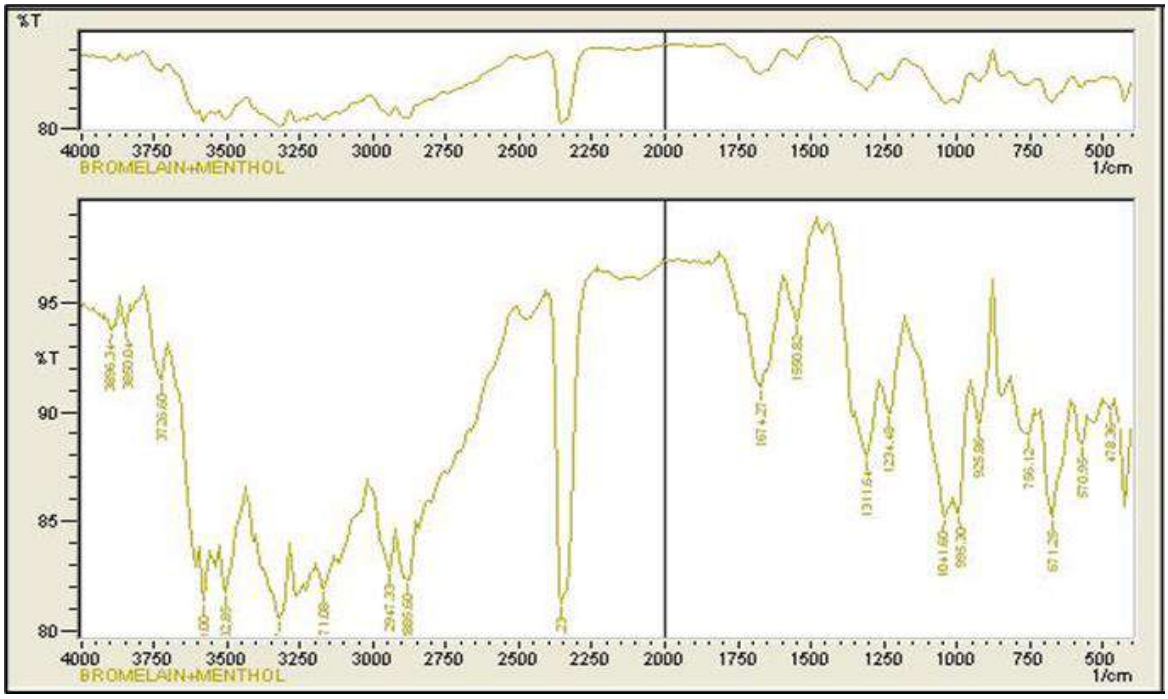


Figure 8: FTIR Studies of Bromelain + Menthol

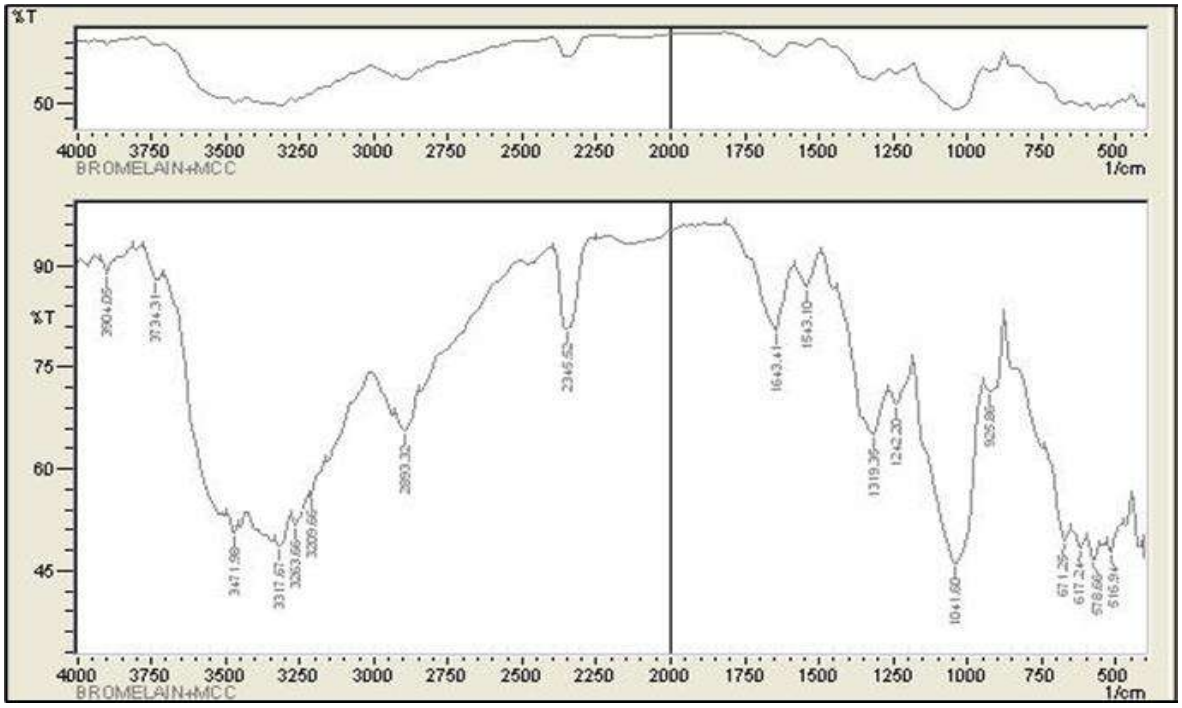


Figure 9: FTIR Studies of Bromelain + MCC

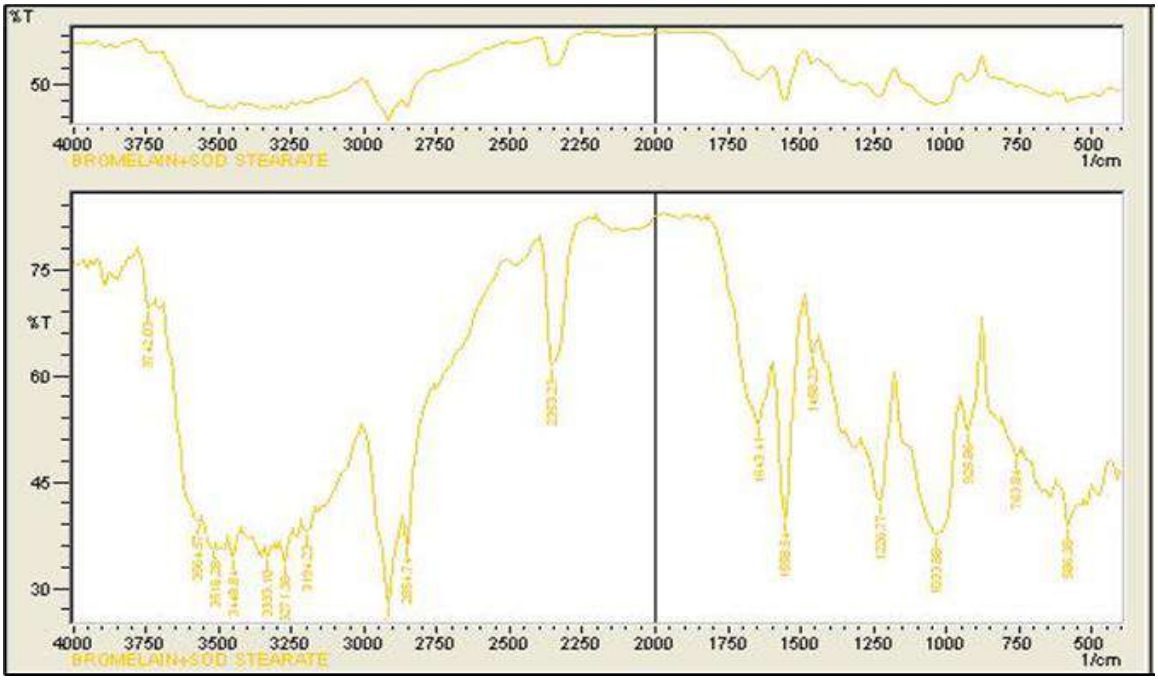


Figure 10: FTIR Studies of Bromelain + Sodium Stearate

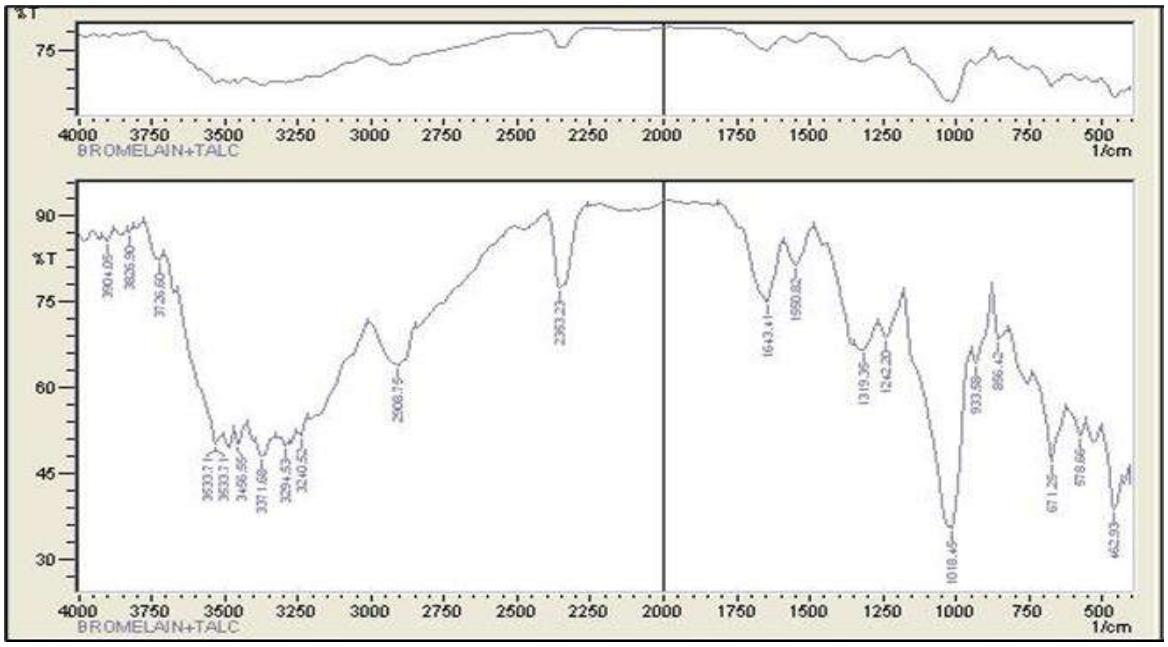


Figure 11: FTIR Studies of Bromelain + Talc

Evaluations:

Mouth dissolving tablets of Bromelain were prepared by a method employing crospovidone and sodium starch glycolate as super-disintegrants at different ratios. A total of six formulations were designed. The flow properties of the powder mixture are important for the uniformity of mass of the tablets; the flow of the powder mixture was analysed before compression to tablets.

Low Hausner`s ratio (≤1.18), compressibility index (≤14.81) and angle of repose (≤ 29.04) values indicated fairly good flowability of the powder mixture (Table 5).

Table 5: Evaluation of Tablet Blend of Mouth Dissolving Tablet of Bromelain.

Batches	Angle of Repose (Ɵ)	Bulk Density (gm/cm^3)	Tapped Density (gm/cm^3)	Housner's Ratio (H_R)	Carr's Compressibility Index
F1	21.78±1.88	0.45±0.12	0.50±0.23	1.18±0.10	10.00±0.20
F2	20.67±0.95	0.43±0.16	0.49±0.09	1.13±0.21	12.24±0.33
F3	23.59±0.47	0.43±0.17	0.48±0.26	1.11±0.20	10.41±0.10
F4	28.42±1.27	0.41±0.10	0.47±0.20	1.14±0.32	12.76±0.63
F5	23.78±1.45	0.45±0.90	0.52±0.21	1.15±0.28	13.46±0.39
F6	29.04±1.14	0.47±0.12	0.54±0.21	1.14±0.18	14.81±0.91

As the tablet powder mixture was free flowing, tablets produced were of uniform weight with acceptable weight variation in the range from 251 mg to 254 mg due to uniform die fill. Hardness (3.2 ± 0.05 - 3.4 ± 0.1 kg/cm2) and friability loss (0.8 ± 0.090 - 0.9 ± 0.117 %) indicated that tablets had good mechanical resistance. Drug content was found to be high (≥ 98.25 %) in all the tablet formulations (Tables 6).

Table 6: Evaluation of Mouth Dissolving Tablets of Bromelain

Batches	Thickness (mm)	Hardness (Kg/cm^2)	Friability (%)	Drug Content (%)	Weight Variation (mg)	Disintegration time (sec)
F1	4.04±0.10	3.26±0.05	0.8±0.05	98.50±0.11	252± 0.93	49±3.28
F2	4.35±0.17	3.36± 0.11	0.8±0.15	98.75±0.01	251±0.32	44±1.41
F3	4.27±0.25	3.26± 0.15	0.9±0.1	98.75±0.13	251±0.70	41±1.41
F4	4.35±0.10	3.36± 0.15	0.9±0.13	98.25±0.06	252± 0.93	50±1.89
F5	4.01±0.17	3.33± 0.25	0.8±0.07	98.70±0.23	251±0.17	48±1.41
F6	4.20±0.10	3.43± 0.10	0.8±0.09	98.75±0.14	254±0.51	45±1.91

The most important parameter that needs to be optimized in the development of mouth dissolving tablets is the disintegration time of tablets. In the present study. The faster disintegration of crospovidone tablets may be attributed to its rapid capillary activity and pronounced hydration with low capacity for gel formation. Thus, these results suggest that disintegration times can be reduced by using a wicking type disintegrant (crospovidone). Thus, disintegration times of tablets with crospovidone were found to be less than those with sodium starch glycolate. IR shows the drug interaction study, indicating that the drug is compatible with all the excipients (Figures 3 to 11).

In vitro, drug release studies were carried out in phosphate buffer pH 6.8 and the dissolution profile is depicted in Table 7 and Figures 12. The drug release from the optimized batch (F3) was 97.67 % at 30 min.

Table 7: In vitro Cumulative % Drug Release from Tablets

Time (In Min)	**Cumulative % Drug Release**					
	F1	**F2**	**F3**	**F4**	**F5**	**F6**
0 min	0	0	0	0	0	0
05 min	30.88±0.97	32.47±1.76	33.34±1.06	30.75±1.46	32.89±1.92	34.55±2.11
10 min	46.76±1.55	41.13±1.23	51.34±1.88	49.98±1.65	42.18±1.54	44.8±0.94
15 min	54.35±1.89	55.04±0.76	61.37±1.46	53.24±2.45	58.6±1.98	61.35±1.56
20 min	75.52±2.63	75.14±1.89	84.21±1.23	75.14±1.33	72.55±1.17	72.55±2.35
25 min	83.29±1.44	83.09±1.27	91.06±0.89	83.29±1.39	81.69±1.43	81.25±1.34
30 min	95.17±1.93	96.59±1.09	97.67±1.98	94.47±1.47	95.88±2.78	96.95±1.89

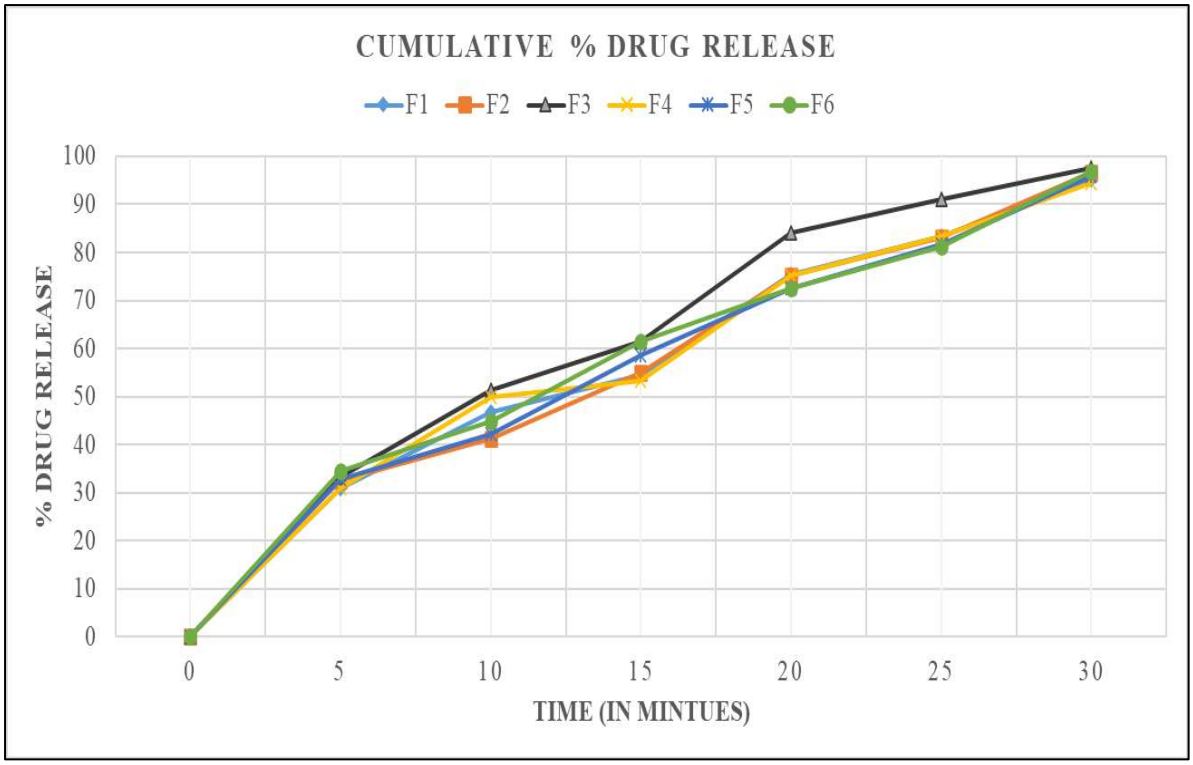


Figure 12: Cumulative % Drug Release

CONCLUSION:

In the present work, mouth dissolving tablets of Bromelain were prepared by direct compression method using superdisintegrants such as sodium starch glycolate and crospovidone. All the tablets of Bromelain were subjected to tests for weight variation, hardness, friability, drug polymer interaction, drug content uniformity, water absorption ratio, wetting time, and in vitro drug release**.**

Based on the above studies, the following conclusions can be drawn:

Tablets prepared by direct compression methods were found to be good and free from chipping and capping.

- The low values of the standard deviation of average weight of the prepared tablets indicated weight uniformity within the batches prepared.
- The hardness of the prepared tablets was found to be in the range of 3.2 ± 0.05 - 3.4 ± 0.1 kg/cm2. The friability values of the prepared tablets were found to be less than 1%.
- IR spectroscopic indicated that the drug is compatible with all the excipients.

- The in vitro disintegration time of Bromelain MDT prepared by the direct compression method was found to be in the range of 41 sec. to 50 sec. fulfilling the official requirements.
- Based on the in vitro disintegration time, formulation F3 (crospovidone) was found to be promising and showed a disintegration time of 41 sec, facilitating faster dispersion in the mouth.
- The drug content of tablets was uniform across all batches, ranging from 98.25 ± 0.06 - 98.75 ± 0.14 %w/w
- The drug release from the optimized batch (F3) was about 97.67 % at 30 min.

ACKNOWLEDGEMENT

For the completion of the research work the authors would like to show sincere gratitude to PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research centre, Kharadi, Pune to provide a lot of support and help whenever needed.

CONFLICT OF INTEREST

All authors declared no conflicts of interest.

REFERENCES:

1. Modasiya MK, Lala LL, Prajapati BG, Patel VM, Shah DA. Vol. 1 No. 2. Design and characterization of Fast Dissolving Tablets of Piroxicam, Indian J. Pharm.Tech. Res; 2009. p. 353.
2. Sahoo S, Mishra B, Biswal PK, Panda Omprakash, Mahapatra K Santosh, Jana K Goutam. Vol. 2. Fast Dissolving Tablet: As A Potential Drug Delivery System. Drug Inv. Today; 2010.
3. Kaur et al., Vol. 3. Mouth dissolving tablets: A novel approach to drug delivery, International Journal of Current Pharmaceutical Research; 2011.p. 1-7.
4. Nayak UK., Patra SK., Rout PK., Patro BK. and Nayak BS. Development and optimization of promethazine theoclate Mouth dissolving tablets; The Indian pharmacist; 2008.p. 65- 68.
5. Seager H. Vol. 50. Drug-delivery Products and the Zydis Fast-dissolving Dosage Form. J Pharm Pharmacol; 1998.p. 375-382.
6. Bradoo R, Shahani S, Poojary S, Deewan B, Sudarshan S. Vol. 4 No. 10. Fast Dissolving Drug Delivery Systems. JAMA India; 2001.p. 27-31.

7. Bikshapathi, D.; Saikrishna, k.; Kumar, u. fast dissolving tablets: an update. int. res. j. pharm., v.2, n.3, p.45-53, 2011.
8. Shah, v.; Patel, s.; Rakesh, k. formulation and evaluation of mouth dissolving tablets of metoclopramide hydrochloride by direct compression technique. int. j. drug disc. herbal res., v.1, n.2, p.100-103, 2011.
9. Suresh, s.; Senthil, a.; Manikandan, c. formulation and evaluation of mouth dissolving tablets of amlodipine besylate. int. res.j. pharm., v.2, n.9, p.161-165, 2011.
10. Sayeed, a.; Mohiuddin, m. mouth dissolving tablets an overview. int. res. pharm. biomed. sci., v.2, n.3, p.959- 970, 2011.
11. Prameela, a.; Archana, p.; Siva Teja, p.; Vikas m. formulation and evaluation of Orodispersible metformin tablets: a comparative study on hisapghula husk and crospovidone as superdisintegrants. *int. j. appl. pharm.*, v.2, n.3, p.15-21, 2010.
12. Chandira, r.; Venkataeswarlu, b. formulation and evaluation of mouth dissolving tablets of the etoricoxib. *pak. j. pharm. sci.*, v.23, n.2, p.178-181, 2010.
13. Puttewar, t.; Kshirsagar, m.; Chandewar, a.; Chikhale, r. formulation and evaluation of Orodispersible tablet of test masked doxylamine succinate using ion exchange resin. *j. king saud univ. sci.*, v.22, p.229-240, 2010.
14. Parmar, r.; Baria, a.; tank, h.; Faldu, s. formulation and evaluation of domperidone fast dissolving tablets. *int. j. pharm. tech. res*., v.1, n.3, p.483-487, 2009.
15. Mehta, m.; Deepak, p.; Gupta, g. fast dissolving tablets of sertraline hydrochloride. *int. j. chem. tech. res*., v.1, n.4, p.925-930, 2009.
16. chacko, a.; jose, s.; babu n. Design and development of Orodispersible tablets of promethazine theoclate using coprocessed superdisintegrants and subliming materials. *Int. J. Innov. Pharm. Res.*, v.1, n.2, p.53-56, 2010.
17. Margret, R.; Venkataeswarlu, B.; Kumudhavalli M. Formulation and evaluation of mouth dissolving tablets of the etoricoxib. *Pak. J. Pharm. Sci.,* v.23, n.2, p.178-181, 2010.
18. Bagul, u.; Gujar, k.; Patel, n.; Aphale, s. formulation and evaluation of sublimed fast melt tablets of levocetirizine dihydrochloride. *int. j. pharm. sci*., v.2, n.2, p.76-80, 2010.
19. Satpute MM, Tour NS. Formulation and in vitro evaluation of fast dissolving tablets of metoprolol tartrate. Brazilian Journal of pharmaceutical sciences. 2013; 49:783-92.
20. Rana R, Devi N, Kumar V, Thakur R, Singla S, Goyal S. The formulation and evaluation of mouth dissolving tablet Levocetirizine by using synthetic Superdisintegrants. Himalayan Journal of Health Sciences. 2020 Mar 22:1-1.

Formulation Development and Evaluation for Sustained Release Tablet Containing Glibenclamide

Avhad Pratiksha [1*], Dr. Barge Vijaya [2], Dr. Kasabe Amit [3], Deshmane Kamlesh [1], Borase Pallavi [1], Gaikwad Rajratna [1], Pawar Ajay[4]

[1]*Research Scholar, Department of Pharmaceutical Quality Assurance, PDEAs Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Pune, Maharashtra, India.*

[2]*Vice Principal, Department of Pharmaceutical Quality Assurance, PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research centre, Kharadi, Pune, Maharashtra, India.*

[3]*Associate Professor, Department of Pharmaceutical Quality Assurance, PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research centre, Kharadi, Pune, Maharashtra, India.*

[4]*Research Scholar, Department of Pharmaceutics, PDEAs Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Pune, Maharashtra, India.*

For Correspondence -Avhad Pratiksha B.

pratiavhad9494@gmail.com

ABSTRACT

Objective: The Glibenclamide matrix tablet were prepared using hydrophilic polymers (HPMC complex i.e. HPMC(E4) + calcium phosphate in various proportions as release retarding agent to prolong the drug release and to improve the patience compliance.

Methods: The matrix tablets were prepared by direct compression method. The prepared matrix tablets were subjected to thickness, friability, weight variation test, drug content, hardness, swelling index and in vitro release studies. The drug excipients compatability was evaluated by FTIR studies.

Results: All the formulation showed compliance with pharmacopoeial standards. The in vitro dissolution study shows that F5 formulation was releases the drug in a controlled manner for 12 hours. Among all the formulations, formulation F5 which contains HPMC(E4) calcium complex releases the drugs which follow Zero order kinetics. The FTIR studies was revealed that there was no interaction between drug and excipients.

Conclusion: Hence hydrophilic polymers combination of (HPMC with E4 grade-calcium phosphate complex) in various proportions can be used to prepare matrix tablets of Glibenclamide having prolonged therapeutic effect with enhanced patience compliance.

Keywords: Glibenclamide, HPMC E4-calcium phosphate complex, Sustained release tablet.

INTRODUCTION

Oral sustained release delivery systems are designed to achieve a therapeutically effective concentration of drug in systemic circulation over an extended period of time. Therapeutic benefits of designing SR dosage form include low cost, simple processing, improved efficacy, reduced adverse effects, flexibility in terms of the range of release profiles attainable, increased patient compliance and convenience. Many innovative methods have been developed for obtaining modified drug release. From the practical view point, the least complicated approach for developing a modified release dosage form is the formulation of a hydrophilic matrix tablet [1].

HPMC is the dominant hydrophilic vehicle used for the preparation of oral sustained drug delivery. While HPMC could potentially control the release of a soluble drug, it could also facilitate the release of relatively insoluble drug. In the later case, insolubility of the drug molecule would be the rate limiting step in its release and HPMC's solubilizing effect would facilitate the release. The objective of the present study was to develop a hydrophilic polymer (HPMC – calcium complex) based Glibenclamide matrix sustained release tablet which can release the drug up to time of 12 hours in predetermined rate. The formulation of Glibenclamide matrix tablet was prepared by the polymer combination in order to get required theoretical release profile. The influence of hydrophilic polymer and granulation technique on Glibenclamide was studied. The formulated tablets were also characterized by physical and chemical parameters like drug content, hardness, friability, dissolution rate etc [2].

Diabetes mellitus Type 2 is a long term metabolic disorder that is characterized by high blood sugar, insulin resistance and relative lack of insulin. It primarily occurs due to obesity. Symptoms of high blood sugar include frequent urination, increased thirst and increased hunger [3]. Type 2 diabetes is a progressive condition in which the body becomes resistant to the normal effects of insulin and/or gradually loses the capacity to produce enough insulin in the pancreas. We do not know what causes type 2 diabetes. Type 2 diabetes is associated with modifiable lifestyle risk factors. Type 2 diabetes also has strong genetic and family related risk factors. Type 2

diabetes is diagnosed when the pancreas does not produce enough insulin (reduced insulin production) and/or the insulin does not work effectively and/or the cells of the body do not respond to insulin effectively known as insulin resistance [4]. Over 90% cases of diabetes are type 2 [5,15].

Glibenclamide, also known as Glibenclamide, is an antidiabetic drug belonging to the class of sulfonylureas. Therapy with Glibenclamide is usually initiated with 2.5mg given once daily. The maximal recommended daily dose is 20mg. It has a special status in the treatment of non-insulin-dependent diabetes mellitus because it is effective in many cases which are resistant to all other oral hypoglycemic drugs. It differs from other oral hypoglycemic drugs i.e. more effective during eating than during fasting [6]. It was developed in 1966. It works by binding and inhibiting the ATP-sensitive potassium channels in pancreatic beta cells. It causes cell membrane depolarization, opening voltage-dependent calcium channels. As a result, intracellular calcium level increases in the beta cells and release of insulin is stimulated.

Glibenclamide is a potent sulphonyl urea class which uses an oral hypoglycemic agent. It stimulates insulin release from the beta cells of the pancreas that leads to hypoglycemia. Glibenclamide increases insulin level by reducing the hepatic clearance of the hormone [16]. Glibenclamide belongs to class II (i.e. drugs with low solubility and high permeability) according to the biopharmaceutical classification system [17]. It is practically insoluble in water and consequently, its dissolution has been considered to be the rate-limiting step for absorption. Being weak acid with a pka 5.3, it shows pH dependent solubility and its absorption is expected to be better from the upper part of the gastrointestinal tract (GIT). Plasma half-life of glibenclamide is about 2 to 4 hrs. Various strategies are to be used for the development of oral controlled-release formulations, but the optimum technique should be selected by considering the absorption window of the given drug [5]. The mechanism of action of the drug consists in the inhibition of the ATP-sensitive K+ channels, which leads to depolarization of the cells and insulin secretion [18].

MATERIALS AND METHODS

Material

Glibenclamide was obtained as a sample product from Yarrow chemical products, Mumbai. HPMC E4M was obtained from Ashland Netherlands.co., Magnesium stearate, Talc, Microcrystalline cellulose, was obtained from Research lab Fine chem. Industries, Mumbai. Calcium phosphate was obtained from Yarrow chemical products, Mumbai.

Method

Preparation of HPMC- Calcium Phosphate complex [7]:

- Three biologically relevant calcium phosphates: CaHPO4? 2H2O (DCPD), calcium deficient apatite (CDA), and BCP (60% of HA and 40% of b-Ca3(PO4)2) were chosen for the experiments. HPMC (E4M, Dow Chemical), with a molecular weight of 290,000 g/mol, as determined by a laser light diffusion technique, was used.
- One g of each calcium phosphate was mixed with 0.5 g of solid HPMC and 5 mL of doubly distilled water. The mixtures obtained were placed inside glass bottles. The bottles were sealed and kept at 121°C for 48 hours.
- This stage is necessary for simulation of a steam sterilization procedure, widely used in medicine (normally 20 min at 121°C is enough for the sterilization). Later, the bottles were opened and kept for 24 h at 90°C for water evaporation
- No additional treatments were performed with the dry solid composites obtained.
- Chemical and structural analysis of the composites was studied with FTIR (Magna-IR 550, Nicolet) in the range of 400–4000 cm−1 (3–5 mg of the solid composites were mixed with 300 mg of spectral-grade KBr followed by pellet pressing at 12,000 kg/cm2), X-ray diffraction (XRD) (Diffract 5000, Kristalloflex, Siemens) within 2u value of 10–60° (Cu Ka radiation was used), and scanning electron microscopy (SEM) (JSM 6300, JEOL) in the secondary electron mode (acceleration voltage 15 kV).
- Similar measurements were also performed for thermally treated water suspensions of the above calcium phosphates without HPMC (1 g of calcium phosphate and 5 mL of water), and HPMC solution without calcium phosphates (0.5 g of HPMC and 5 mL of water). The latter experiments were used for the control.

- Kristalloflex, Siemens) within 2u value of 10–60° (Cu Ka radiation was used), and scanning electron microscopy (SEM) (JSM 6300, JEOL) in the secondary electron mode (acceleration voltage 15 kV).
- Similar measurements were also performed for thermally treated water suspensions of the above calcium phosphates without HPMC (1 g of calcium phosphate and 5 mL of water), and HPMC solution without calcium phosphates (0.5 g of HPMC and 5 mL of water). The latter experiments were used for the control.

FORMULATION OF SUSTAINED RELEASE TABLET OF GLIBENCLAMIDE

Preparation of Sustained Release Matrix Tablets by Direct Compression Method

Glibenclamide matrix tablets are prepared by direct compression method. The corresponding amount of drug and excipients were accurately weighed and mixedproperly and the matrix is formed. The tablet blends for different batches (F1-F5) areprepared according to Table 1 and further studied for Pre-compression properties.

Table 1: Formulation of Sustain Release Matrix Tablet

Sr. No.	Ingredients	Formulation Codes				
		F1	F2	F3	F4	F5
01	Glibenclamide	5	5	5	5	5
02	HPMC (K4M) complex	50	75	100	125	150
03	Microcrystalline Cellulose	229	204	179	154	129
04	Magnesium Stearate	8	8	8	8	8
05	Talc	8	8	8	8	8
Total		300	300	300	300	300

PRECOMPRESSION EVALUATION OF BLEND OF SUSTAINED RELEASE TABLET OF GLIBENCLAMIDE:[8,9,10,11,12]

Angle of Repose

This is the maximum angle possible between the height of pile of blend powder and horizontal plane. The frictional forces in the lose powder can be measured by angle of repose. The tangent of angle of repose is equal to the coefficient friction (Θ) between the particles. Hence the rougher and more irregular the surface of particles the greater will be angle of repose.

$$\Theta = \tan^{-1}(r/h) \qquad \text{.....Eq}^{n}\ (1)$$

Where, H = height of the pile

Table 2: Standards for Angle of Repose

Angle of Repose	Flowability
<20	Excellent
20-30	Good
30-34	passable
>40	Very Poor

Bulk density:

Apparent bulk density (BD) was determined by pouring blend into a graduated cylinder. Weighted quantity of the powder mass (M) was poured into measuring cylinder, then the powder was levelled carefully, and the unsettled apparent volume Vo was noted to the nearest graduated unit. The bulk density was calculated in gm/ml by the formula: The bulk density was calculated using the formula

$$\text{Bulk Density} = M/Vo \qquad \text{----------Eq}^{n}(2)$$

Tapped density:[14]

After determination of the bulk density, the cylinder was tapped mechanically by mounting on a holder in a mechanical tapped density tester that provided a fixed drop of 14 ± 2 mm at a nominal rate of 300 drops per minute. The cylinder was tapped for 500 times initially and the tapped volume Vt was measured to the nearestgraduated unit. The tapping was repeated foran additional 750 times and the tappedvolume was measured. Final tapped volume was measured and tapped density was calculated by the formula:

Tapped Density = M/Vt. ---------- **Eq^{n} (3)**

Compressibility Index and Hausner's Ratio:

The Compressibility Index and Hausner's Ratio are measures of the propensity of a powder to be compressed. As such, they are measures of the relative importance of inter-particulate interactions. In a free-flowing powder, such interactions are generallyless significant, and the bulk and tapped densities will be closer in value. For poorer flowing materials, there are frequently greater inter-particle interactions, and a greater difference between the bulk and tapped densities will be observed. These differences are reflected in the compressibility index or Carr's index (CI) and the Hausner's ratio (HR) which is calculated using the following formulas

Compressibility Index

The simplest way for measurement of free flow of powder is compressibility, a indication of the case with which a material can be induced to how is given by compressibility index (CI) which is calculated as follows

Carr's Index = [(Tapped density - Bulk density)/ Tapped density] ×100 **------(4)**

Table 3: Standards for Compressibility Index

Carr's Index	Properties
5-15	Excellent
12-16	Good
18-21	Fair to Passable

23-35	Poor
35-38	Very Poor
>40	Very Very Poor

Hausner's ratio

Hausner's ratio is an indirect index of ease of powder flow. It is calculated by the following formula;

Hausner's ratio (Hr) = [Tapped Density (ρtap)/Bulk Density (ρb)] **------(5)**

Table 4: Standards for Hausner's Ratio

Hausner's ratio	Flow
1.2-1.3	Excellent
1.3-1.4	Good
1.4-1.5	Fair
1.5-1.6	Poor

COMPRESSION OF SUSTAINED RELEASE TABLET OF GLIBENCLAMIDE BY DIRECT COMPRESSION METHOD

Accurate quantity of Glibenclamide and all ingredients were weighed according to formula powders except talc and magnesium stearate was blended homogeneously in mortar and pestle for 15 minutes. Prepared powder blend was passed through sieve no. 60. Finally, Talc and Magnesium stearate passed from sieve no. 30 added and was further mixed for10 minutes.

Accurately weighed 300 mg homogeneously mixed powder blend was fed manually and compressed with constant compression force and hardness on 16 stations tablet compression machine with 9 mm, breakthrough, and flat faced punches.

Total five formulations were prepared.

EVALUATION OF SUSTAINED RELEASE TABLET OF GLIBENCLAMIDE [8,10,12]

The prepared tablet batches (F1-F5) are subjected to post compression evaluation and evaluation parameters like appearance, weight variation, thickness, hardness, friability, content uniformity, disintegration time, dissolution time was performed and the results are shown in **table 10**.

Appearance:

The tablets were visually observed for capping, chipping and lamination.

Weight Variation:

When a tablet is designed to contain a certain quantity of medication in a specific amount of tablet formula, the weight of the tablet is frequently tested to confirm that the correct amount of drug is included in the tablet. In actuality, ten tablets were consumed and weighed on a digital weighing balance individually.

The average weight of the tablets was determined, and the weight of each tablet was compared to the average. If no more than two tablets are outside the % restriction and no tablet varies by more than twice the percentage limit, the tablet passes the test.

Table 5: Specifications of % weight variation allowed in tablets

Average Weight of Tablet	% Deviation Allowed
80 mg or less	10
More than 80 mg but less than 250 mg	7.5
250 or more	5

Thickness:

The uniformity of tablet size is dependent on the thickness of the tablet. Vernier caliper was used to determine thickness. randomly selected three pills from each formulation were tested to determine it.

Hardness:

The "force necessary to shatter a tablet in diametric compression test" is thedefinition of hardness. As a result, tablet crushing strength is also known as hardness. The resistance before use is determined by the hardness of the material. For each formulation the hardness of 6 tablets was determined using a Pfizer hardness tester. In the hardness tester, tablet was held along its oblong axis in between the two jaws of the tester and the load necessary to crush it was measured. Then force was applied until the tablet fractured. The value at this point was noted in kg/cm2.

Friability:

This test is used to determine if tablets can survive abrasion while being packed, handled, or transported. Friability is a sign of inadequate tablet ingredient cohesiveness. Friability of the tablets was determined using Roche Friabilator. A total of ten pills are weighed and placed in the Friabilator, which is made up of a circular plastic chamber separated into two or three compartments. The chamber rotates at 25 revolutions per minute for 4 minutes, dropping the tablets 15 cm away and completing100 rotations. The pills are then weighed for the second time. The weight difference isobserved and given as a percentage difference. It's best if it's less than 1%.

% Friability = (W1-W2)/W1 X 100 ..... (6)

Where,

W1 = Weight of tablet before test

W2 = Weight of tablet after test

Content uniformity

The Glibenclamide content was estimated as follows.

20 tablets were finely powdered and weight equivalent to 10 mg of Glibenclamide was dissolved in 100 ml of 0.1N HCL and assayed against 0.1 N HCL for drug content using UV-Visible spectrophotometer at 229 nm.

Disintegration test:

Six tablets were placed in each six tubes of the basket and the apparatus operated containing water maintained at 37^0C as the disintegration fluid. The Disintegration time was recorded.

In-vitro Dissolution studies

Dissolution profiles of Glibenclamide tablets were determined using the USP Type II Dissolution test apparatus (paddle) (Electrolab, Mumbai, India). set with a paddle speed of 50 rpm & at temperature 37º C ± 0.5°C. The dissolution media used were 900 mL of 0.1N HCl for first 2 h followed by pH 6.8 phosphate buffer solutions for 12 h. 5 ml samples wereremoved at specified intervals up to 1h and filtered through Whatmann filter paper. An equal volume of fresh medium, prewarmed at 37^0C was replaced into the dissolution medium after each sampling to maintain the constant volume throughout the test. Samples were analyzed by UV spectrophotometer at 229 nm. Drug dissolved at specified timeperiods was plotted as cumulative percent release versus time (h) curve.

Stability Study

The prepared sustained release tablet of Glibenclamide were placed in plastic tubes containing desiccant and stored at ambient conditions, such as room temperature at 40^0C ± 2^0C /75 % RH ± 5% for period of 90 days. Each tablet is weighed and wrapped in aluminum foil and packed in black PVC bottle and put at above specified condition in a heating humidity chamber for 3 months and evaluated for their physical appearance, hardness, disintegrate time, dissolution testing and drug content at specified intervals of time.

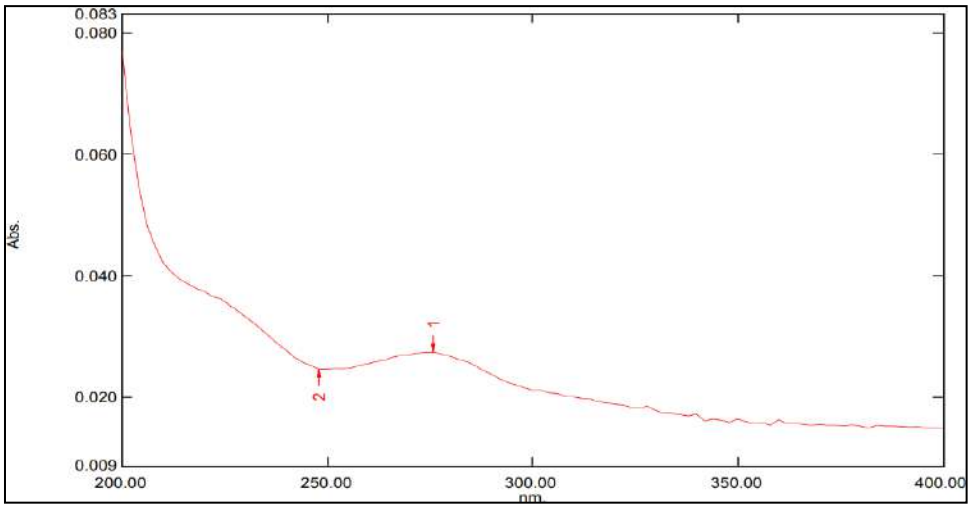
RESULTS AND DISCUSSION

Spectrophotometric Analysis of Glibenclamide UV Spectrophotometric Analysis

Determination of λ max of Glibenclamide in 0.1 N HCL

In UV spectroscopy study, the maximum wavelength (λ max) of Glipizide in 0.1N HCL was found to be 229 nm. The reported λ max value of Glipizide in 0.1N HCL was also 229 nm, so the values similar with the reported value indicates that the given sample of Glibenclamide was in pure form.

Figure 1: UV Spectrum of Glibenclamide in 0.1 N HCl at 229 nm



Preparation of Standard Calibration Curve of Glibenclamide in 0.1N HCl

The Standard curve of Glibenclamide was determined by plotting absorbance Vs concentration at 229 nm. It was found that there was linear relationship between concentration and absorbance with R^2 value 0.9988. Which reveals that, the drug Glibenclamide obeys theBeers lamberts law.

Table 6: UV Absorbance of Glibenclamide in 0.1 N HCl at 229 nm

Sr.no.	Concentration (µg/ml)	Absorbance
1	0	0
2	10	0.028
3	20	0.057
4	30	0.087
5	40	0.121
6	50	0.14

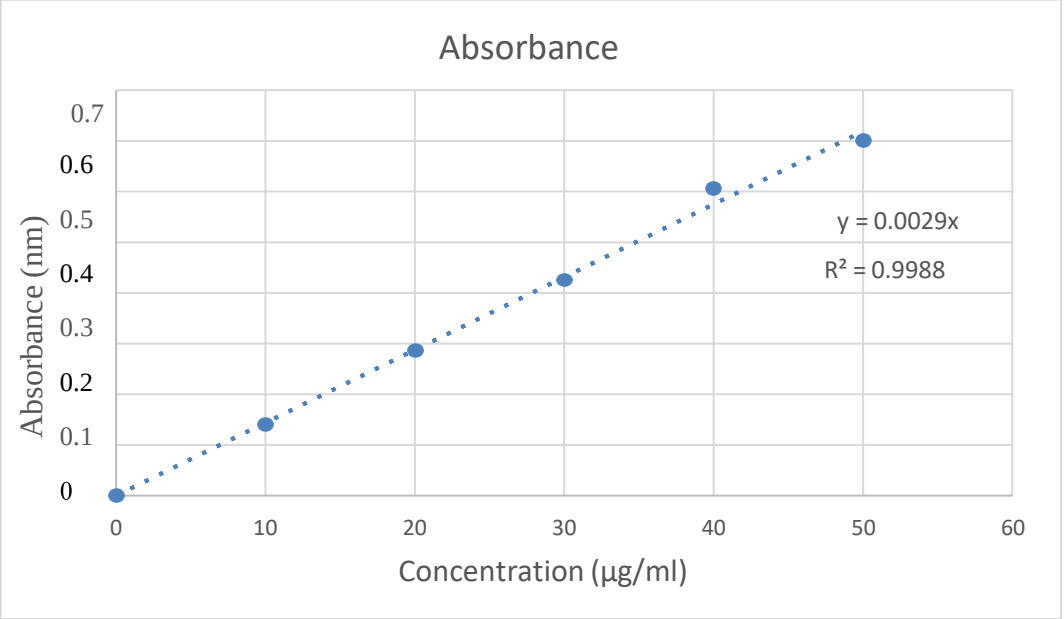


Figure 2: Standard Calibration Curve Graph of Glibenclamide in 0.1N HCL

Determination of λ max of Glibenclamide in 6.8 Phosphate Buffer

In UV spectroscopy study, the maximum wavelength (λ max) of Glibenclamide in 6.8 Phosphate Buffer was found to be 229 nm. The reported λ max value of Glibenclamide in 6.8 Phosphate Buffer was also 229 nm, so the values similar with the reported value indicates thatthe given sample of Glibenclamide was in pure form.

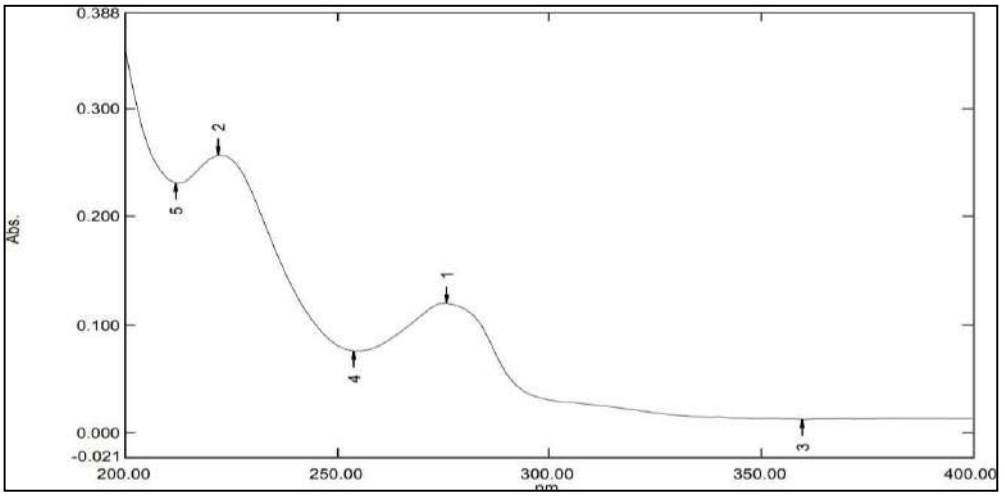


Figure 3: UV Spectrum of Glibenclamide in 6.8 Phosphate Buffer at 229 nm

Sr. no.	Concentration (µg/ml)	Absorbance
1	0	0
2	10	0.12
3	20	0.215
4	30	0.315
5	40	0.4
6	50	0.48
7	60	0.6

Table 7: UV Absorbance of Glibenclamide in 6.8 Phosphate Buffer at 229 nm

Preparation of Standard Calibration Curve of Glibenclamide in 6.8 Phosphate Buffer: The Standard curve of Glibenclamide was determined by plotting absorbance Vs concentration at 229 nm. It was found that there was linear relationship between concentration and absorbance with R2 value 0.9986. Which reveals that, the drug Glibenclamide obeys the Beers lamberts law.

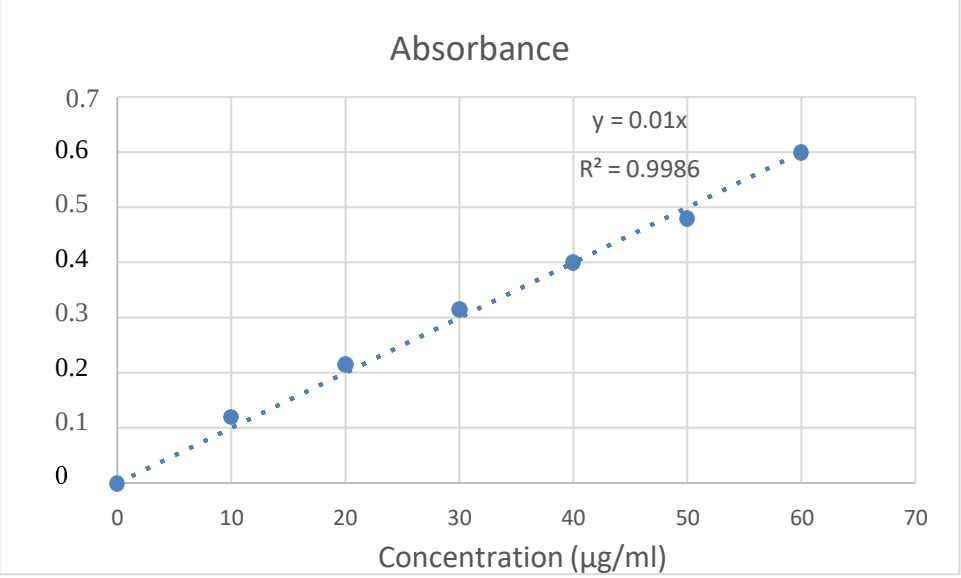


Figure 4: Standard Calibration Curve Graph of Glibenclamide in 6.8 Phosphate Buffer

Drug-Excipient Compatibility Study

Fourier Transform Infra-red Spectroscopy (FTIR) Interpretation of Glibenclamide

The FTIR spectrums of pure Glibenclamide and physical mixtures of drugs and polymers were studied separately as per the excipients used in the formulation. It was observed that there were no major shifts in the main peaks of either drug. This indicates that there were no compatibility problems with the drug with the polymers and excipients used in the formulation. Glibenclamide had peaks at 1658 (C=O amide), 2890 (C=H), 3471 (NH stretch), 1033 (S=O), 1072 (C-O-C).

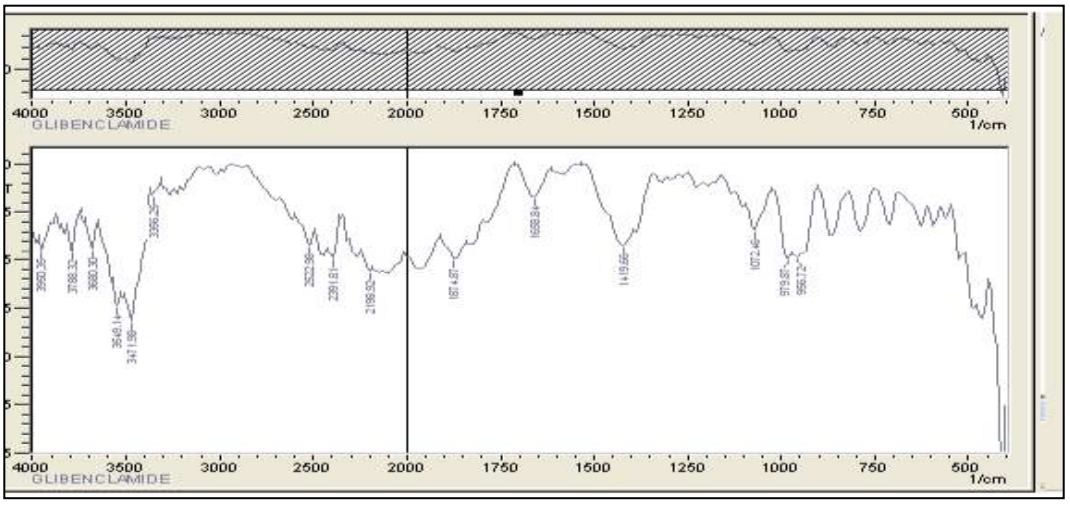


Figure 5: FTIR Spectrum of Glibenclamide

Fourier Transform Infra-red Spectroscopy (FTIR) Interpretation of FTIR of Glibenclamide + HPMC (E4M)- Calcium phosphate (CaPO4) complex

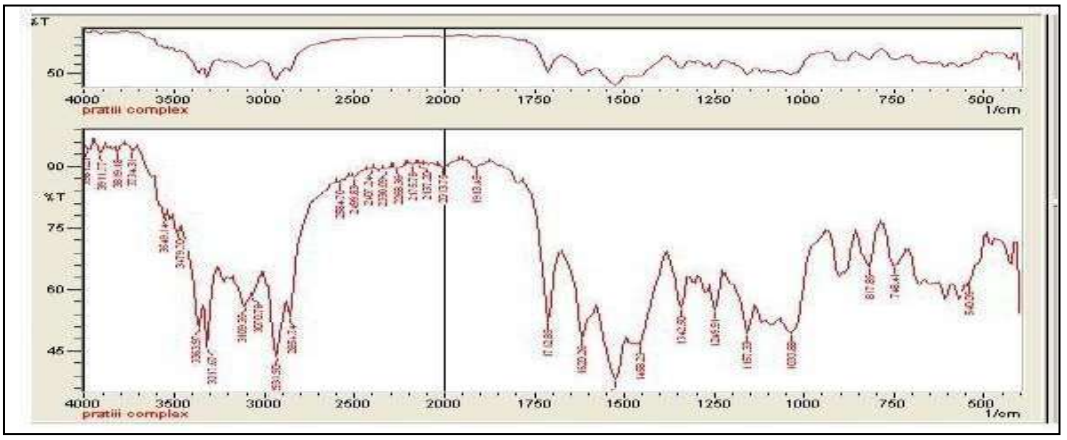


Figure 6: FTIR Graph of Glibenclamide + HPMC (E4M)- Calcium phosphate (CaPO4) complex

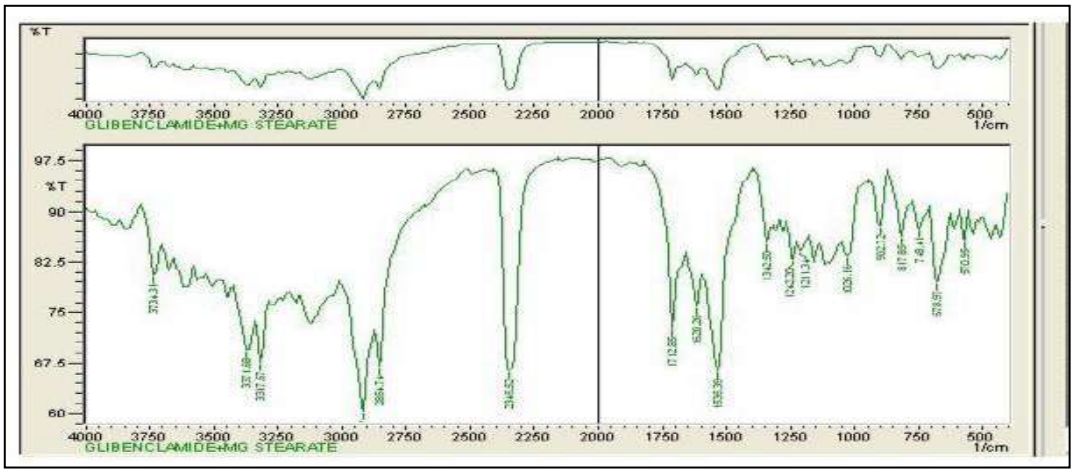


Figure 7: FTIR Graph of Glibenclamide + Mg. Stearate

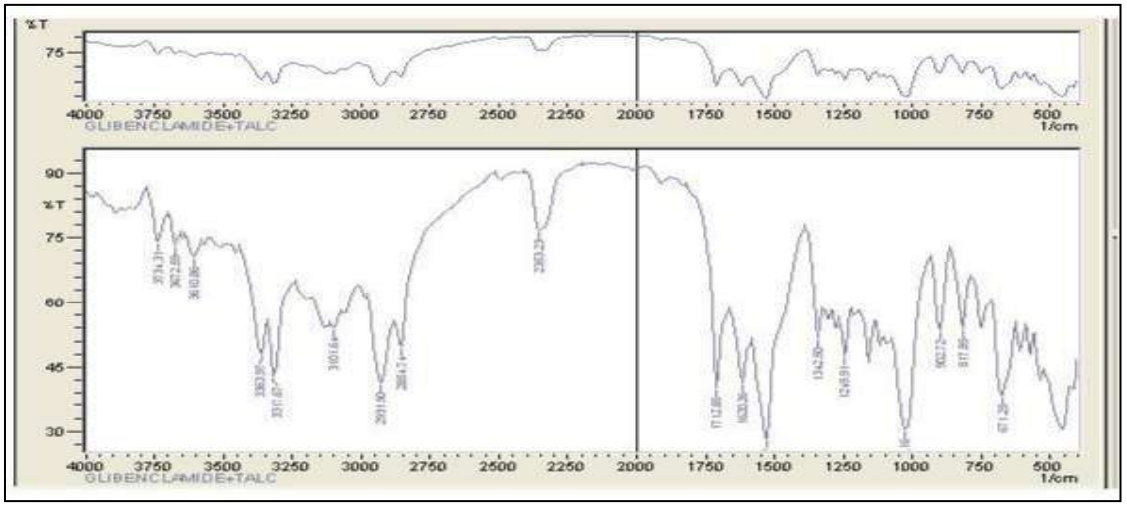


Figure 8: FTIR Graph of Glibenclamide + Talc

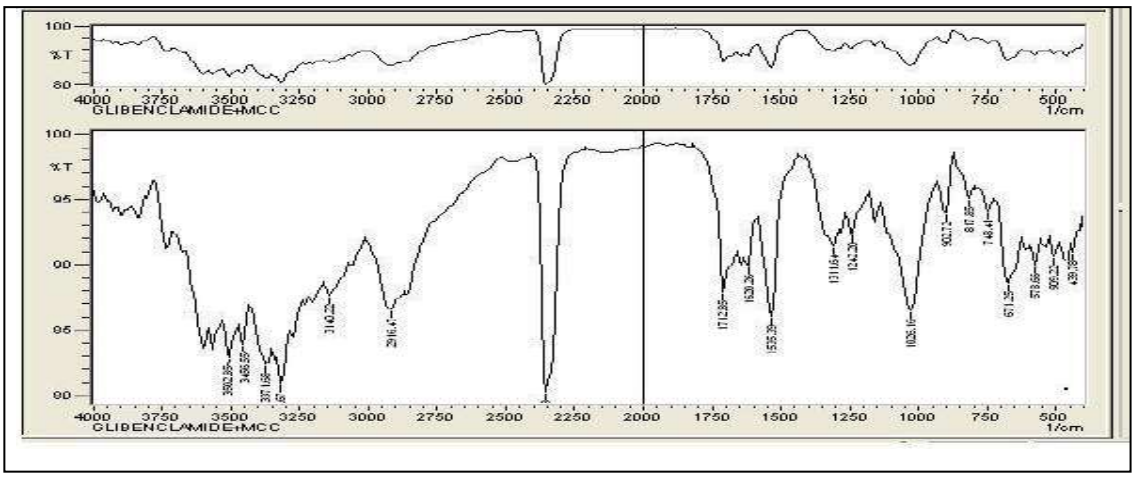


Figure 9: FTIR Graph of Glibenclamide + MCC

PRECOMPRESSION EVALUATION OF BLEND OF SUSTAINED RELEASE TABLET OF GLIBENCLAMIDE:

Sustained release tablets of Glibenclamide were prepared by direct compression method using polymer HPMC-Calcium phosphate complex. A total of five formulations were designed. The flow properties of the powder mixture are important for the uniformity of mass of the tablets; the flow of the powder mixture was analysed before compression to tablets. Low Hausner`s ratio (≤1.18), compressibility index (≤15.68) and angle of repose (≤ 29.39) values indicated fairly good flowability of the powder mixture **Table 8.**

Table 8: Precompression Evaluation of tablet for sustained release tablets

Formulations	Angle of repose (Θ^o)	Bulk Density (gm/cm^3)	Tapped Density (gm/cm^3)	Hausner's Ratio (H_R)	Carr's Compressibility index (%)
F1	28.80±0.8	0.42±0.12	0.49±0.23	1.16±0.10	14.28±0.20
F2	28.21±0.5	0.44±0.16	0.51±0.09	1.15±0.21	13.72±0.33
F3	29.24±0.9	0.45±0.40	0.50±0.06	1.11±0.11	10.00±0.52
F4	29.39±0.5	0.41±0.10	0.47±0.20	1.14±0.42	12.76±0.63
F5	28.80±0.8	0.43±0.90	0.51±0.21	1.18±0.36	15.68±0.39

Results are mean of three dimensions*

EVALUATION OF SUSTAINED RELEASE TABLET OF GLIBENCLAMIDE:

As the tablet powder mixture was free flowing, tablets produced were of uniform weight with acceptable weight variation in the range from 298 mg to 301 mg due to uniform die fill. Hardness (5.7 ± 0.5 – 6.1 ± 0.3 kg/cm2) and friability loss (0.71 ± 0.04 - 0.82 ± 0.03 %) indicated that tablets had good mechanical resistance. Drug content was found to be high (≥ 98.75 %) in all the tablet formulations **Table 9 and Table 10.**

Table 9: Evaluation of Sustained Release Tablet of Glibenclamide

Formulations	Weight variation (mg)	Thickness (mm)	Hardness (Kg/cm^2)	Friability (%)	Drug Content (%)
F1	299±0.50	3.50±0.10	5.7± 0.5	0.78±0.05	95.25
F2	298±0.58	3.40±0.18	5.9± 0.2	0.75±0.06	96.3
F3	301±0.20	3.45±0.25	6.0± 0.3	0.71±0.04	97.9
F4	298±0.85	3.55±0.10	5.8± 0.4	0.82±0.03	98.5
F5	299±0.65	3.48±0.17	6.1± 0.3	0.78±0.07	98.75

***In vitro* % Drug Release of Drug from Tablet**

All the five tablet batches of fast Sustained release tablet of Glibenclamide were subjected for the in vitro dissolution studies using tablet dissolution test apparatus (USP type II). The dissolution media used were 900 mL of 0.1 N HCl for first 2 h followed by pH 6.8 phosphate buffer solutions for 12 h.

Table 10: *In vitro* Cumulative % Drug Release from Tablets

Time (Hours)	Cumulative % Drug Release				
	F1	F2	F3	F4	F5
0	0.00	0.00	0.00	0.00	0.00
1	23.99±0.44	7.07±0.48	12.68±0.25	8.94±0.25	9.57±0.55
2	40.76±0.54	18.93±0.52	23.92±0.84	16.43±0.48	15.81±0.35
3	55.15±0.56	33.28±0.85	34.54±0.51	24.56±0.56	22.69±0.65
4	65.80±0.25	47.04±0.55	45.80±0.55	35.80±0.74	31.44±0.26
5	75.85±0.64	58.31±0.84	57.70±0.52	43.95±0.42	40.20±0.45
6	86.53±0.45	68.97±0.52	65.86±0.	53.35±0.57	48.35±0.58
7	95.35±0.48	78.40±0.15	75.91±0.15	61.51±0.65	57.13±0.69
8		86.59±0.45	82.85±0.51	72.18±0.31	65.30±0.22
9		96.66±0.48	91.6±0.45	80.36±0.28	72.85±0.62
10			95.51±0.59	87.93±0.25	81.66±0.44
11				94.88±0.15	89.23±0.64
12					97.43±0.65

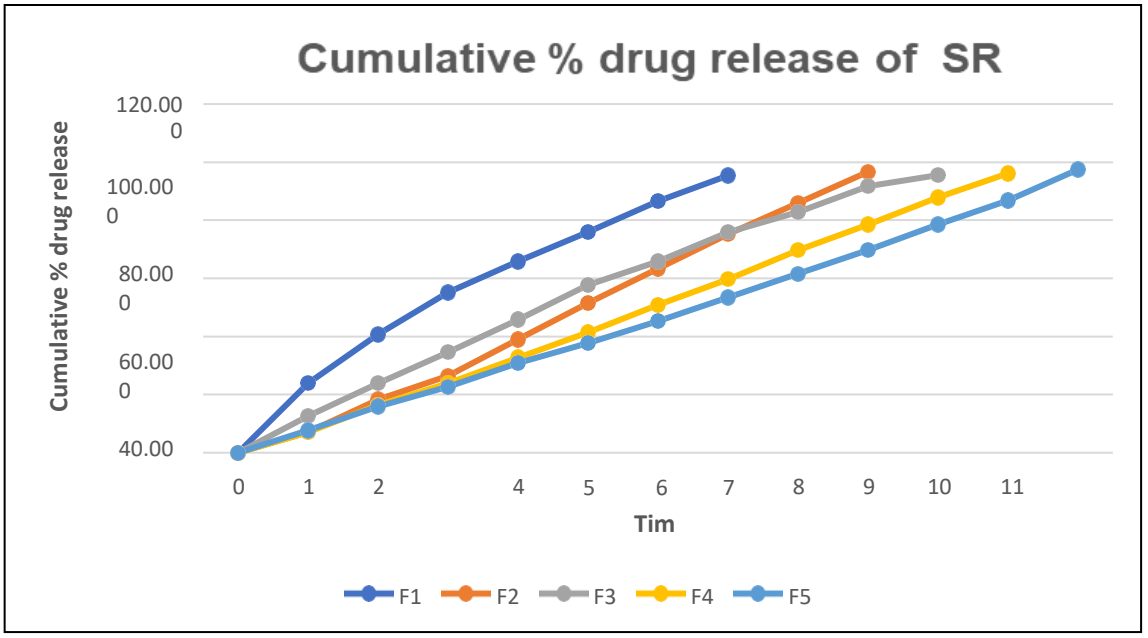


Figure 10: Cumulative % drug release of SR

STABILITY STUDY

The formulation F5 was selected for stability studies on the basis of their high cumulative % drug release time was studied. The stability studies were carried out at 40˚C±2˚C/75˚C±5% relative humidity for the selected formulation up to two months. For every 1-month time interval the tablets were analysed for drug hardness, content uniformity, % drug release up to two months.

CONCLUSION

In this research work, Preformulation studies of the drug were carried out which includes powder properties and compatibility studies using FTIR. Sustained release tablets were prepared using mixture of hydrophilic polymers such as of HPMC E4M- Calcium phosphate complex. The increasing proportion of polymer in tablet retards the release of drug from tablet. Formulated tablets were evaluated for hardness, friability, thickness, drug content andin-vitro study. F5 batch was selected as optimize batch from the similarity factor, cumulativedrug release and drug content study. Then stability study and cumulative release study carriedout on optimized batch and compared with marketed product Glynase Xl. Results of present study demonstrated that methodology successfully employed for formulating sustained release matrix tablets of Glibenclamide. The in-vitro dissolution result of batch F5 was fittedbest to the kinetic properties as well as showed better similarity to innovator brand Glynase XL (10 mg).

ACKNOWLEDGEMENT

For the completion of the research work the authors would like to show sincere gratitude to PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research center, Kharadi, Pune to provide a lot of support and help whenever needed.

CONFLICT OF INTEREST

All authors declared no conflicts of interest.

REFERENCES

1. Ponchel G, Irache J. Specific and non-specific bioadhesive particulate systems for oral delivery to the gastrointestinal tract. Adv Drug Deliv Rev 1998; 34(2-3): 191-219. http://dx.doi.org/10.1016/S0169-409X(98)00040-4 PMID: 10837678
2. Shree Ram Jayaswal et.al. international journal of pharmacy & technology, Volume 6 Issue 2, Page No. 6527-6586
3. https://en.wikipedia.org/wiki/diabetes_mellitus
4. https://www.diabetesaustralia.com.au/type-2- diabetes
5. Tripathi K.D, Essential's of Pharmacology 7th edition, Page. No.258.
6. Marikanti Rajkumar et.al. J.Chem.Pharm.Res., 2010,2(4):291-303
7. Dorozhkin, S. V. (2000). Is there a chemical interaction between calcium phosphates and hydroxypropylmethylcellulose (HPMC) in organic/inorganic composites? Journal of Biomedical Materials Research, 54(2), 247–255
8. Lieberman H.A., Lachman L., The Theory and Practice of Industrial Pharmacy, Indian Edition, CBS Publishers, and Distributors Pvt. Ltd., 2009, 293, 457, 479-501.
9. Lieberman HA, Lachman L, Schwartz JB. Pharmaceutical dosage forms: Tablets, Ed 3, New York, Marcel Dekker, 1990.225-228.
10. https://go.drugbank.com/drugs/DB01016
11. Michael E Aulton. Pharmaceutics, The Science of Dosage form Design. 2nd Edition. 2005.335-346.
12. Leon Lachman, Herbart liebeman. The theory and practice of industrial pharmacy. Indian Edition CBS publishers.2009.331-334.
13. Won Kyung Kim, et.al., Sustained-Released Formulation of Nifedipine Solid Dispersion with Various Polymers, Macromolecular Research, November 28, 2019.
14. Kuldeep H. Ramteke, et.al., Design, Development and Optimization of Glibenclamide Sustained Release Matrix Tablet by Using Natural Polymers, Current Applied Polymer Science, 2019, 3, 197-211
15. Mellitus D. Diagnosis and classification of diabetes mellitus. Diabetes care. 2005 Jan 1;28(S37): S5-10.

16. Wei H, Löbenberg R. Biorelevant dissolution media as a predictive tool for glyburide a class II drug. Eur J Pharm Sci 2006; 29(1): 45- 52. http://dx.doi.org/10.1016/j.ejps.2006.05.004 PMID: 16815694

17. Löbenberg R, Krämer J, Shah VP, Amidon GL, Dressman JB. Dissolution testing as a prognostic tool for oral drug absorption: dissolution behavior of glibenclamide. Pharm Res 2000; 17(4): 439-44.

18. https://go.drugbank.com › drugs

Formulation Development and Evaluation of a Topical Nanogel Containing Kojic acid

Borase Pallavi S.[1]*, Dr. Barge Vijaya[2], Dr. Kasabe Amit[3],

Gaikwad Rajratna[1], Avhad Pratiksha[1], Deshmane Kamlesh[1]

[1]Research Scholar, Department of Pharmaceutical Quality Assurance, PDEAs Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Pune, Maharashtra, India.

[2]Vice Principal, Professor Department of Pharmaceutical Quality Assurance, PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research centre, Kharadi, Pune, Maharashtra, India.

[3]Assistant Professor, Department of Pharmaceutical Quality Assurance, PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research centre, Kharadi, Pune, Maharashtra, India.

For Correspondence:Borase Pallavi S.

pallaviborse41296@gmail.com

ABSTRACT- Topical drug administration is a localized method of delivering drugs to specific areas of the body via topical channels. The major route of topical medication delivery is through the skin, which is one of the most easily accessible organs on the human body for topical drug administration. The present investigation involves formulation of topical nanogel using Kojic acid for the treatment of hyperpigmentation, Kojic acid is an effective and well tolerated drug having melanin neutralising activity (Tyrosinase inhibitor). Topical nanogel of Kojic acid was prepared by using High molecular weight water soluble polymer Hydroxy propyl methyl cellulose such as K35M grade and other excipients including methyl paraben, Carbopol 940, glycerine and purified water were reported in the formation of nanogel. In the present investigation nanogel the formulated nanogel was evaluated for pH, viscosity, Spreadability, extrudability, conductivity, particle size, zeta potential, in vitro drug diffusion studies. Among the formulated nanogel batch 4 has met all the specifications and was formed to be optimized Efficient delivery of drug to skin application was found to be highly beneficial in localizing the drug to desired site in the skin.

KEYWORDS- Nanogel, Kojic acid, Particle size, Zeta potential, Drug Release.

INTRODUCTION

Nanogels are defined as nanoscale particles that, either physically or chemically, create crosslinked polymers. In order to transport polynucleotides, cross-linked bifunctional networks of a polyion and a non-ionic polymer were first developed [1]. Although soluble in water, nanogels differ from linear macromolecules with comparable molecular weights in their properties. These structures along with their larger equivalents [2]. Structures along with their larger equivalents [2]. Nanogels are typical formulations that typically range in size from 1000 nm, and their three-dimensional structure can be maintained by altering volume proportion and solvent quality. Nanogels have revolutionized the field of gene therapy because they have made it possible to deliver genes within cellular organelles for gene silencing therapy [3]. Nanogels are composed of ionic or non-ionic polymer chains that are hydrophilic or amphiphilic and

grow into nanoscale structures. Despite its use as a drug delivery system, nanogel has been studied for longer periods in the production of other substances like quantum dots, dyes, and other diagnostic agents [4]. The development of nano-sized microgels and hydrogels as a result of specific delivery system anticipation has been made possible by the wide range of polymer systems and the simple modification of their physico-chemical properties [5]. Transdermal delivery of drug is promising but challenging system is available for local as well as systemic effect of drug. The entry of drug through the stratum corneum may follow the intercellular, transcellular or appendageal route. The intercellular route is the more common pathway of the drug permeation through the skin [6].

Melanocytes create the biological pigment called skin melanin. Skin colour is primarily determined by melanin, which shields human skin from ultraviolet (UV) solar radiation's harmful effects. Hyperpigmentation is the term used to describe melanin over synthesis [7]. For most people, especially women, hyperpigmentation treatment is usually difficult and disappointing [8]. Kojic acid (KA) is a popular hydrophilic tyrosinase inhibitor with natural whitening properties that is used to treat hyperpigmentation. By chelating copper atoms, Kojic Acid inhibits the tyrosinase enzyme and prevents the synthesis of dopachrome. It synthesized several fungi species, including Aspergillus and Penicillium [9]. Despite KA and its derivatives distinctive qualities, the cosmetic industries hardly ever use them. Due to its hydrophilic nature and the two hydroxyl functional groups that make up its chemical structure, Kojic Acid is a hydrophilic component. Its skin absorption is inadequate [10].

The present study was conducted to design and evaluate Kojic Acid nanogel which provides prolonged release, increase the residence time of drug on the skin thereby enhance bioavailability.

MATERIALS AND METHOD

Kojic Acid was purchased from Arti pharmaceuticals, Mumbai. Carbopol 940 Research-lab Fine Chem Industries, Mumbai. HPMC K35M was obtained as a gift sample from Ashlands, Netherlands. Co., Methylparaben and Glycerine was purchased from Research-lab Fine Chem. Industries, Mumbai [11].

METHOD

Preparation of Kojic Acid Nanogel [12]

Preparation of 2% drug solution of KA- weigh 2 gm of drug Kojic acid dissolve in 100ml of distilled water.
2% of prepared kojic acid measure 2ml of solution mix with given quantity of HPMC K35m, mix well then add glycerine. (Organic phase). Weigh carbopol940 accurately, add 10ml distilled water (aqueous phase). Stir aq. phase on magnetic stirrer add organic phase dropwise. Add methylparaben (preservative). Batch B1, B2, B3, B4 was prepared at highest rpm 8000 with variation in composition.

Evaluation Parameters

Appearance: The prepared nanogel bases were inspected visually for clarity, colour and presence of any particles.

Homogenesity

All developed nanogels were tested for homogeneity by visual inspection after the gels have been set in the container. They were tested for their appearance and presence of any aggregates [12].

Measurement of particle size of formulation

Horiba sz-100 windows [z type] were used to investigate the particle size (PS) of the gel. Particle size and zeta potential were measured in triplicates after dilution with distilled water, and the average values ±SD were recorded [13].

pH measurement

The pH measurement was carried out by using calibrated digital type pH meter by dipping the glass electrode and the reference electrode completely into gel system so as to cover the electrodes.

Conductivity

A direct reading digital conductivity meter (Systronics model no. 304) and dipping type conductivity cell [14].

Drug content

For the estimation of the drug in nanogel, kojic acid was extracted from 1 gm of nanogel formulation with 50 ml of distilled water. From this, 2 ml was pipette out and made up to 10 ml. The absorbance of the sample was determined spectrophotometrically at 268 nm. The concentration of Kojic acid was estimated from the calibration curve [12, 24].

In vitro drug Release studies

The drug release from the formulation was determined by using the apparatus known as Franz Diffusion Cell, which consist of a cylindrical glass tube which was opened at both the ends. 1 gm of nanogel equivalent to 4 mg of Kojic acid was spread uniformly on the surface of cellophane membrane (previously soaked in medium for 24 hrs) and was fixed to the one end of tube. The whole assembly was fixed in such a way that the lower end of tube containing gel was just touches (1-2 mm deep) the surface of diffusion medium i.e., 100 ml of pH 7.4 phosphate buffer contained in 100 ml beaker. The assembly was placed on thermostatic hot plate with magnetic stirrer and maintained at temperature 37°±2° the contents were stirred using magnetic bar at 100 rpm for a period of 24 hrs, 5 ml of samples were withdrawn at different time intervals. This 5 ml was diluted up to 10 ml of fresh phosphate buffer (pH 7.4) and sample were analyse at 268 nm in UV-Visible spectrometer for KA. [12, 25-26].

Skin irritation test

Test for irritation was performed on human volunteers. For each gel, four volunteers were selected and 1.0 g of formulated gel was applied on an area of 2 square inch to the back of hand. The volunteers were observed for lesions or irritation [12].

Spreadability

Spreadability is determined by apparatus suggested by Mutimer. It consists of wooden block, which is provided by a pulley at one end. By this method, Spreadability is measured on the basis of "Slip" and "Drag". A ground glass slide is fixed on this block. A sample of 0.1 g of nanogel under study is placed on this ground slide. The gel is fixed on the beach formula was pressed between two slides and a 1 kg weight is placed on the top of two slides and left for about 5 min to expel air and to provide a uniform film of the nanogel between two slides. Excess of the nanogel is scrapped from edges. The top plate is then subjected to pull the weight. With help of string attaches to the hook and the time required by top slide to cover the distance is noted. A shorter interval indicates better spreadability, spreadability was calculated by using the formula,

S=M.L/T,

Where,

S= spreadability, L=Length of glass slide, M=weight tied to upper slide, T=Time taken to separate the slides [13, 15].

Extrudability

Measure the force required to extrude the material from tube. Extrudability was based upon the quantity in percentage of gel and gel extruded from lacquered aluminum collapsible tube on application of weight in grams required to extrude at least 0.5 cm ribbon of gel in 10 seconds [16, 17]

+++ excellent ++ very good + average

Scanning electron microscopy

Scanning electron microscopy (SEM) provides high-resolution imaging that may be used to evaluate diverse materials for surface cracks, defects, contaminants, or corrosion. When a focused stream of secondary electrons interacts with atoms in the sample, multiple signals are produced that include information about the surface topography and sample composition using the Nova NanoSEM NPEP, all pictures were scanned at 10000x with a 5 m dimension scale 303 [18].

Zeta Potential

Zeta Potential of the prepared Nanosuspension was determined using Light Scattering method. The charge on the surface of particles is characterized by the HORIBA Scientific SZ-100 by measuring the zeta potential of a gel. The sample is injected into a disposable cell and a measurement of the particle electrophoretic mobility results in the calculated zeta potential [19-22].

Particle size

Horiba sz-100 windows [z type] were used to investigate the particle size (PS) of the gel. Particle size and zeta potential were measured in triplicates after dilution with distilled water, andthe average values ±SD were recorded [13, 23].

Content uniformity

Identification of pure drug

Identification of pure drug was carried was by Fourier Transform Infra-red Spectrophotometry (Shimadzu 8400s) scanned in the range of 200-400 nm.

Drug-excipient compatibility study

Studies of drug-excipient compatibility are important to ascertain drug and excipients are compatible with each other. IR spectra are used to study drug-excipient compatibility.

FTIR study

FTIR (Shimadzu 8400s) spectrophotometer were used in the range of 400-4000 cm^{-1} using potassium bromide discs (Mixing ratio1:1) The samples were hermetically sealed in aluminium pans and heated at a constant rate of 10°C/ min over a temperature range of 40 to 300°C.

FTIR spectroscopy

The FTIR spectrums of pure Kojic acid and physical mixtures of drugs and polymers were studied separately as per the excipients used in the formulation. It was observed that there were no major shifts in the main peaks of either drug. This indicates that there were no compatibility problems with the drug with the polymers and excipients used in the formulation. Kojic acid had peaks at 1715(C=O stretching), 3549 (O-H str.), 1620 (C-O), 2839 (C-H).

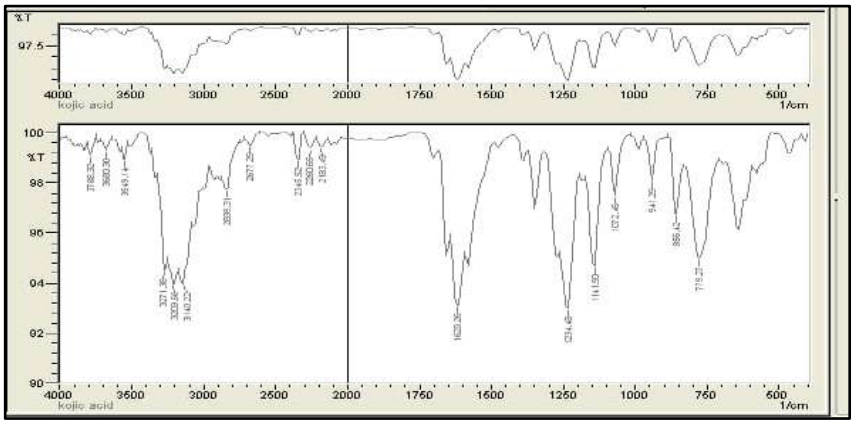
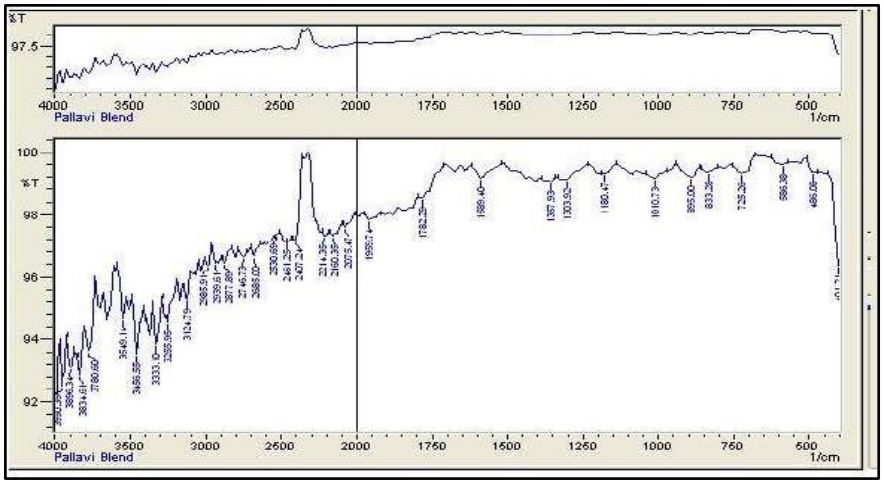


Figure 1: FTIR Studied of Kojic acid



UV spectroscopy:

The linearity of the response of kojic acid was verified at 2–10 µg/ml concentrations. The calibration curve was obtained by plotting the absorbance versus the concentration data and was treated by linear regression analysis. The equation of the linearity curve for kojic acid was y = 0.0646x +0.0036. The linearity curve was found to be linear in the a for mentioned concentrations (the correlation coefficient (r^2) of determination was 0.9978)

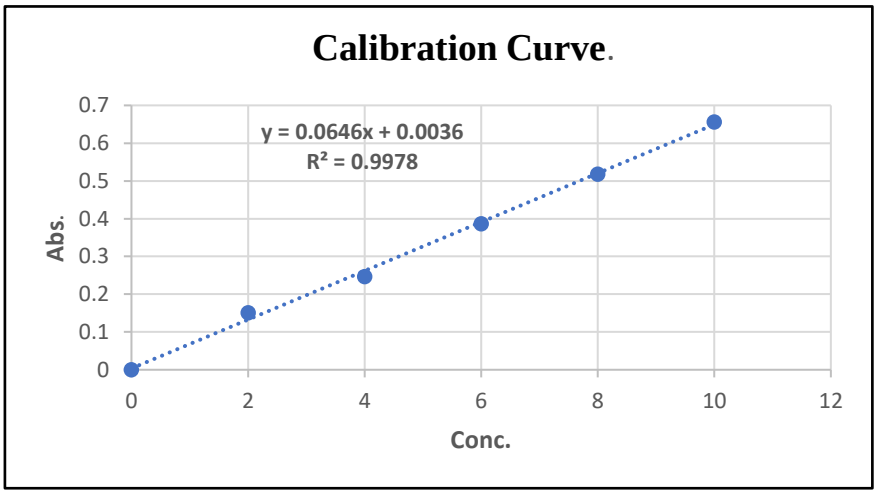


Fig 3: Calibration curve of Kojic acid

Composition of Nanogel: -

Table 1- Composition of nanogel (B1-B4)

Evaluation of prepared nanogel:

Appearance

Appearance of the prepared Nanogel was inspected visually and all the batches were white to Clear, and free from any particulate matters.

Particle Size Determination

Particle size of the prepared Nanogel was determined using Dynamic Light Scattering (DLS) method. Particle size determination results for all the prepared batches kojic acid nano are presented in the Table 3 and all the Graph obtained are reported in the Figure 4-7.

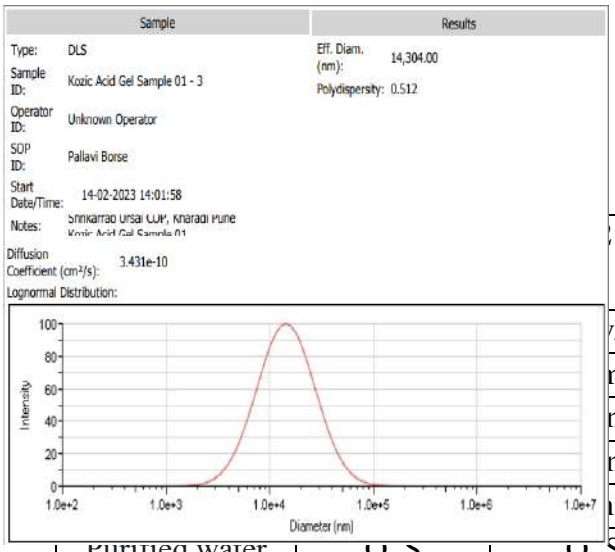


Fig 4 A: Particle size of formulation B1

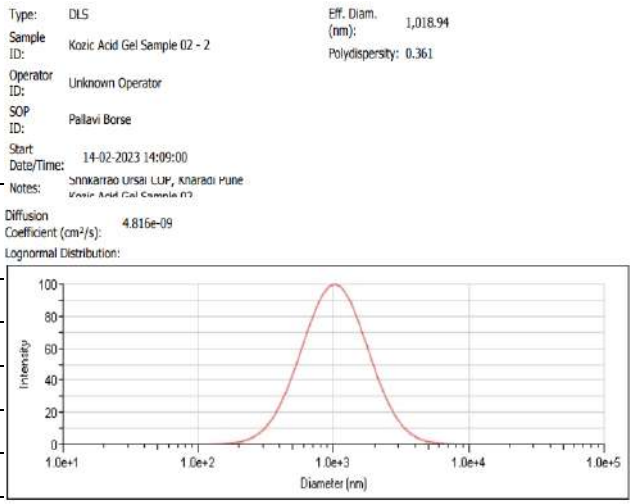
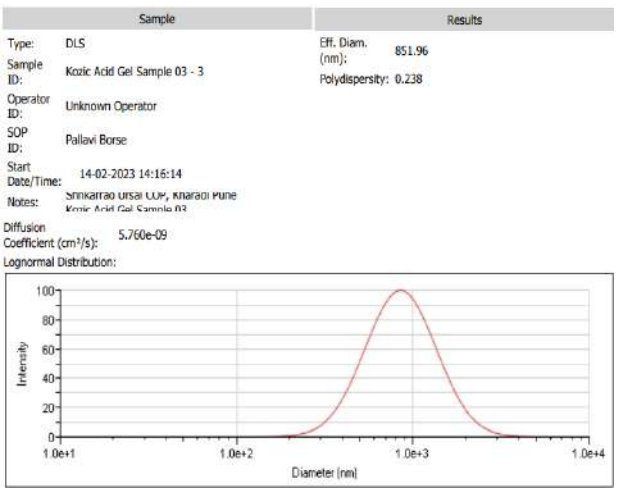


Fig 4B: Particle size of formulation B2

Fig 4D: Particle size of formulation B4



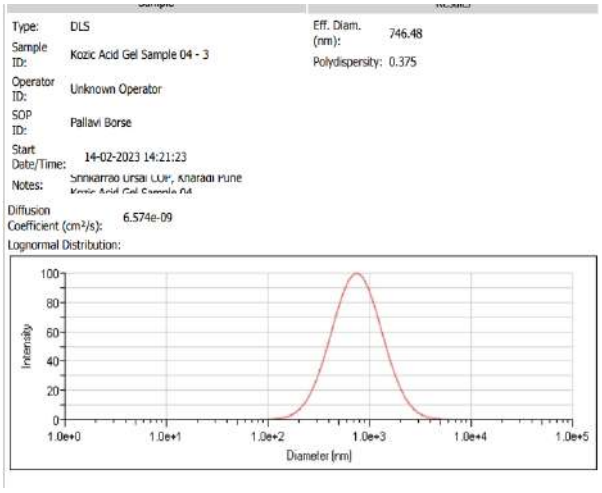
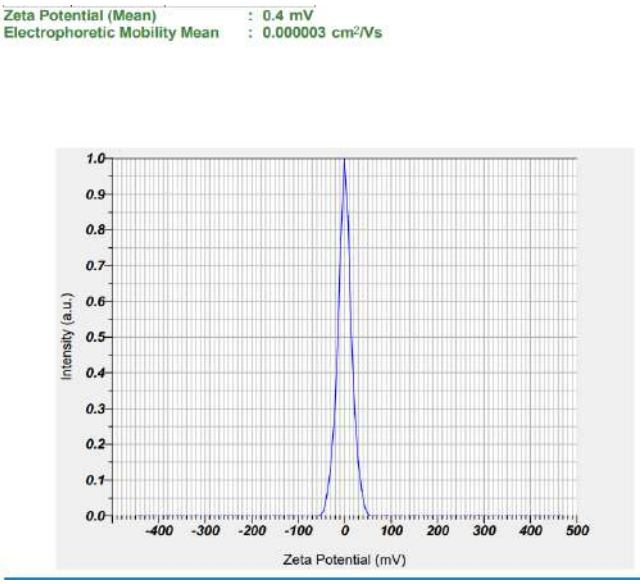


Fig 4C: Particle size of formulation B3

Particle size of batch 4 shows optimise size 746.48nm compare to other 3 batches. Batch4 is having optimum conc. of HPMC K35M and Carbopol 940.

Zeta Potential analysis

From the Graphical representation in following figures, it was observed that when the Nanogel was prepared using maximum conc. Of HPMC polymer compared to other batches is more stable.



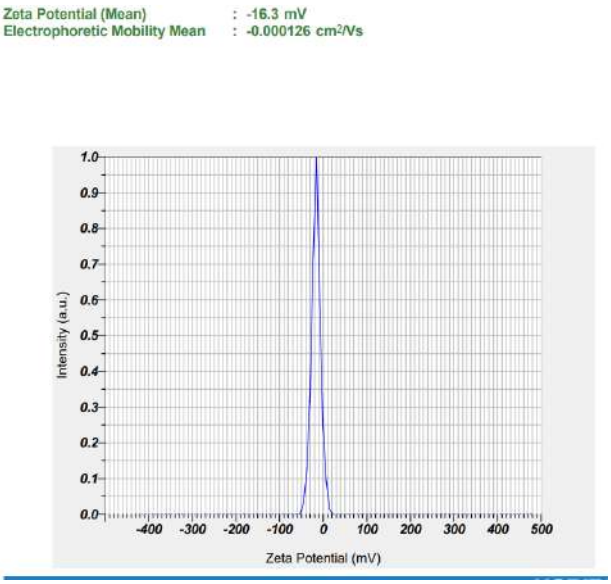


Fig 5A. zeta potential of formulation B1

Fig 5B. zeta potential of formulation B2

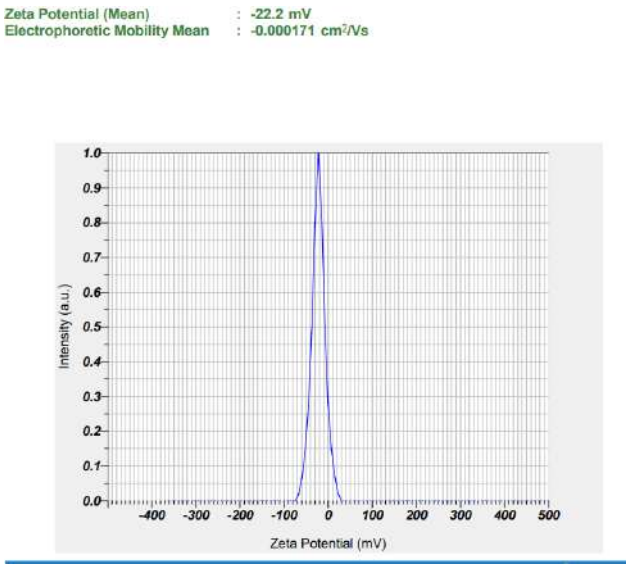


Fig 5C. zeta potential of formulation B3

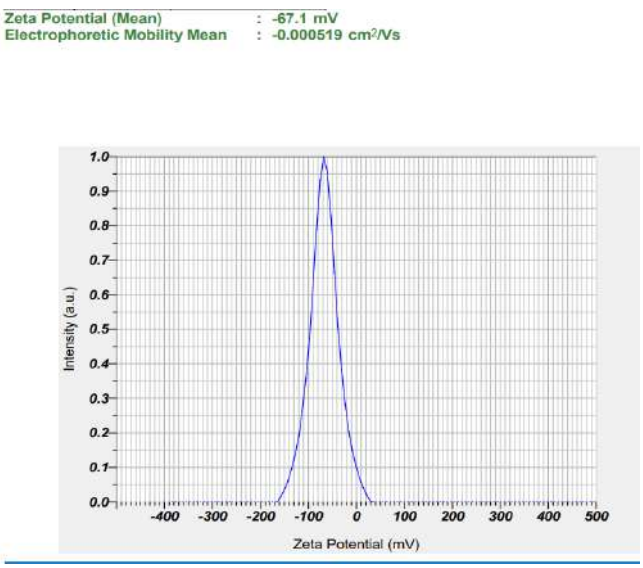


Fig 5D. zeta potential of formulation B4

To stabilize the Nanogel the Zeta Potential must be more that ±20 mV and it was observed from the above figure that batch 4 shows -67.1mV. From the Graphical representation the prepared Nanogel of B4 is more stable.

In-vitro Diffusion studies:

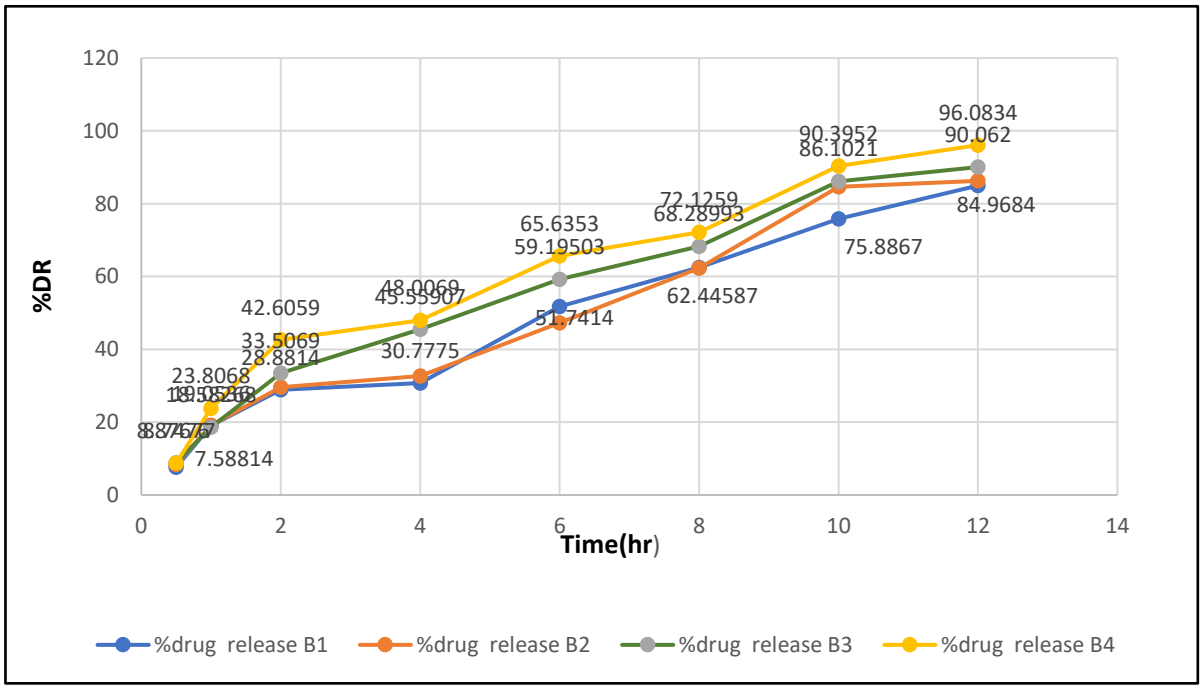


Fig 6: In-vitro drug release profile of nanogel of Kojic acid

From the above graph and % drug released readings batch 1 has 84.96% of drug release, batch 2 shows 86.27% drug release, batch 3 shows 90.06% drug release, batch 4 shows 96.83% drug

release in 12 hours. Formulation batch 4 shows maximum %drug release. Batch 4 have optimum concentration of polymer. Hence batch 4 consider optimise batch among 4 batches.

Viscosity study: (Spindle number-96)

Table 2: Viscosity results of B1

RPM	Surface (cP)	Middle (cP)	Bottom (cP)
10	27000	27560	28970
20	17530	19310	20480
30	14690	15250	16220
40	10200	10800	10930
50	9328	9469	1547

Table 3: Viscosity results of B2

RPM	Surface (cP)	Middle (cP)	Bottom (cP)
10	21940	21840	25590
20	15230	15940	14160
30	10650	10560	11120
40	7969	7406	7631
50	6688	6531	6625

Table 4: Viscosity results of B3

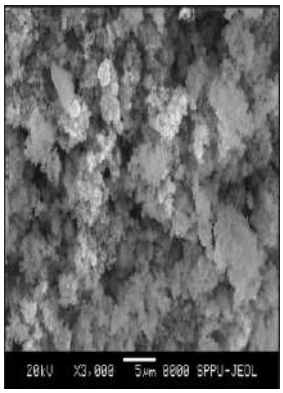
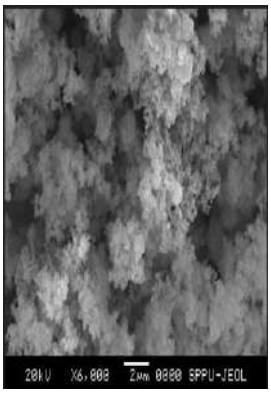
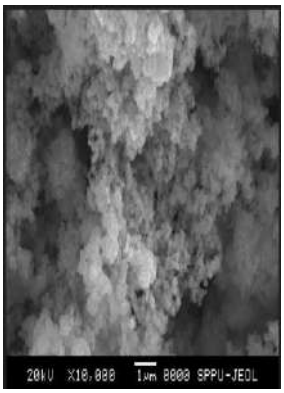
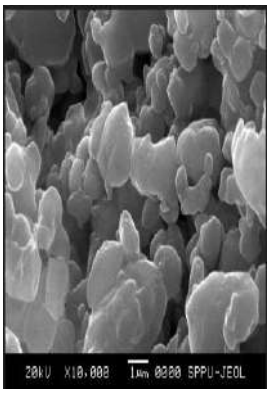
RPM	Surface (cP)	Middle (cP)	Bottom (cP)
10	22220	23110	24000
20	13550	13730	13880
30	10840	11090	11410
40	7388	7575	8231
50	6516	6531	6875

Table 5: Viscosity results of B4

RPM	Surface (cP)	Middle (cP)	Bottom (cP)
10	45000	50440	51000
20	30050	30560	31220
30	23380	23970	24560
40	15960	16560	16610
50	14200	14500	14690

Table 6: Evaluation For all formulated batches (B1-B4)

Particulars	**Batch1**	**Batch2**	**Batch3**	**Batch4**
Appearance	Whitish to colourless	Whitish to colourless	Whitish to colourless	Whitish to colourless
Fill volume (gm)	10gm	10gm	10gm	10gm
pH	5-7.5	5-7.5	5-7.5	5-7.5
Extrudability	++ (very good)	++ (very good)	+++ (excellent)	+++ (excellent)

Conductivity 1)200ms 2)20ms 3)2ms 4)200µs 5)20µs	 0 0 0.03 27 1.0	 0 0.2 0.05 057 1.0	 0 0.0 0.03 021 1.0	 0 0.1 0.12 123 1.0
Zeta potential (mV)	0.4mV	-16.3mV	-22.2mV	-67.4mV
Particle size (nm)	1754.20nm	1018.9nm	851nm	746nm
Spreadability (gm.cm/sec)	4.1 ±0.0264	4.6 ±0.0284	3.9 ±0.057	3.2 ±0.0156
Scanning electron microscopy				
Content Uniformity (%)	94.6%	96.1%	98.4%	98.7%

Conclusion:

It can be concluded from the experimental study carried out that the formulation of a Nanogel containing Kojic acid drug yields a formulation with a spherical and smooth surface, nano in the size range. The prepared nanogel was smooth without any lumps, particles and aggregates. So, all the formulations are homogenous. Based on all the factors the nanogel drug delivery system Batch-4 shows good drug content compared to others. The particle size of the nanogel formulation is optimum and it is less than 1000 nm. So, it concluded that the particles are in the tiny and nano in the size range. All nanogel formulations show pH in the range of 5.5 to 7. Based on the Spreadability diameter study it shows the nanogel is having good Spreadability. Nanogel formulations show a viscosity range from 5000-50000 cps. It concluded that they are stable in nature. Formulation Batch-4 showed the highest percentage of drug release compared to other formulations. In-vitro diffusion studies show Batch-4 formulation shows a controlled release pattern of drug from the formulation. The Zeta potential of batch Batch-4 showed -67.3mV. High zeta potential values show there will be no particles come together and no

flocculation. Hence it can be concluded from the experimental study carried out, that the formulation Batch-4 is an optimized batch with optimum HPMC K35M and Carbopol940.

ACKNOWLEDGEMENT

For the completion of the research work the authors would like to show sincere gratitude to PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research centre, Kharadi, Pune to provide with a lot of support and help whenever needed.

CONFLICT OF INTEREST

All authors declared no conflicts of interest.

References

[1] Sultana F, Manirujjaman M, Imran-Ul-Haque MA, Sharmin S. An overview of nanogel drug delivery system. Journal of Applied Pharmaceutical Science. Sep 2013; 3(8): 95- 105.

[2] Patel HA, Patel JK. Nanogel as a controlled drug delivery system. Int. J. Pharm. Sci. Rev. Res. 2010; 4(2): 37-41.

[3] Dorwal D. Nanogels as novel and versatile pharmaceuticals. Int J Pharm Sci. 2012; 4(3): 67-74.

[4] Adhikari B, Cherukuri S, Reddy CS, Haranath C, Bhatta HP, Naidu Inturi R. Recent advances in nanogels drug delivery systems. World Journal of Pharmacy and Pharmaceutical Sciences. 2016; 5(9): 505-30.

[5] Prasad K, Vijay G, Jayakumari NK, Dhananjaya A, Valliyil L. Nanogel as a smart vehicle for local drug delivery in dentistry. American Journal of Pharmacy and Health Research. 2015; 3(1): 19-30.

[6] Dinda SC. Advances in Pharmaceutical Techonology. School of Pharmaceutical Education and Research. 2011;69-82.

[7] Kang M, Park S-H, Oh SW, et al. Anti-melanogenic effects of resorcinol are mediated by suppression of cAMP signaling and activation of p38 MAPK signaling. Biosci Biotechnol Biochem. 2018; 82(7):1188–1196.

[8] Nicolaidou E, Katsambas AD. Pigmentation disorders: hyperpigmentation and hypopigmentation. Clin Dermatol. 2014;32(1): 66–72.

[9] Saeedi M, Eslamifar M, Khezri K. Kojic acid applications in cosmetic and pharmaceutical preparations. Biomed Pharmacother. 2019; 110:582–593.

[10] Khezri K, Saeedi M, Morteza-Semnani K, et al. An emerging technology in lipid research for targeting hydrophilic drugs to the skin in the treatment of hyperpigmentation disorders: kojic acid solid lipid nanoparticles. Artif Cells Nanomed Biotechnol. 2020; 48(1):841–853.

[11] Yogesh Pounikar*, Pushpendra Jain, Navneet Khurana, L. K. Omray, S. Patil Formulation and Characterization of Aloe Vera Cosmetic Herbal Hydrogel, International Journal of Pharmacy and Pharmaceutical Sciences Vol 4, Suppl. 4, 2012: 85-86.

[12] Swati Talele, Preetam Nikam1, Braja Ghosh, Chaitali Deore, Ashwini Jaybhave, Anil Jadhav2, A Research Article on Nanogel as Topical Promising Drug Delivery for Diclofenac sodium, Indian Journal of Pharmaceutical Education and Research | Vol 51 | Issue 4S: Oct-Dec (Suppl.), 2017.

[13] Chowhan ZT. Role of binders in moisture-induced hardness increase in compressed tablets and its effect on in vitro disintegration and dissolution. J. Pharm. Sci.1980: 69; 1-4.

[14] Kumar Nrendra (2014), Study Of extraction, Isolation and Physico-Chemical Properties of Psidium Gaujava, International Journal of Research Science and Management, ISSN: 2349-5197.

[15] Gupta A, Mishra AK, Singh AK, Gupta V, Bansal P. Formulation and evaluation of topical gel of diclofenac sodium using different polymers. Drug Invent. Today. 2010; 2: 250-253.

[16]. Ahmed M, Gendy E, Alaa A. In vitro Release Studies of Flurbiprofen from Different Topical Formulations. Drug Dev. Ind. Pharm. 2002; 28(7):823-831.

[17]. Goyal S, Sharma P, Ramchandani U, Shrivastava SK. et al. Formulation development and characterization of aceclofenac gel containing linseed oil and ginger oleoresin. Int. J. Pharm. Biol. Arch. 2011; 3(3):1087-1094.

[18] Karthik. T.V.K., Martinez, V., Agrawal. V., Porous silicon ZnO/SnO2 structures for CO2 detection, Journal of alloys and Compounds, 731, 2008, 853-863

[19] Hiemenz, Principles of Colloid and Surface Chemistry, Marcel Decker, 1977

[20] https://www.brookhaveninstruments.com/

[21] https://www.brookhaveninstruments.com/product/srel-solvent-resistant-electrode/

[22]https://www.brookhaveninstruments.com/wp-content/uploads/2021/02/guide-to-choosing-zeta potential-analyzer-brookhaven-instruments-new.p

[23] https://www.brookhaveninstruments.com/

[24] Michaels A.S, ChandrasekaranS. K, Shaw J.E. Drug permeation through human skin: Theory and invitro experimental measurement. AIChE J. 2004;21(5) 16 Williams AC, Barry BW. Penetration enhancers. Adv drug deliv rev.2004;56(5):603-618.

[25] Belgamwar V, Patel H, Joshi A, Agrawal A, Surana S. Design and development of nasal mucoadhesive microspheres containing tramadol HCl for CNS targeting. Drug Delivery, Informa Healthcare, 2011;18(5):353-360.

[26] Patel, J., Ketkar, S., Patil, S., Fearnley, J., Mahadik, K. R., & Paradkar, A. R. (2015). Potentiating antimicrobial efficacy of propolis through niosomal-based system for administration. Integrative medicine research, 4(2), 94-10.

Research Centre Details

The college has been recognized as Research Centre in Pharmacy under the faculty of Science & Technology from the Academic Year 2019-20 as per the Letter No. CA/541, dated 14/05/2019.

Number of Students Admitted at Research Centre

Sr. No.	Academic Year	No. of students admitted	No. of students awarded Ph. D.
1	2020-21	--	--
2	2021-22	04	Nil
3	2022-23	03	Nil
Total		07	

Research Centre Vacancy Report

Sr. No.	Name of research guide	Approved No. of Seats	Presently Working	No. of seats vacant
1.	Dr. Ashok Bhosale	08	08 (06-Saswad, 01-Kharadi)	0
2.	Dr. Ravindra Patil	08	05 (05- Saswad)	03
3.	Dr. Vijaya Barge	06	05 (02-Saswad, 03-Kharadi)	01
4.	Dr. Amit Kasabe	04	02(02-Kharadi)	02
Total		**26**	**20**	**06**

List of candidates admitted at Research Centre
A.Y. 2022-23

Sr. No.	Name of Candidate	Name of the subject	Selected in category	Name of the guide
1	Poonam Ankush Jadhav	Pharmaceutics	DT-(A) / VJ	Dr. Ashok Bhosale
2	Shubhangi Karkhile	Pharmaceutical Chemistry	Open	Dr. Amit Kasabe
3	Tejaswini Raju Kande	Pharmaceutical Chemistry	Open	Dr. Amit Kasabe

List of candidates admitted at Research Centre
A.Y. 2021-22

Sr. No.	Name of Candidate	Name of the subject	Selected in category	Name of the guide
1	Swapnil Bhanudas Gadekar	Pharmaceutics	EWS	Dr. Ashok Bhosale
2	Nitin Shesherao Neharkar	Pharmaceutical Chemistry	DT/NT	Dr .Vijaya Barge
3	Pravin Prakash Kamble	Pharmaceutical Chemistry	SC	Dr .Vijaya Barge
4	Kiran Ramdas Ghule	Pharmaceutical Chemistry	EWS	Dr. Vijaya Barge

Dr. Vijaya Barge
Research Centre Coordinator

VICE - PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune - 411014

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

सावित्रीबाई फुले पुणे विद्यापीठ

(पूर्वीचे पुणे विद्यापीठ)

दूरध्वनी क्रमांक :
०२०-२५६९१२३३
२५६०१२५७
२५६०१२५८
२५६०१२५९

18110014

शैक्षणिक विभाग
गणेशखिंड, पुणे-४११००७.

टेलिग्राफ : 'युनिपुणे'
फॅक्स : ०२०-२५६९१२३३
वेबसाइट : www.unipune.ac.in
इ-मेल : dyracademic@unipune.ac.in

संदर्भ क्र.:CA/858 दि.: 20/05/2019

मा.प्राचार्य/संचालक,
पुणे जिल्हा शिक्षण मंडळ शंकरराव उरसळ कॉलेज ऑफ
फार्मासुटीकल सायन्स अँड रिसर्च सेंटरखराडी. पत्ता:
१५/२अ/१/१ झेन्सार आयटी टॉवर जवळ खराडीपुणे-४११
०१४ ता.: पुणे (महानगर पालिका हद्द) जि: पुणे पिनकोड:
411014

विषय:-संशोधन केंद्राच्या नव्याने मान्यतेबाबत...
संदर्भ क्र :-१)भारतीय राजपत्र क्रं.२७८ दि. ५ जुलै २०१६ च्या संशोधन केंद्रा संदर्भात निर्गमित केलेली नियमावली.
२)सीए/३०९३ परिपत्रक क्र.१२२/२०१६ दि. ०३.०८.२०१६

महोदय,

उपरोक्त विषय व संदर्भांकीत परिपत्रकातील नियमांच्या अधीन राहून विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयात खालील रकान्यात नमूद केलेल्या विषयांच्या पीएच.डी. संशोधन केंद्राच्या/संस्थेच्या अभ्यासक्रमास नव्याने मान्यता देण्यात येत आहे.

तथापि,संशोधन केंद्रांना खालील बाबींचे अनुपालन करणे आवश्यक आहे.

१)दर सहा महिन्याचा पदव्युतर संशोधन केंद्राचा प्रगती अहवाल (Progress Report) शैक्षणिक विभागास सादर करणे आवश्यक आहे.

२)खालील नमूद कालावधीसाठी संशोधन केंद्रामध्ये रकान्यात नमूद केलेल्या विषयांचे पीएच.डी. संशोधन मार्गदर्शक असणे आवश्यक आहे.

अनु.क्र.	अभ्यासक्रमाचा तपशील	विद्याशाखा	शैक्षणिक वर्ष	संलग्रीकरणाचा प्रकार
1	पीएच.डी. फार्मसी	औषधनिर्माणशास्त्र	२०१९-२०२०,	नवीन अभ्यासक्रम

कळावे,

आपला,

सहायक कुलसचिव
(संलग्रता विभाग)

VUB/KGK.
22/5/2019

NEW
Research
Centre
Ph.D.
Affiliation
A.Y. 2019-20

P.D.E.A's S. U. College Of P. S. & R. C. Kharadi
INWARD NO:2071
DATE:22/5/19

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)

दूरध्वनी क्रमांक :
०२०-२५६९१२३३
२५६०१२५७
२५६०१२५८
२५६०१२५९

19120019

शैक्षणिक विभाग
गणेशखिंड, पुणे-४११००७.

टेलिग्राफ : 'युनिपुणे'
फॅक्स : ०२०-२५६९१२३३
वेबसाइट : www.unipune.ac.in
इ-मेल : dyracademic@unipune.ac.in

संदर्भ क्र.:CA/ 283 दि.: 04/03/2020

मा.प्राचार्य/संचालक,
पुणे जिल्हा शिक्षण मंडळ शंकरराव उरसळ कॉलेज ऑफ फार्मासुटीकल सायन्स अँड रिसर्च सेंटरखराडी. पत्ता: १५/२अ/१/१ झेन्सार आयटी टॉवर जवळ खराडीपुणे-४११ ०१४ ता.: पुणे (महानगर पालिका हद्द) जि: पुणे पिनकोड: 411014

विषय:-संशोधन केंद्राच्या नूतनीकरणाबाबत...
संदर्भ क्र :-१)भारतीय राजपत्र क्रं.२७८ दि. ५ जुलै २०१६ च्या संशोधन केंद्रा संदर्भात निर्गमित केलेली नियमावली.
२)सीए/३०९३ परिपत्रक क्र.१२२/२०१६ दि. ०३.०८.२०१६
३)सीए/१८२२/२०१८, परिपत्रक क्र.१४४/२०१८ दि. १६.०८.२०१८

महोदय,
उपरोक्त विषय व संदर्भाकीत परिपत्रकातील नियमांच्या अधीन राहून विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयात खालील रकान्यात नमूद केलेल्या विषयांच्या पीएच.डी. संशोधन केंद्राच्या/संस्थेच्या नूतनिकरणास मान्यता देण्यात येत आहे.
तथापि,संशोधन केंद्रांना खालील बाबींचे अनुपालन करणे आवश्यक आहे.
१)दर सहा महिन्याचा पदव्युतर संशोधन केंद्राचा प्रगती अहवाल (Progress Report) शैक्षणिक विभागास सादर करणे आवश्यक आहे.
२)खालील नमूद कालावधीसाठी संशोधन केंद्रामध्ये रकान्यात नमूद केलेल्या विषयांचे पीएच.डी. संशोधन मार्गदर्शक असणे आवश्यक आहे.

अनु.क्र.	अभ्यासक्रमाचा तपशील	विद्याशाखा	शैक्षणिक वर्ष	संलग्रीकरणाचा प्रकार
1	विज्ञान व तंत्रज्ञान - पीएच.डी. फार्मसी	औषधनिर्माणशास्त्र	२०२०-२०२१,२०२१-२०२२,२०२२-२०२३,२०२३-२०२४,२०२४-२०२५,	नूतनीकरण संशोधन

कळावे,

आपला,
उपकुलसचिव
(शैक्षणिक विभाग)

VUB Ph.D file Approval From 2020-21 to 2024-25

P.D.E.A's S. U. College Of P. S. & R. C. Kharadi
INWARD NO: 1643
DATE: 9/3/2020

प्रत माहिती व योग्य त्या कार्यवाहीसाठी :
१.मा. संचालक,परीक्षा व मुल्यमापन मंडळ, सावित्रीबाई फुले पुणे विद्यापीठ पुणे –४११ ००७
२.उपकुलसचिव,शैक्षणिक पात्रता, सावित्रीबाई फुले पुणे विद्यापीठ पुणे –४११ ००७
३.उपकुलसचिव प्रवेश विभाग, सावित्रीबाई फुले पुणे विद्यापीठ पुणे –४११ ००७
४.कक्षाधिकारी,विद्यापीठ आध्यासन व संशोधन मंडळ,(बीयुटीआर) सावित्रीबाई फुले पुणे विद्यापीठ, पुणे – ४१ १००७

09032020

PRINCIPAL
P D. E. A's
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

3/4/2020 4:39:31 PM

1 Of 1

Savitribai Phule Pune University
(Formerly University of Pune)

Tel. Nos: (020) 2562 1227/1212/1205
Fax no. : 020 25699232

Ganeshkhind, Pune - 07
Email : pgadmis@pun.unipune.ac.in

Ref. No.: PGS/PGS/2861

Date :02/06/2022

To,
The Principal / Director
Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune [CPHP015050]

Sir/Madam

The Ph.D. cases forwarded by your Institute/Centre were placed before the Research & Recognition Committtee in Pharmaceutics (Science and Technology) held on 02/06/2022. The decision/s of Research & Recognition Committee are as follows :

Sr.No.	Name of the candidate & Name of the Guide	Remarks
1.	Swapnil Bhanudas Gadekar Guide : Dr. Bhosale Ashok Vitthal	Topic Approved and Admitted w.e.f. 05/05/2022as follows :- Design, Development and Evaluation of Extended Release Dosage Form for Antidiabetic Drugs.

Please comply with the directions of Reasearch & Recognition Committee and University Communicate to this office at the earliest.

Thanking You,

Yours faithfully,

Assistant Registrar
(P.G.Admissions)

Copy to :

1. Mr./Ms. Swapnil Bhanudas Gadekar
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune
2. Dr.Bhosale Ashok Vitthal
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune

Savitribai Phule Pune University
(Formerly University of Pune)

Tel. Nos: (020) 2562 1227/1212/1205
Fax no. : 020 25699232

Ganeshkhind, Pune - 07
Email : pgadmis@pun.unipune.ac.in

Ref. No.: PGS/1697

Date :01/01/2022

To,
The Principal / Director / Head
Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune [CPHP015050]

Sir/Madam

The Ph.D. cases forwarded by your Institute/Centre were placed before the Research & Recognition Committee in Pharmaceutical Chemistry (Science and Technology) held on 19/07/2022. The decision/s of Research & Recognition Committee are as follows :

Sr.No.	Name of the candidate & Name of the Guide	Remarks
1.	Nitin Shesherao Neharkar Guide : Dr. Barge Vijaya Uday	Topic Approved and Admitted w.e.f. 05/05/2022 as follows :- Analytical and Bioanalytical Method Development and Validation for Some Drugs and Pharmaceutical Dosage Forms.

Please comply with the directions of Reasearch & Recognition Committee and University Communicate to this office at the earliest.

Thanking You,

Yours faithfully,

Assistant Registrar
(P.G.Admissions)

Copy to :

1. Mr./Ms. Nitin Shesherao Neharkar
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune
2. Dr.Barge Vijaya Uday
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune

Savitribai Phule Pune University
(Formerly University of Pune)

Tel. Nos: (020) 2562 1227/1212/1205
Fax no. : 020 25699232

Ganeshkhind, Pune - 07
Email : pgadmis@pun.unipune.ac.in

Ref. No.: PGS/1697

Date :01/01/2022

To,
The Principal / Director / Head
Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune [CPHP015050]

Sir/Madam

The Ph.D. cases forwarded by your Institute/Centre were placed before the Research & Recognition Committee in Pharmaceutical Chemistry (Science and Technology) held on 19/07/2022. The decision/s of Research & Recognition Committee are as follows :

Sr.No.	Name of the candidate & Name of the Guide	Remarks
1.	Pravin Prakash Kamble Guide : Dr. Barge Vijaya Uday	Topic Approved and Admitted w.e.f. 05/05/2022 as follows :- Analytical and Bioanalytical Method Development and Validation for suitable Probiotic Dosage Forms.

Please comply with the directions of Reasearch & Recognition Committee and University Communicate to this office at the earliest.

Thanking You,

Yours faithfully,

Assistant Registrar
(P.G.Admissions)

Copy to :

1. Mr./Ms. Pravin Prakash Kamble
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune
2. Dr.Barge Vijaya Uday
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune

Savitribai Phule Pune University
(Formerly University of Pune)

Tel. Nos: (020) 2562 1227/1212/1205
Fax no. : 020 25699232

Ganeshkhind, Pune - 07
Email : pgadmis@pun.unipune.ac.in

Ref. No.: PGS/1697

Date :01/01/2022

To,
The Principal / Director / Head
Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune [CPHP015050]

Sir/Madam

The Ph.D. cases forwarded by your Institute/Centre were placed before the Research & Recognition Committee in Pharmaceutical Chemistry (Science and Technology) held on 19/07/2022. The decision/s of Research & Recognition Committee are as follows :

Sr.No.	Name of the candidate & Name of the Guide	Remarks
1.	Kiran Ramdas Ghule Guide : Dr. Barge Vijaya Uday	Topic Approved and Admitted w.e.f. 05/05/2022 as follows :- Development and Validation of Analytical and Bioanalytical Method for Some Drugs.

Please comply with the directions of Reasearch & Recognition Committee and University Communicate to this office at the earliest.

Thanking You,

Yours faithfully,

Assistant Registrar
(P.G.Admissions)

Copy to :

1. Mr./Ms. Kiran Ramdas Ghule
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune
2. Dr.Barge Vijaya Uday
   Pune District Education Association Pune District Education Associations Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Ta: Pune (corporation Area) Dist: Pune

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 ▮ Website : www.pdeasubpharm.edu.in ▮ E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 22/05/2023 Ref. No.: SUCOPSRC / 1999 / 2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

Provisional Admission / Registration

To,
Tejaswini Raju Kande
Silver Nest Society, F-102,
Kharadi Bypass, Kharadi

Subject: Your application for Registration for Ph. D. dated 01/04/23.

Dear Tejaswini Raju Kande
I am happy to inform you that you have been provisionally admitted to the Ph.D. Programme in Pharmaceutical Chemistry under the faculty of Science & Technology of the Savitribai Phule Pune University with effect from 22/05/2023.
Your place of research will be Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune. Your proposal is being forwarded to the University office for approval of the research topic. Your admission/ registration will be confirmed after the University authorities approve the research topic. Your presentation is scheduled at 11.00 am on Monday, 22/05/2023.

Yours faithfully,

Head
Place of Research

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Copy to:
1. The Dy. Registrar (Ph.D Unit), Savitribai Phule Pune University, Pune 411 007.
2. The Guide: Dr. Amit Kasabe, Assistant Professor,
Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, 15/2A/1/1, Near Zensar IT Tower, Kharadi, Pune-14.

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 22/05/2023 Ref. No.: SUCOPSRC/1000/2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

Provisional Admission / Registration

To,
Shubhangi Nandu Karkhile
S.No. 43, Patnare thube Nagar -
Kharadi Bypass, Pune

Subject: Your application for Registration for Ph. D. dated 03/04/23.

Dear Shubhangi Nandu Karkhile

I am happy to inform you that you have been provisionally admitted to the Ph.D. Programme in Pharmaceutical Chemistry under the faculty of Science & Technology of the Savitribai Phule Pune University with effect from 22/05/2023.

Your place of research will be Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune. Your proposal is being forwarded to the University office for approval of the research topic. Your admission/ registration will be confirmed after the University authorities approve the research topic. Your presentation is scheduled at 11.00 am on Monday, 22/05/2023.

Yours faithfully,

Head
Place of Research

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Kharadi, Pune-411014

Copy to:
1. The Dy. Registrar (Ph.D Unit), Savitribai Phule Pune University, Pune 411 007.
2. The Guide: Dr. Amit Kasabe, Assistant Professor,
Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, 15/2A/1/1, Near Zensar IT Tower, Kharadi, Pune-14.

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
Approved by : All India Council for Technical Education, Pharmacy Council of India, New Delhi.
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Recognised by : Government of Maharashtra
D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 22/05/2023 Ref. No.: SUCOPSRC / 1998 / 2022-2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member, SPPU, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

Provisional Admission / Registration

To,
Poonam Ankush Jadhav
A/P- Rahimat pur, Tal- Koregaon
Dist- Satara.

Subject: Your application for Registration for Ph. D. dated 03/04/23.

Dear Poonam Ankush Jadhav
I am happy to inform you that you have been provisionally admitted to the Ph.D. Programme in Pharmaceutics under the faculty of Science & Technology of the Savitribai Phule Pune University with effect from 22/05/2023.

Your place of research will be Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune. Your proposal is being forwarded to the University office for approval of the research topic. Your admission/ registration will be confirmed after the University authorities approve the research topic. Your presentation is scheduled at 11.00 am on Monday, 22/05/2023.

Yours faithfully,

Head
Place of Research

PRINCIPAL
P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
Pune-411014

Copy to:
1. The Dy. Registrar (Ph.D Unit), Savitribai Phule Pune University, Pune 411 007.
2. The Guide: Dr. Ashok Bhosale, Principal & Head - Research Centre
Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, 15/2A/1/1, Near Zensar IT Tower, Kharadi, Pune-14.

ICT Tools

ICT resources such as educational software, e-books, multimedia, e-content, YouTube videos, and online platforms like Google Classroom are used to assist all of the aforementioned learnings.

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Use of ICT Tools

1. **Please follow the link for faculty-prepared e-content.**

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/201/ICT-%20All%20ppt.pdf

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

SUBSCRIPTION OF JOURNAL/LIBRARY MEMBERSHIP:

Online National/International Journals are subscribed for promoting research activities. College has subscribed for the membership of British Library, and Jaykar Library, SPPU, Pune giving access to knowledge resource.

The Institution has E-Library with membership/registration for the following:

1. British Council library, Pune

2. Jaykar library, SPPU, Pune

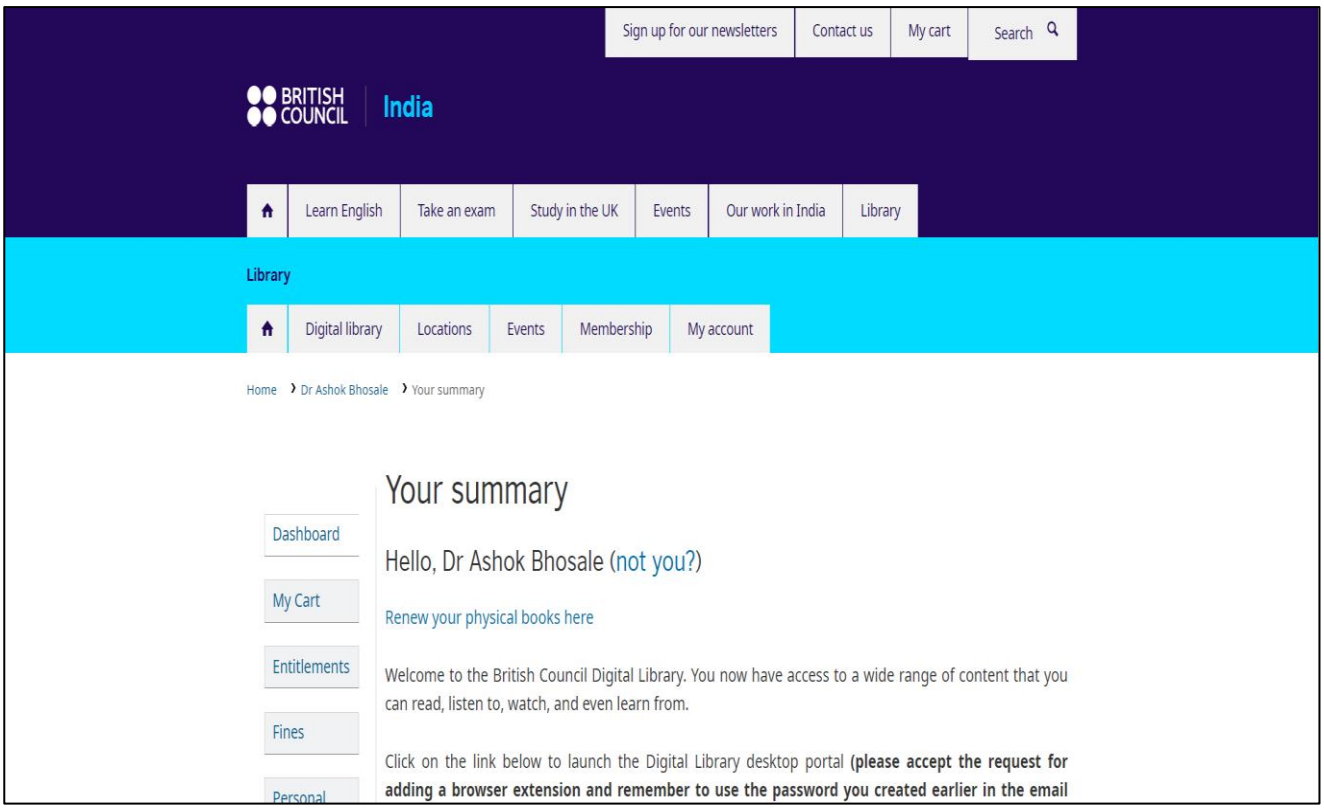
3. E-ShodhSindu

4. DELNET

5. National Digital Library of India:

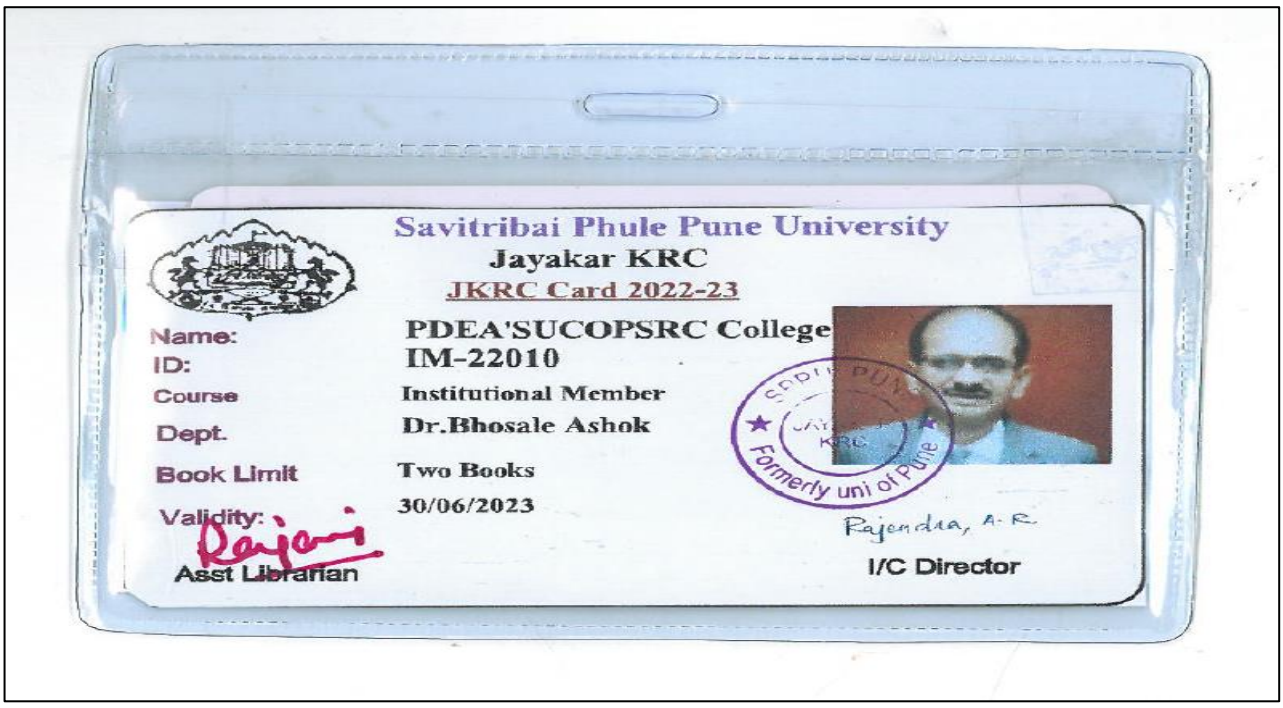
1. British Council Library, Pune Membership:

Institute has membership of British Council Library, Pune.



Screenshot of user interface for British Council Library

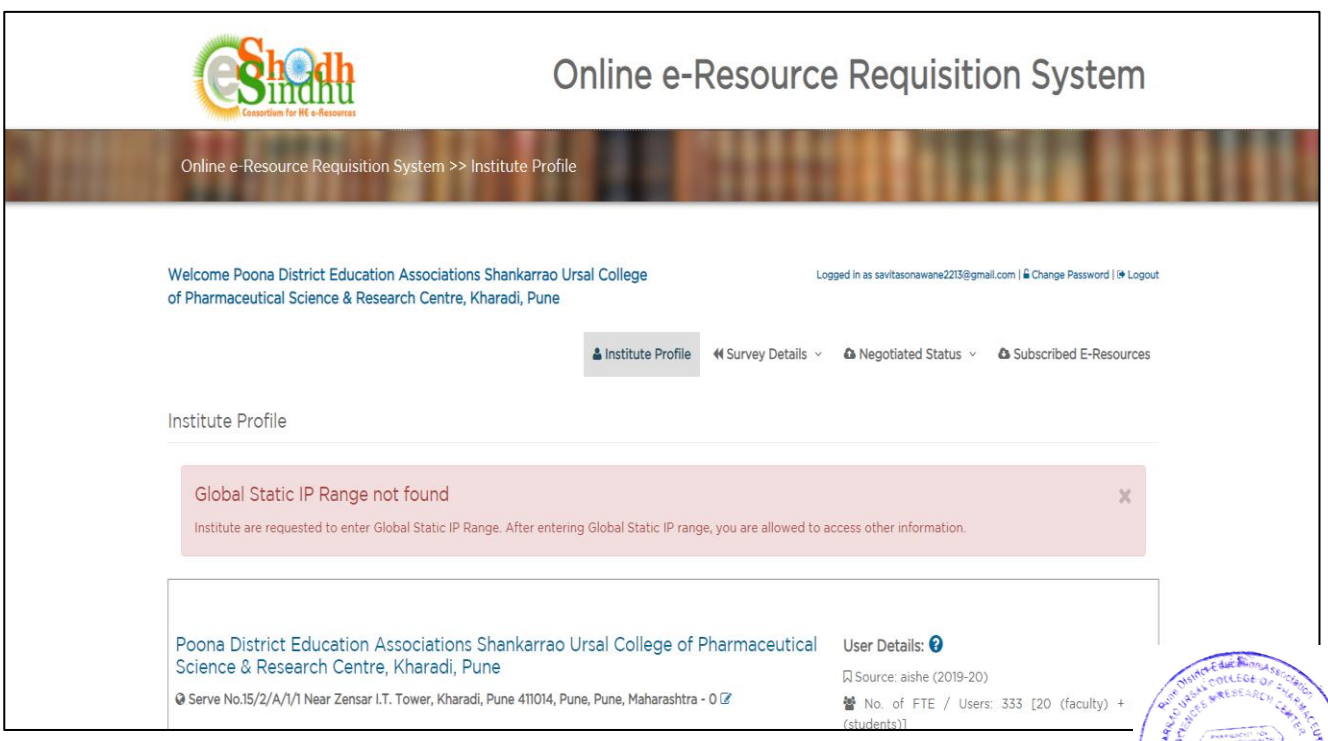
2. Jaykar Library, SPPU, Pune:
Institute has membership of Jaykar Library, Savitribai Phule Pune University, Pune.



Jaykar Library Membership I-card

3. E-ShodhSindu:

The main objective of the E-ShodhSindu: Consortia for Higher Education E-Resources is to provide access to qualitative electronic resources including full-text, bibliographic and factual databases to academic institutions at a lower rate of subscription.

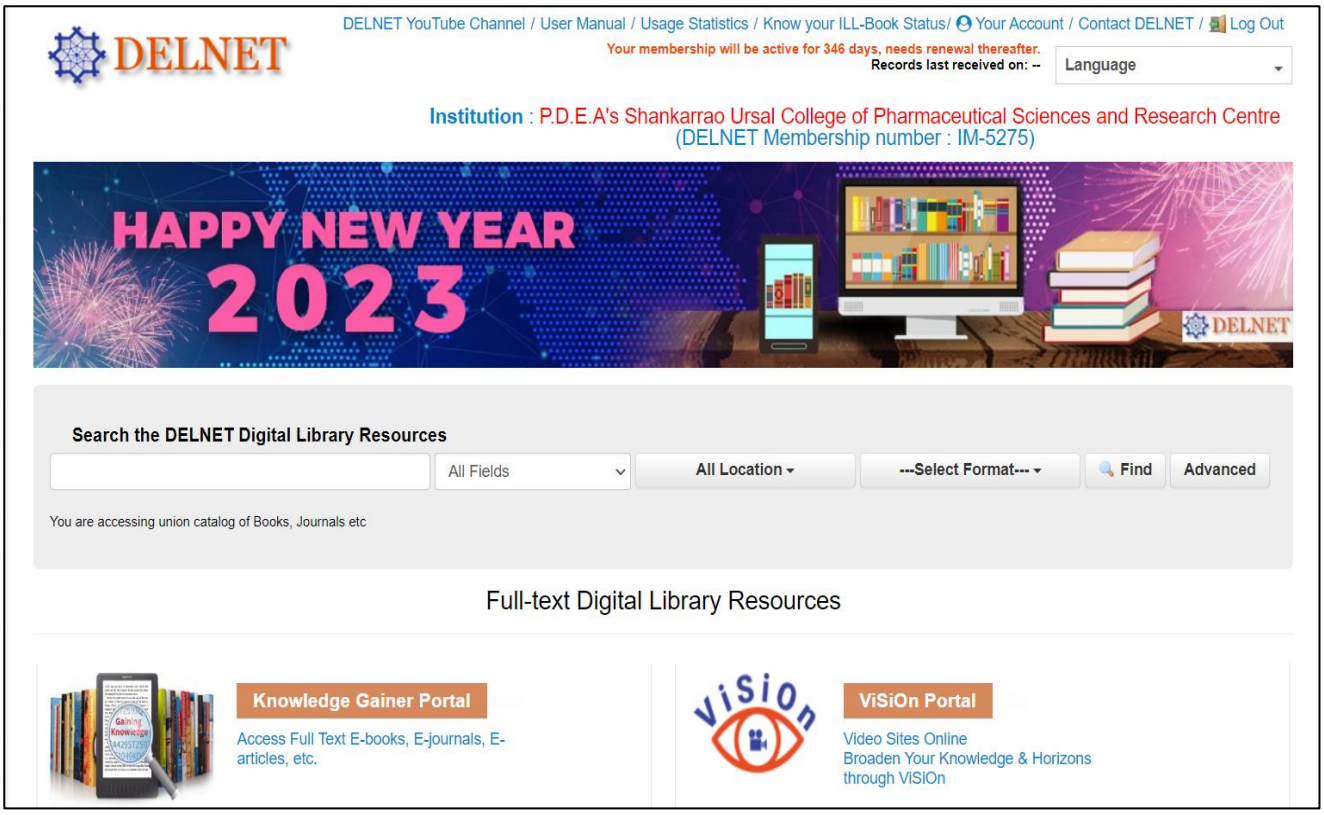


Screenshot of user interface for E-ShodhSindu

4. DELNET:

DELNET has been established with the prime objective of providing access to millions of networked library resources.

There are 10655 E-Books and 388 E-Journals available for reference.



Screenshot of User Interface of Delnet



DELNET
Developing Library Network
New Delhi
www.delnet.in

Certificate of Membership

This certifies that

P.D.E.A.`s Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

is an Institutional Member of

DELNET – Developing Library Network

and is entitled to all benefits and privileges pertaining thereto.

Membership Number *IM – 5275* has been renewed and next renewal is due on June 20, 2023

DELNET-DEVELOPING LIBRARY NETWORK ★ NEW DELHI ★

Date of Issue: June 21, 2022

Dr. Sangeeta Kaul
Director
DELNET, New Delhi

Certificate of Membership

5. National Digital Library of India:

Ministry of Human Resource Development (MHRD) under its National Mission on Education through Information and Communication Technology (NMEICT) has initiated the National Digital Library of India (NDL India) pilot project to develop a framework of virtual repository of learning resources with a single-window search facility.



Screenshot of user interface for National Digital Library

Vice Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

e-Books List

Sr. no.	Title
1.	Medicinal Chemistry
2.	Frontiers in Chemistry: Rising Stars
3.	Pharmacognosy- Medicinal Plants
4.	25th Anniversary of Molecules- Recent Advances in Chemistry
5.	Vaccines, Medicines and Covid- 19 How can WHO be given a stronger voice?
6.	Disposable Bioprocessing System
7.	Chemopreventive Activities of Phytochemicals
8.	Biosimilars
9.	Radiopharmaceuticals current research for better diagnosis and therapy
10.	Pharmacotherapy
11.	Medicinal Chemistry and Drug Design
12.	Seaweed Biomaterials
13.	Antimicrobial Resistance An Open Challenge
14.	Vaccine Development
15.	Complementry Therapies for the Body, Mind and Soul
16.	Anticoagulation Therapy
17.	Colloid Science in Pharmaceutical Nanotechnology
18.	Serotonin
19.	Evidence- based Strategies in Herbal Medicines, Psychiatric Disorders and Emergency Medicine
20.	Antiviral Drugs Aspects of Clinical Use and Recent Advances
21.	Pharmacology
22.	Concepts, Compounds and the Alternatives of Antibacterials
23.	Drug Discovery
24.	Antidepressants Predictable, Clinical and Translational Aspects
25.	Virtual Screening
26.	Drug Discovery and Development New Advances
27.	Molecular Pharmacology
28.	Herbs and Spices
29.	Clinical Use of Local Anesthetics
30.	Analytical techniques in Pharmaceutical and Biomedical Analysis
31.	Pharmaceutical Residues in the Environment
32.	Polymer Materials in Biomedical Application
33.	Natural Products for Chronic Diseases: A Ray of Hope
34.	Poultry Nutrition
35.	Magnetic Nanoparticles
36.	Research as Development Perspective
37.	Antimicrobial Resistance A One Health Perspective
38.	Pharmaceutical Formulation Design Recent Practices

39.	Pharmacology and Therapeutics
40.	Alkaloids their Importance in Nature and Human Life
41.	Bioactive Compunds in Phytomedicine
42.	Metformin
43.	Tandem Mass Spectrometry Molecular Characterization
44.	Antihypertensive Drugs
45.	Drug Repurposing Hypothesis, Molecular Aspects and Therapeutic Application
46.	Molecular Docking and Molecular Dynamics
47.	Drug Discovery Research in Pharmacognosy
48.	Basis Pharmacokinetics Concepts and Some Clinical Applications
49.	Clinical Applications of Pharmacogenetics
50.	Reading in Advanced Pharmacokinetics Theory, Method and Applications
51.	Anticoagulation Drugs the Current State of the Art
52.	Opioids from Analysic use to Addiction
53.	Role of Novel Drug Delivery Vehicles in Nanobimedicines
54.	British Pharmacopoeia 2008
55.	European Pharmacopoeia 5th ed
56.	Microbiology 9th ed
57.	T.B.of Pathology .Harsh Mohan.
58.	Physical Chemistry. Arun Bahal.
59.	Computer Fundamental.
60.	Solomons frynle, Organic Chemistry.
61.	USP 31 NF 26 print ed.
62.	Sanjay Saxena's , A First Course in Computers.2003 ed
63.	Question Bank to Accompany Essentials Of Physical Chemistry. Arun Bahal.
64.	A course in listening & Speaking.
65.	Ph: Microbiology & Immunology.
66.	Barrons GRF
67.	Indian Pharmacopoeia 2014.
68.	Solomons frynle, Organic Chemistry.
69.	Computer Fundamentals.
70.	ATB of Pathology. Harsh Mohan.
71.	The Scientology Handbook.
72.	Pharmaconasy.
73.	Pharmaceutical Chemistry.
74.	Bio - Pharmaceutics.
75.	Anatomy & Physiology.
76.	Pharmaceutical Analysis.
77.	Bio- Technology.
78.	Cosmetology
79.	Forensic Pharmacy
80.	Microbiology
81.	Bio-Statistics & Research Methodology
82.	Bio- Chemistry
83.	Pharmacology.
84.	Pharmaceutics.
85.	United State Pharm acopeia USP 44 - NF 39

86.	Communication in Pharmacy Practice
87.	Chronicles of Pharmacy, Vol. 2 (of 2)
88.	Chronicles of Pharmacy, Vol. 1 (of 2)
89.	Competences for Pharmacy Education and Practice in Europe
90.	A Short View of the Frauds and Abuses Committed by Apothecaries As well in Relation to Patients, as Physicians: And Of the only Remedy thereof by Physicians making their own Medici...
91.	Cagliostros Geheimrezepte. Magistralformeln aus dem Ancien Régime
92.	eHealth and Remote Monitoring
93.	The Apothecary in Eighteenth-Century Williamsburg Being an Account of his medical and chirurgical Services, as well as of his trade Practices as a Chymist
94.	Das Blaue Buch Chemotherapie-Manual Hämatologie und Onkologie
95.	The Mystery and Romance of Alchemy and Pharmacy
96.	Understanding Drugs Markets An Analysis of Medicines, Regulations and Pharmaceutical Systems in the Global South
97.	Travel Medicine - Series 1
98.	Folia Pharmaceutica Universitatis Carolinae L/2019
99.	Un trésor à l'Université d'Avignon La pharmacie de l'Hôpital Sainte-Marthe
100.	Legemidler som forurensning
101.	Modern medicine and Pharma
102.	Drug Designing,Discovery and
103.	Pharmacognostic Methods for
104.	Biological Products Manufact
105.	Apparent solublity and Dissolu
106.	Good Manufacturing Practices
107.	Arzneimittelversorgung bei Mul
108.	Handbook of Pharmaceutical Manufacturing Formulation
109.	Handbook of solubility Data for Pharmaceuticals
110.	Pharmazeutische Anwendungshifen in der Gerontopharmakologie
111.	Polymers in medicine
112.	Unused and Expired pharmaceuticals
113.	Handbook of Manufacturing Formulation Liquid products (Vol.3to6)
114.	Medikamentose Therapie bei Blasenfunktionsstorungen
115.	Bioactive Bead type Cellulosic Adsorbent for blood purification
116.	Cellulose and its Derivativatives use in the pharmaceutic compounding practice
117.	Medikamentöse Therapie bei Blasenfunktionsstörungen
118.	Handbook of Pharmaceutical Manufacturing Formulations Compressed Solid Products (Volume 1 of 6)
119.	Handbook of Pharmaceutical Manufacturing FormulationsOver-the-Counter Products (Volume 5 of 6)
120.	Handbook of Pharmaceutical Manufacturing Formulations Uncompressed Solid Products (Volume 2 of 6)
121.	Avancées dans le traitement pharmacologique des douleurs neuropathiquesTherapeutic advances in pharmaceutical treatment of neuropathic pain
122.	Pharmaceutical Dosage Forms - Parenteral MedicationsVolume 1: Formulation and Packaging
123.	Pharmaceutical Dosage Forms - Parenteral MedicationsVolume 3: Regulations, Validation and the Future

3/7

124.	Biosimilars and Interchangeable Biologics
125.	Pharmaceutical Analysis: A Textbook for Pharmacy Students and Pharmaceutical Chemists
126.	A Method of Documenting Pharmaceutical Care Utilizing Pharmaceutical Diagnosis
127.	Technology, Biopharmaceutics, Pharmaceutical Chemistry, Pharmaceutical Analysis and Quality
128.	Pharmaceutical Biotechnology Fundamentals and Applications
129.	Applications of Mass Spectrometry for the Provision of Forensic Intelligence: State-of-the-art and Perspectives
130.	Machine Learning and Hybrid Modelling for Reaction Engineering: Theory and Applications
131.	Amphibian Species in Environmental Risk Assessment Strategies
132.	Perspectives and Challenges of Hair Analysis
133.	Chemometric Methods in Forensic Science
134.	Methods and Strategies for C–N Bond Formation Reactions
135.	Validation Standard Operating Procedures
136.	Textbook of Organic Medicinal and Pharmaceutical Chemistry.
137.	A short pharmaceutic chemistry, second edition
138.	Introduction to Green Chemistry, Organic Synthesis and Pharmaceuticals
139.	Organic chemistry including certain portions of physical chemistry, third edition
140.	Fragment-Based Drug Discovery and X-Ray Crystallography
141.	Activity-Based Protein Profiling
142.	Functional Molecular Silicon Compounds II
143.	Functional Molecular Silicon Compounds I
144.	Stereoselective Syntheses of Tetrahydropyrans Applications to the Synthesis of (+)-Leucascandrolide A, (+)-Dactylolide and (±)-Diospongin A
145.	Hydroxamic Acids A Unique Family of Chemicals with Multiple Biological Activities
146.	Bentley and Driver's Textbook of Pharmaceutical Chemistry
147.	Textbook of Organic Medicinal and Pharmaceutical Chemistry.
148.	A personal perspective on medicinal and pharmaceutical chemistry
149.	Book Reviews An Introduction to Medicinal Chemistry (2nd Edition)
150.	Textbook of organic and pharmaceutical chemistry
151.	Essentials of Inorganic Chemistry: For Students of Pharmacy, Pharmaceutical Sciences and Medicinal Chemistry
152.	AN ELEMENTAEY COURSE IN INORGAMO PHARMACEUTICALAND MEDICAL CHEMISTRY.
153.	CHEMISTRY: General, Medical, and Pharmaceutical, THE CHEMISTRY OF THE U. S. PHARMACOPEIA.
154.	Stress testing: The chemistry of drug degradation
155.	Medicinal Chemistry: Chemistry, Biochemistry, Therapeutic and Pharmacological Action of Natural and Synthetic Drugs
156.	Design and Evaluation of Ophthalmic Pharmaceutical Products
157.	Recent developments with boron as a platform for novel drug design
158.	Instructional Model to Teach Clinically Relevant Medicinal Chemistry
159.	From Theory to Bench Experiment by Computer-assisted Drug Design
160.	Multicomponent reactions – opportunities for the pharmaceutical industry
161.	Biocatalysis in the Discovery and Development of an Antimalarial Drug

162.	Directed Drug Delivery A Multidisciplinary Problem
163.	Validation of Active Pharmaceutical Ingredients, Second Edition
164.	A New Era of Drug Products: Opportunities and Challenges
165.	Steroid Analysis
166.	Green chemistry: A tool in Pharmaceutical Chemistry
167.	Bioinorganic Chemistry of Copper
168.	Pharmacy's Part in Society
169.	Investigation of Trypanothione Reductase as a Drug Target in Trypanosoma brucei
170.	Industry Dynamics in Pharmaceuticals
171.	Medicinal Organometallic Chemistry
172.	Natural Products in the Chemical Industry
173.	Modern Methods of Drug Discovery
174.	Chemical and biological research of Clematis medicinal resources
175.	Needs for new plant-derived pharmaceuticals in the post-genome era: an industrial view in drug research and development
176.	Modern Medicine and Pharmaceutics
177.	Modernizing Pharmaceutical Manufacturing
178.	Analysis of the creation of a modern pharmaceutical support system in ukraine in a retrospective development of the state and civil society relations
179.	Analysis of the creation of a modern pharmaceutical support system in ukraine in a retrospective development of the state and civil society relations
180.	Handbook of modern pharmaceutical analysis
181.	Parenteral Products
182.	Packaging of Pharmaceutical Dosage Forms
183.	Pharmacokinetics
184.	Hard and Soft Shell Capsules
185.	Tablet Dosage Forms
186.	Target-Oriented Drug-Delivery System
187.	Cutaneous and Transdermal Delivery—Processes and Systems of Delivery
188.	Bioequivalency
189.	Managed Care and Pharmacotherapy Management
190.	Disperse Systems
191.	Dietary Supplements
192.	Pediatric and Geriatric Aspects of Pharmaceutics
193.	Food and Drug Laws that Affect Drug Product Design, Manufacture, and Distribution
194.	Drug Information
195.	The Pharmacist and Veterinary Pharmaceutical Dosage Forms
196.	Drug Products: Their Role in the Treatment of Disease, Their Quality, and Their Status and Future as Drug-Delivery Systems
197.	Factors Influencing Drug Absorption and Drug Availability
198.	Pediatric and Geriatric Aspects of Pharmaceutics
199.	Food and Drug Laws that Affect Drug Product Design, Manufacture, and Distribution
200.	Drug Information
201.	The Pharmacist and Veterinary Pharmaceutical Dosage Forms
202.	Drug Products: Their Role in the Treatment of Disease, Their Quality, and Their Status and Future as Drug-Delivery Systems
203.	European Aspects of the Regulation of Drug Products with Particular Reference to Development Pharmaceutics
204.	Factors Influencing Drug Absorption and Drug Availability

5/7

205.	Sustained- and Controlled-Release Drug-Delivery Systems
206.	Delivery of Drugs by the Pulmonary Route
207.	Analysis of Genotoxic Impurities in Active Pharmaceutical Ingredients by Using Modern Analytical Techniques
208.	Biotechnology-Based Pharmaceuticals
209.	Quality assurance of pharmaceuticals
210.	Quality Assurance of Pharmaceuticals
211.	Pharmaceutical Quality Assurance & Control
212.	Quality Assurance in the Pharmaceutical Sector
213.	Pharmaceutical development and quality assurance of FDCs Pharmaceutical development and quality
214.	Pharmaceutical Quality Assurance Microbiology Laboratories
215.	Pharmaceutics: Tablet Development, Manufacturing and Quality Assurance
216.	Quality assurance of pharmaceuticals: a compendium of guidelines and related materials
217.	Quality assurance in pharmaceutical powder processing: Current developments
218.	Chemometrics (PCA) in Pharmaceutics: Tablet Development, Manufacturing and Quality Assurance
219.	Pharmaceutical Computer Systems Validation
220.	Computer Systems ValidationComputer Systems Validation Quality Assurance, Risk Management, and Regulatory Compliance for Pharmaceutical and Healthcare Companies
221.	A rapid HPLC procedure for analysis of analgesic pharmaceutical mixtures for quality assurance and drug diversion testing
222.	Pharmaceutical Quality Assurance & Control
223.	Quality assurance of pharmaceuticals: a compendium of guidelines and related materials
224.	Quality Assurance Issues Good pharmaceutical trade and distribution practices
225.	Validation and quality assurance of planar chromatographic procedures in pharmaceutical analysis.
226.	Quality assurance of pharmaceuticals : a compendium of guidelines and related ...
227.	A Rapid HPLC Procedure for Analysis of Analgesic Pharmaceutical Mixtures for Quality Assurance and Drug Diversion Testing
228.	Quality Assurance in Clinical Trials
229.	Pharmaceutical Quality Systems
230.	Quality Assurance of Pharmaceutical Solid Dosage Forms:
231.	CMC Considerations for Quality
232.	Toxic Effects of Pharmaceuticals and Cosmetics
233.	Validated Cleaning Technologies for Pharmaceutical Manufacturing
234.	Manufacturing capability as a technological development indicator in the pharmaceutical industry
235.	Engineering and manufacturing of pharmaceutical co-crystals: a review of solvent-free manufacturing technologies
236.	Raman spectroscopy as a process analytical technology for pharmaceutical manufacturing and bioprocessing
237.	Process Analytical Technology in the Manufacture of Bulk Active Pharmaceuticals—Promise, Practice, and Challenges
238.	Development of formulation, manufacturing technology, and standardization of solid pharmaceutical dosage form of Dilept, a novel atypical neuroleptic
239.	Process engineering and pharmaceutical manufacturing technologies
240.	Process analytical technology tools for process control of roller compaction in solid pharmaceuticals manufacturing

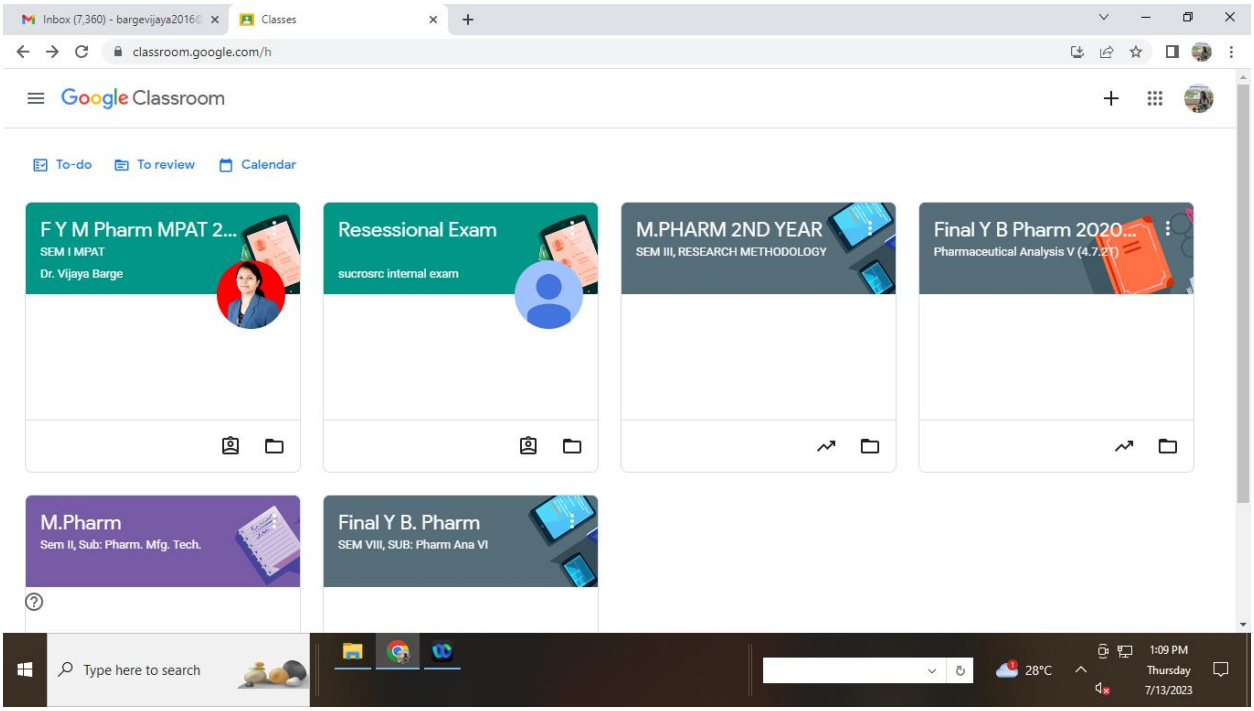
241.	Process analytical technology tools for process control of roller compaction in solid pharmaceuticals manufacturing
242.	Strengthening Pharmaceutical Systems
243.	Control of Genotoxic Impurities in Pharmaceutical Products
244.	Regulatory and Manufacturing Guidance: Part I
245.	Pharmacokinetics and Toxicokinetics
246.	Integrating systems approaches into pharmaceutical sciences
247.	Dictionary of Pharmaceutical Medicine
248.	FDA Bioequivalence Standards
249.	Controlled Pulmonary Drug Delivery
250.	Nonclinical statistics for pharmaceutical and biotechnology industries
251.	Wildlife Ecotoxicology Forensic Approaches
252.	Clinical Trial Simulations Applications and Trends
253.	Transporters in Drug Development Discovery, Optimization, Clinical Study and Regulation
254.	Pharmaceutical Biotechnolo Fundamentals and Applications
255.	Drug Product Development for the Back of the Eye
256.	Quality Control Training Manual
257.	Biopharmaceuticals, an Industrial Perspective
258.	Mucosal Delivery of Biopharmaceuticals Biology, Challenges and Strategies
259.	Molecular Biophysics for the Life Sciences
260.	Optimization of Pharmaceutical R&D Programs and Portfolios Design and Investment Strategy
261.	Medicines For Women

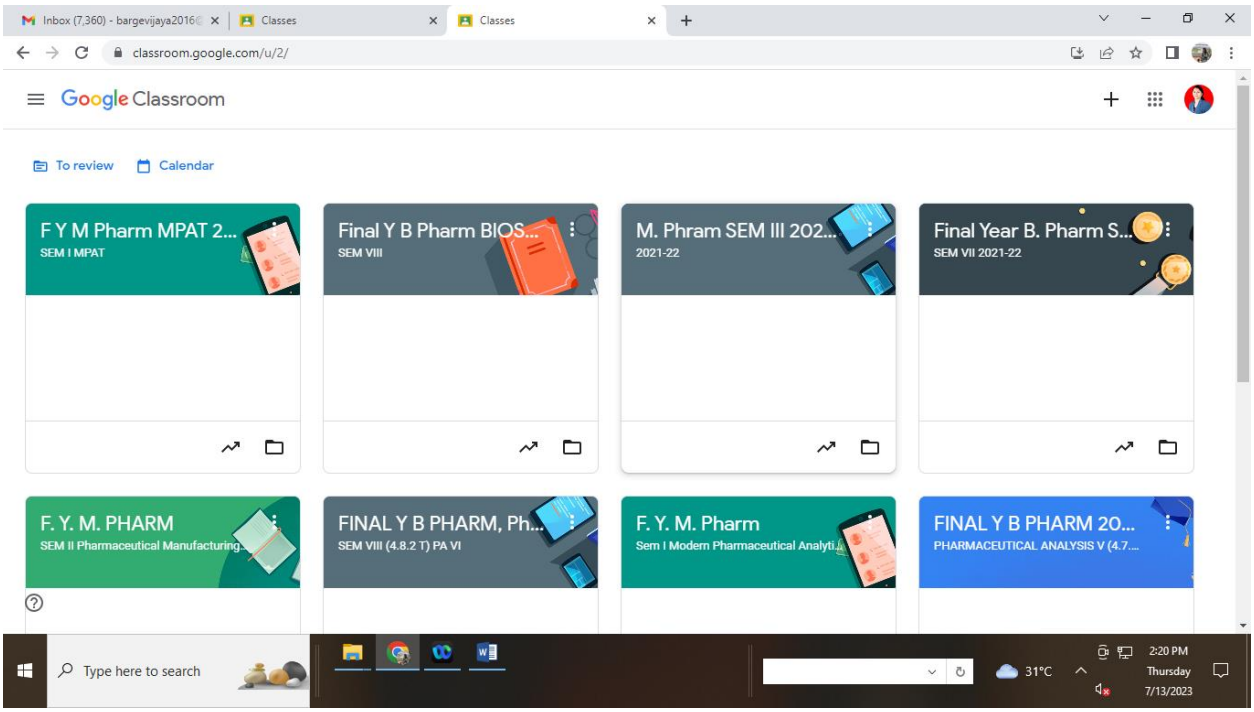
LIBRARIAN
P.D.E.A's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre
Kharadi, Pune - 411014

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

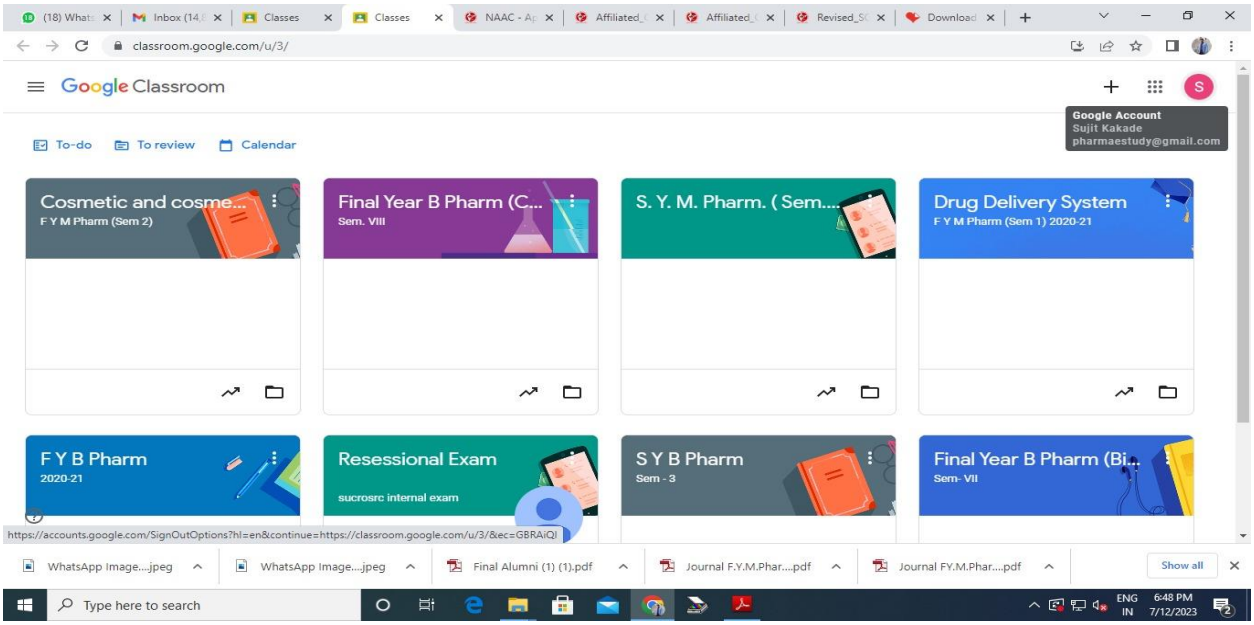
717

Educational Online Platform: Google Classroom

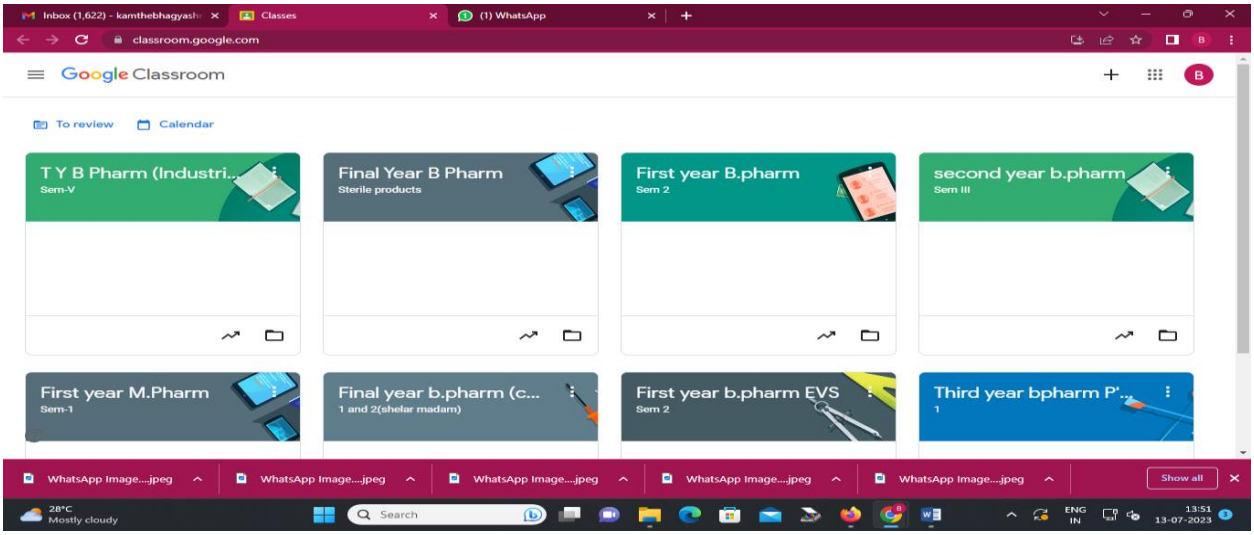




Name of the subject teacher: Dr. Vijaya Barge



Name of the subject teacher: Dr. Sujit Kakade



Name of the subject teacher: Mrs. Bhagyashri Shelar

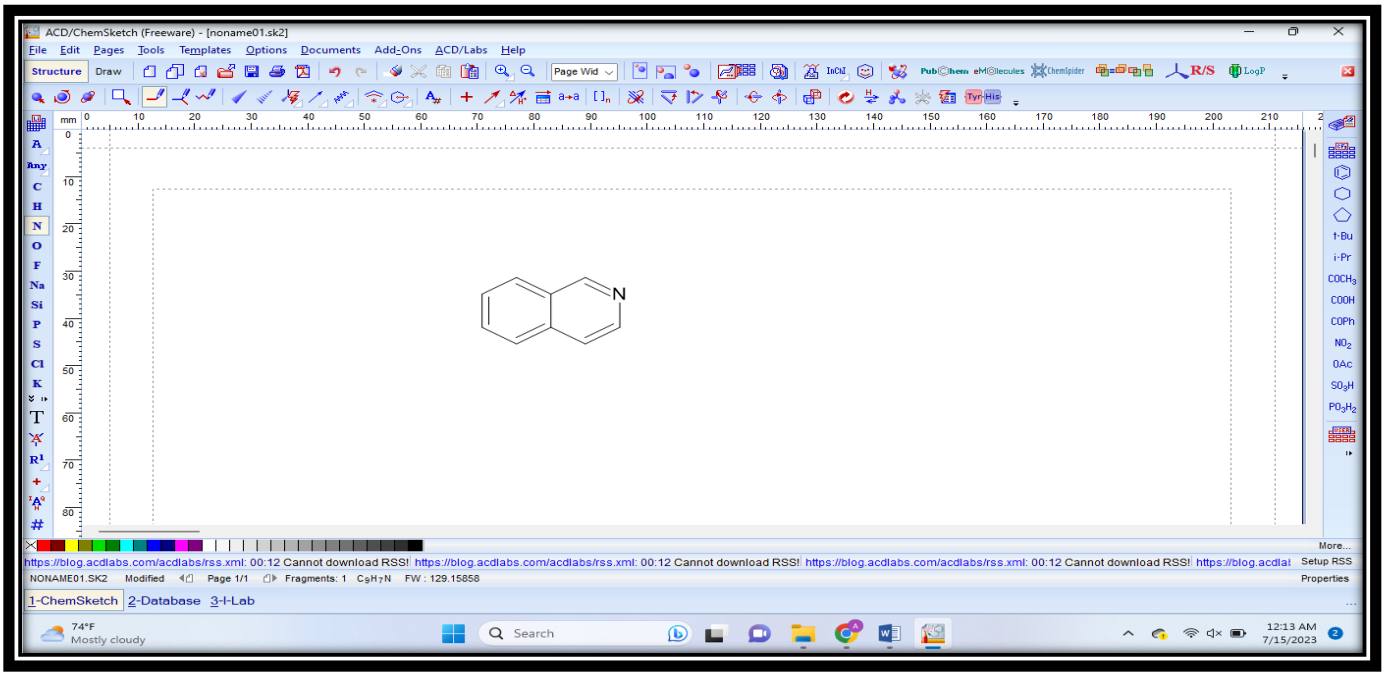
Vice Principal
Dr. Vijaya Barge

PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

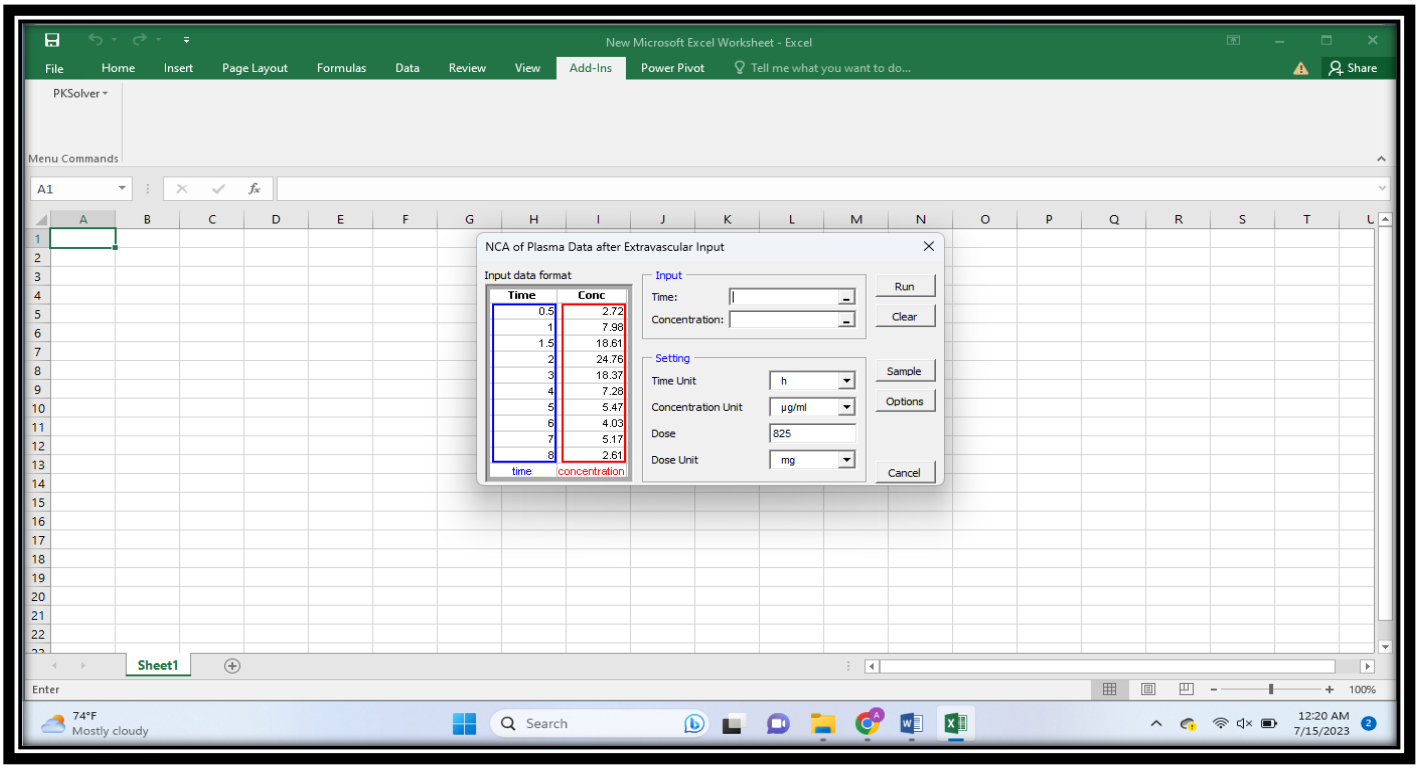
Educational Software used for Research

Sr. No.	Name of Software	Version	Source	Application
1.	Chem Sketch	2021.1.2.	www.acdlabs.com	ChemSketch is a drawing package that allows you to draw chemical structures including organics, organometallics, polymers, and Markush structures.
2.	PKSolver	-	PKSolver	It is a menu-driven add-in program for Microsoft Excel written in Visual Basic for Applications (VBA), for solving basic problems in pharmacokinetic (PK) and pharmacodynamic (PD) data analysis. The program provides a range of modules for PK and PD analysis including noncompartmental analysis (NCA), compartmental analysis (CA), and pharmacodynamic modeling. Two special built-in modules, multiple absorption sites (MAS) and enterohepatic circulation (EHC), were developed for fitting the double-peak concentrationÐtime profile based on the classical one-compartment model.
3.	PCP Disso	3.0	BVDU's Poona College of Pharmacy, Pune 411038	For calibration curve, percent drug release, model fitting and F2 factor from the dissolution studies.

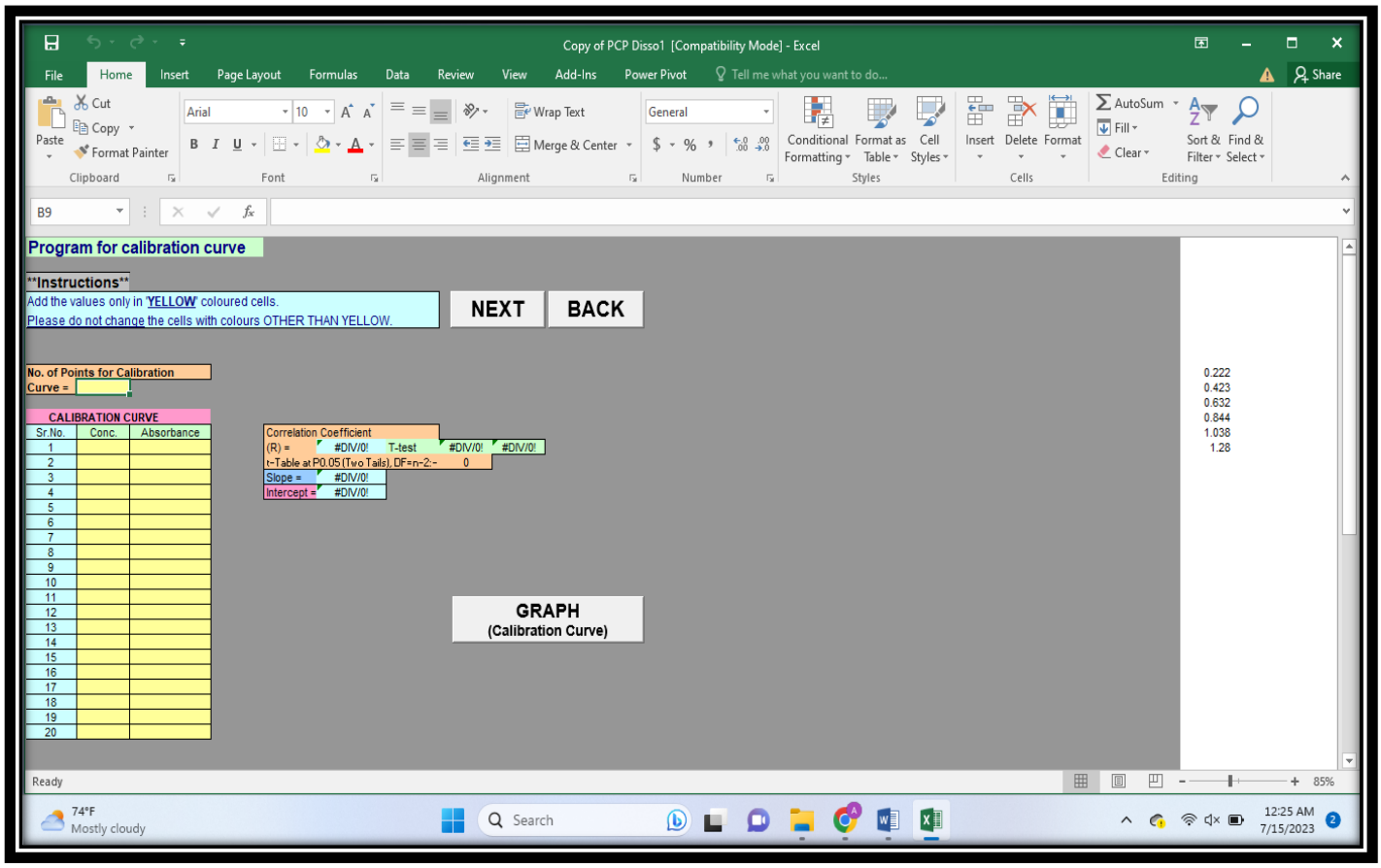
1. Chem Sketch



2. PKsolver



3. PCP Disso



PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.

Pune District Education Association's

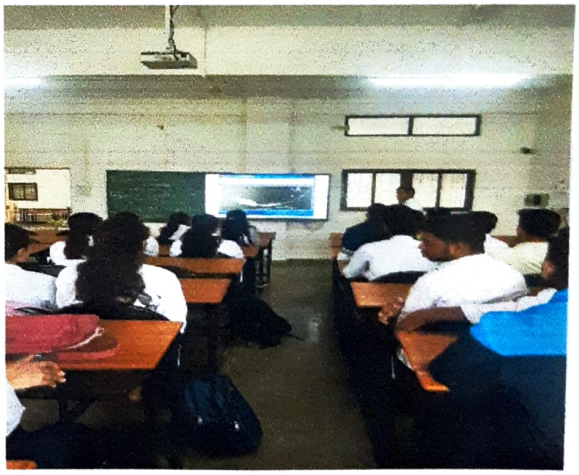
Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

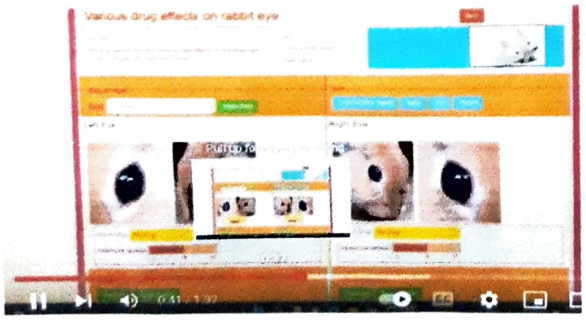
Demonstration of various softwares

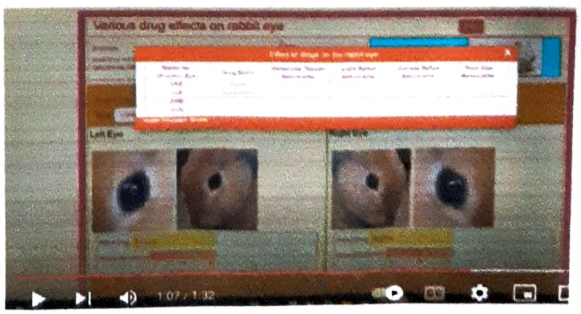
Class : Second Year B. Pharmacy **Sub: Pharmacology-I**

Aim: Effect of drugs on rabbit eye on Ex Pharma Software.









Mr. Krunal Kanase

HOD & Asst. Prof. in Pharmacology

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-411014.

PRINCIPAL

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre,
Kharadi, Pune-411014.