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.

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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-14.

Centre, Kharadi, Pune-14.

A. Experiential learning

Pune District Education Association's

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

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. Kshitija Satish Gaikwad Exam Seat No. 21024

has satisfactorily carried out the Practical Work Prescribed by Savitribai Phule Pune University for B. Pharmacy. Course under Faculty of Pharmaceutical Sciences in Pharmaceutical Microbiology (Subject)

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

19/07/2024

Sign. of Subject Incharge

PRINCIPAL
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 AND RESEARCH CENTRE

Name : Kshitija S. Gaikwad Class : S.Y.B.Pharm

Roll No. : 17 Exam Seat No. : 21024

Year : 2023 - 2024

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4.	28/9/23	Preparation and sterilisation of sabboured agar.	12-13	
5.	5/10/23	Preparation and ~~sterilisation of~~ Isolation of pure culture by using pour plate technique (Lbop dilution)	14-15	

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Sr. No.	Date of Experiment	TITLE	Page No.	Remarks & Sign. of Teacher
6.	5/10/23	Isolation of pure culture by using spread plate method.	16-17	
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8.	12/10/23	To study the bacterial morphology by simple (monochrome) staining	20-21	
9.	19/10/23	To study the morphology bacteria by Gram staining method.	22-24	
10.	26/10/23	Subculturing of bacteria of fungus by nutrient stabs & slant preparation.	25-26	
11.	2/11/23.	To study the given	27-29	

Certified that Mr. / Ms. / Mrs. Kshitija S. Gaikwad Exam Seat No. 21024

of S.Y.B.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
		bacterial culture by acid fast staining.		
12.	23/11/23	To perform microbial assay of streptomycin sulphate by cup plate method.	30-31	
13.	30/11/23	To study bacterial motility by using hanging drop technique.	32-33	
14.	6/12/23	To perform sterility test for sodium inglestion (500ml)	34-35.	
15.	6/12/23	To determine quality of water by most probable number list.		
16.	13/12/23	To determine the ability of micro-organism to produce amylase.		

completed

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	14/9/23	2	2	2	2	8	
2	14/9/23	2	2	2	2	8	
3	28/9/23	2	2	2	2	8	
4	28/9/23	2	2	2	2	8	
5	5/10/23	2	2	2	2	8	
6	5/10/23	2	2	2	2	8	
7	12/10/23	2	2	2	2	8	
8	12/10/23	2	3	2	2	9	
9	19/10/23	2	3	2	2	9	
10	26/10/23	2	3	2	2	9	
11	2/11/23	2	2	2	2	8	
12	23/11/23	2	2	2	2	8	
13	30/11/23	2	2	2	2	8	
14	6/12/23	2	2	2	2	8	
15	6/12/23	2	2	2	2	8	
16.	13/12/23	2	3	2	2	9	
						8.25	

Teacher's Signature

Experimental and hands-on training

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

Subject: Pharmacology-III (BP602T)

Class: T.Y.B. Pharm, Sem- VI (2019 Pattern)

Academic Year: 2023-24

Date: 20/12/2023

Aim - Study of effect of drugs on gastrointestinal motility. (Demonstrated by Ex. Pharma Software)

Principle: Gastrointestinal (GI) motility refers to the movement of food from the mouth through the pharynx (throat), esophagus, stomach, small and large intestines, and out of the body. Motility specialists identify and address conditions related to the body's movement of food through the gastrointestinal system.

Name and Signature of subject Teacher

Deepika Deepika Prajapati

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

Class: First Year B. Pharm.

Semester: I (2019 Pattern)

Subject: Pharmaceutical Analysis-I

Date: 18/01/2024

Topic: Preparation and standardization of 0.1 N $KMnO_4$

F.Y. B.Pharm students performing the standardization of 0.1 N $KMnO_4$ solution.

Mr. Veer V.S.
Subject Incharge

Principal
PDEA'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-14

Class-S.Y.B. Pharm, Sem-III

Subject-Pharmaceutical Microbiology (BP307P)

Academic Year – 2023-24

Aim: To study the principle and working of laboratory equipment.

Principle: The principle of autoclave or steam sterilizer is that water boils when it's vapour pressure equal that of surrounding atmosphere hence when pressure inside a closed a closed vessel increases, the temperature at which water boils also increases. Saturated steam has greater penetration power. When steam comes from into contact with cooler surface it condenser to water & give up its latent heat to that surface. The condensed water ensures moist condition for killing the microbes present. All microbial cells are destroyed by de-saturation process & coagulation of protein.

Students handling autoclave during practical (15/09/2023)

BShelar

Name and Signature of Subject Teacher- Mrs.B.G. Shelar

Pune District Education Association's

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

- **Class: S. Y. B. Pharm, Sem IV**
- **Subject: Pharmacognosy and Phytochemistry I**
- **Academic Year: 2023-2024**
- **Aim:** To Determine the Leaf Constants of given sample.(vein-islet number, Veinlet termination number)
- **Principle:**. The leaf sample was studied microscopically by taking transverse section (T.S.) through midrib with small portion of lamina, thin section was double stained with hematoxylin and saffranin and observed under compound microscope, and photos were taken by using photographic microscope. The leaf sample was also mounted in different reagent and cellular diagnostic and diagnostic cell inclusions were observed. Quantitatively, the vein islet number and termination number were determined using stage and ocular micrometers while leaf constants were determined using Camera Lucida

Student handling compound microscope micrometric apparatus for leaf study

Name: Prof. Vipul Dhasade

Department of Pharmacognosy

Pune District Education Association's

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

One-month Industrial Training

Pune District Education Association's

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

Details of Submission of Industrial Training Report by Final Year B. Pharm (Sem-VIII) students of Academic Year 2023-2024.

Roll No.	Name of the Students	Name of the Organization	Duration
1	Atole Akanksha Shivaji	Chandrika Hospital in Shri Harneshwar medical , Pune	10-12-2023 to 10-01-2024
2	Badhe Payal Santosh	Santosh Medical Store , Khodade Hospital, Jawala, Ahemednagar	9-01-2024 to 9-02-2024
3	Bavdhane Nilam H	Rajhans Medical in Jijai Hospital, Khamgaon, Pune	9-01-2024 to 9-02-2024
4	Bhosale Gitanjali Pandurang	Surya Multi-Speciality Hospital, Paranda	5-06-2024 to 5-07-2024
5	Bochare Shrinath Rangnath	Sarvadnya Hospital	15-12-2023 to 15-01-2024
6	Bohra Sayam Sunil	Sarvadnya Hospital	15-12-2023 to 15-01-2024
7	Choudhari Abhijeet Shivlal	Kilitch Drug Ltd.	15-12-2023 to 15-01-2024
8	Choudhary Yogesh K	Eisen Pharaceuticals	15-12-2023 to 15-01-2024
9	Dhale Rushikesh Krishna	Kilitch Drug Ltd.	15-12-2023 to 15-01-2024
10	Dhumal Siddhant Vikas	T.Walker's Pharmaceutics PVT. LTD	6-6-2024 to 6-07-2024
12	Dolare Sakshi Popat	Shrishali Medical stores, Mohol	9-01-2024 to 09-02-2024

13	Dombe Akshada Nilkant	Janseva General Hospital , pune	01-07-2024 t 01-08-2024
14	Dorage Shreya Dattatray	Jaywant Nurshing Home, Pune	13-06-2024 to 13-07-2024
15	Dumbre Jagruti Sandeep	Dr. Awari Hospital Shri Krushna Pharmacy, Chandan Nagar , Pune	2-03-2024 to 2-04-2024
16	Gaikwad Nikita Nana	Shree Siddhivinayak Hospital, Pune	6-06-2024 to 10-07-2024
17	Gaikwad Utkarsh Ramesh	Eisen Pharaceuticals	5-03-2024 to 5-04-2024
18	Ghavate Siddhi Ashok	Vighneshwara hospital, Manjari	12-04-2024 to 12-05-2024
19	Ghule Sonali Balasaheb	Vighneshwara hospital, Manjari	12-04-2024 to 12-05-2024
20	Ghule Vaibhavi Dattatray	Navjeevan Hospital, Manjari, Pune	11-03-2024 to 11-04-2024
21	Girase Pallavi Mahendra	Tuljai Hospital, Awhalwadi, Pune	5-02-2024 to 5-03-2024
22	Gosavi Subhash Santosh	Mahavir Medical in Arihant Hospital, Ahmednagar	11-12-2023 to 11-01-2024
23	Gund Rutuja Santosh	Jagdale Hospital and Siddhivinayak medical, Pune	05-01-2024 to 05-02-2024
24	Hambir Utkarsha Gulabrao	Shri Seva Medico, Pune	15-06-2024 to 15-07-2024
25	Hole Shubham Mahadev	Rajhans Medical in Jijai Hospital, Khamgaon, Pune	11-12-2023 to 11-01-2024
26	Holkar Nikita Rajaram	Heartbeat Multispeciality Hospital, Ahmednagar	09-01-2024 to 09-02-2024
27	Ingole Rajlaxmi Sanjay	Medicine World, Pune	9-01-2024 to 9-02-2024
28	Jadhav Shivjeet Ramesh	Eisen Pharaceuticals	10-01-2024 to 10-02-2024

29	Jadhav Vaibhav Santosh	Eisen Pharaceuticals	05-03-2024 to 5-04-2024
30	Jagtap Hrishikesh Sudam	Sanjivani Hospital , Pune	09-01-2024 to 9-02-2024
31	Jagtap Rutvik Anil	Inamdar Multispeciality Hospital, Pune	1-01-2024 to 01-02-2024
33	Kadam Manish Ramdas	Kilitch Drug Ltd	05-03-2024 to 05-04-2024
34	Kale Vinit Ganpat	Eisen Pharaceuticals	09-01-2024 to 9-02-2024
35	Kamble Esha Rajendra	Shri Samarth Speciality Hospital	05-06-2024 to 05-07-2024
36	Kaspate Shubham Biru	Inamdar Multispeciality Hospital, Pune	01-02-2024 to 01-03-2024
37	Khaladkar Tejas Santosh	Jagdale Hospital, Pune	09-01-2024 to 09-02-2024
38	Kharabe Khushi Rohidas	Biovet Privet Limited, Pune	18-06-2024 to 18-07-2024
39	Kirtane Vaibhav Vishwajeet	Eisen Pharaceuticals, Pune	10-01-2024 to 10-02-2024
40	Kolhe Gauri Ishwar	Padamshree Nursing Home Hospital	12-04-2024 to 12-05-2024
41	Lagad Jai Anil	Phoenix Hospital , Keshavnagar	12-04-2024 to 12-05-2024
42	Mane Rohini Vijaykumar	Harpale Hospital, pune	05-06-2024 to05-07-2024
43	Mane Sakshi Sayaji	Child Care Hospital, Solapur	22-06-2024 to 22-07-2024
44	Mate Mayur Rameshwar	Dr. Awari Hospital Shri Krushna Pharmacy, Chandan Nagar , Pune	15-06-2024 to 15-07-2024
45	Mohite Aditya Rahul	Eisen Pharamaceuticals , Pune	05-03-2024 to 05-04-2024
48	Naiknavare Deepali Radhkisan	Kale Hospital, Pune	01-06-2024 to 01-07-2024

49	Narvekar Snehal Sukhdev	Eisen Pharmaceutical CO. (PVT.) LTD	17/11/2023 to 16/12/2023
52	Patange Vaibhav Narayanrao	Kale Hospital , Pune	15-06-2024 to 15-07-2024
53	Pawar Pratiksha Prashant	Rajhans Medical in Jijai Hospital, Khamgaon, Pune	09-01-2024 to 09-02-2024
54	Pawar Vikas Rajaram	Kale Hospital, Pune	15-06-2024 to 15-07-2024
56	Raje Vasundhara Satish	Dwarkadhish Clinic, Pune	19-12-2023 to 19-01-2024
57	Rajpurohit Srushti Harisingh	Sure Health Clinic in Bharat Chemist, Pune	09-01-2024 to 09-02-2024
58	Raskar Laukik Chandrakant	Sahara Multi- Speciality Hospital, Pune	06-07-2024 to 6-08-2024
59	Rathod Bharat	Kilitch Drug Ltd.	15-12-2023 to 15-01-2024
60	Salunke Shreya Pravin	Sure Health Clinic in Deep Medical Chemist, Pune	05-02-2024 to 05-03-2024
61	Sawant Aarti Ramdas	Inamdar Multispeciality Hospital, Pune	09-01-2024 to 09-02-2024
63	Shewale Pranali R	Langhe Multispecialty hospital in Sarvadnya Medical Store	05-08-2023 to 05-11-2023
64	Solanke Prathamesh N	Sahara Multi- Speciality Hospital, Pune	06-06-2024 to 06-07-2024
66	Tambe Vaibhav Vishnu	Dr. Awari Hospital Shri Krushna Pharmacy, Chandan Nagar , Pune	02-02-2024 to 02-03-2024
67	Thite Rohan Nitin	Jadhav Hospital, Pune	05-12-2023 to 05-06-2024
68	Thokal Sakshi Bhaskar	Smarth Medical, Pranav Hospital, Kedgaon	01-02-2024 to 15-03-2024
70	Thopate Saurabh Dattatraya	Kanifnath Medical, Pune	12-04-2024 to 12-05-2024
71	Thorat Suyash Vikas	Sanjivani Hospital , Pune	09-01-2024 to 09-02-2024

72	Todmal Bhakti Nilesh	Eknath Hospital in Minerva Medico & General Store, Pune	05-08-2023 to 05-11-2023
73	Vidhate Rachna Suresh	Kale Clinical, Jalna	01-06-2024 to 01-07-2024

Mrs. Deepika Prajapati

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 SCIENCE AND RESEARCH
CENTER
KHARADI, PUNE 14

A REPORT ON : MEDICAL TRAINING AT KALE HOSPITAL

Submitted To

Savitribai Phule Pune University, Pune
For the fulfillment of the B.Pharmacy course

Submitted by

Mr.VIKAS RAJARAM PAWAR

Academic Year 2023-2024

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCE AND RESEARCH CENTER

KHARADI, PUNE 14

CERTIFICATE

This is to certify that **Mr.VIKAS RAJARAM PAWAR** student of final year B. Pharm of academic year 2023-2024 has completedhe him Medical training satisfactorily at **KALE HOSPITAL** for the fulfillment of the academic condition laid down by Savitribai Phule Pune University Pune for the award of B. Pharm degree.

Date: - 19/09/2024
Place: - Kharadi

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

DECLARATION

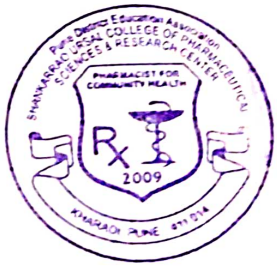
I affirm that I have completed my medical training at **KALE HOSPITAL** during **15/06/2024 to 15/07/2024**. The report of internship training being submitted in fulfillment of the academic condition laid down by Savitribai Phule Pune University for award of bachelor of pharmacy, for the academic year 2023-2024.

I assure that any part of this report has not been submitted elsewhere for award of any degree or diploma, in any other university

Gratitude to all.

Mr.VIKAS RAJARAM PAWAR

Date: 19/09/2024



!! SHREE SWAMI SAMARTH !!

KALE HOSPITAL

DR.PRASAD D. KALE,
B.A.M.S
REG. NO.1-42954-A-1
==========
Shop NO.02 KALATE PATIL PLAZA SAIRANG VILLA SOCIETY SARKAR CHAUK MARUNJI
TAL.MULSHI SHOPE DIST. PUNE 411057
==========

Rx

CERTIFICATE

This is to certify that **VIKAS RAJARAM PAWAR** student of **B. Pharmacy final year** of **Shankarrao ursal collage of pharmaceutical science and research center kharadi pune, 411014,**has successfully completed his one month in-plant training **15june 2024 to 15july** 2024 at kale Hospital in **Mamta Medico Marunji Tal. Mulshi Dist. Pune.**

His attendance was regular and conduct was satisfactory.Best wishes for his future form hospital and Mamta medico.

AUTHORIZED SIGNATURE

MAMTA MEDICO
Shop No 01.Gr Floor,Kalate Patil P...
Sr No.7/2,Near Sarkar Chow...
Marunji Pune-411057
Mob No - 9834285806

DR. PRASAD D.kale

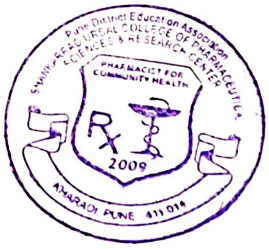
KALE HOSPITAL
Dr. PRASAD D. KALE
B.A.M.S.

ACKNOWLEDGEMENT

I would like to express my special thanks to Principal **Dr. Ashok V. Bhosale** & Training and Placement In-charge **Prof.Trusha P. Shangrapawar** for their continuous support in training, which helped me to get in doinga lot of excellent practical experience and I came to know about so manynew things.

I would like to take this opportunity to thanks "**KALE HOSPITAL**" for allowing me to undertake the training.

Above all, my heartful veneration goes to my God, Mother & Father who are part of my life, for their constant inspiration, love, care, patience and moral support which helped me to boost my confidence.



Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,

Kharadi, Pune-14.

A Report On

Professional / Industrial training in

Medicine World ,

Kharadi, Pune- 411014

Submitted to

Savitribai Phule Pune University, Pune.

For the fulfillment of the

B Pharmacy course

Submitted by

Ms. Rajlaxmi Sanjay Ingole

Final year B pharm

Academic Year 2023-2024

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

Certificate

This is to certify that **Ms. Rajlaxmi Sanjay Ingole** Student of final year B. Pharm of academic year 2023-2024 has completed her Medical training satisfactorily in **Medicine World Kharadi, Pune-14** for the fulfillment of the academic condition laid down by Savitribai Phule Pune University Pune for the award of B. Pharm degree.

Date: 13/08/2024

Place: Kharadi

Dr. Ashok Bhosale

Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14.

DECLARATION

I affirm that I have completed my medical training at **Medicine World** during **09/01/2024 to 09/02/2024**.The report of internship training being submitted in fulfilment of the academic condition laid down by Shavitribai Phule Pune University for award of bachelor of pharmacy, for the academic year 2023-2024. I assure that any part of this report has not been submitted elsewhere for award of any degree or diploma, in any other university.

Dr.Shrikant Kasar
MD (MED)
Consulting Physician

MEDICINE WORLD
Shop No.5 Sr. No.7/3
Raviraj Building, Rakshak Nagar
Kharadi, Pune

Name – **Ms. Rajlaxmi Sanjay Ingole**

Sign

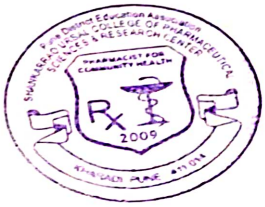
Place- Kharadi, Pune 14.

Date - 13/08/2024

Acknowledgement

I would like to express my special thanks to Principal **Dr. Ashok V. Bhosale** & Training and Placement In-charge **Prof. Dr. Ravindra Patil** for their continuous support in training, which helped me to get in doing a lot of excellent practical experience and I came to know about so many new things. I would like to take this opportunity to thanks "**Medicine World**" for allowing me to undertake the training. Above all, my heartful veneration goes to my God, Mother & Father who are part of my life, for their constant inspiration, love, care, patience and moral support which helped me to boost my confidence.

-



MEDICINE WORLD

Add.: Kharadi, Pune – 411014 Mob No.: 8379858814 / 9763682601

Date: 13/08/2024

Experience Certificate

This is to certify that **Ms. Rajlaxmi Sanjay Ingole** student of B.Pharmacy Final year of Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Kharadi, Tal Haveli Dist Pune 411014 has Successfully completed her one month In-Plant training from 09 Jan 2024 to 09 Feb 2024 at **Medicine World ,Kharadi Pune 411014.**

During her tenure, we found her sincere and hard working. We wish her all the very best in her future endeavours.

Dr.Shrikant Kasar
MD (MED)
Consulting Physician

MEDICINE WORLD
Shop No.5 Sr. No.7/3
Raviraj Building, Rakshak Nagar
Kharadi, Pune
Authorized Signatory

PUNE DISTRICT EDUCATION ASSOCIATION'S

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

A Report on

"HOSPITAL PHARMACY TRAINING"

AT

PHOENIX HOSPITAL, KESHAVNAGAR

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

IN PARTIAL FULFILLMENT OF THE B. PHARM COURSE

SUBMITTED BY

Mr. Jai Anil Lagad.

FINAL YEAR B PHARMACY

Academic Year 2023-2024

PUNE DISTRICT EDUCATION ASSOCIATION'S

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

Certificate

This is to certify that **Mr. Jai Anil Lagad** a student of Final Year B.Pharm of academic year 2023-2024 has completed her Hospital Pharmacy training satisfactorily in **Phoenix Hospital** for the fulfilment of the academic condition laid down by Savitribai Phule Pune University Pune for the award of B.Pharm Degree.

Date: 07/08/2024

Place: Kharadi

Dr. Ashok Bhosale

Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Scie. &
Research Centre, Kharadi, . 14.

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 **Mr. Jai Anil Lagad** a student of Final Year B.Pharm of academic year 2023-2024 has completed her Hospital Pharmacy training satisfactorily in **Phoenix Hospital** for the fulfilment of the academic condition laid down by Savitribai Phule Pune University Pune for the award of B.Pharm Degree.

Date: 07/08/2024

Place: Kharadi

Mrs. Trusha Shangrapawar.

(Training & Placement Officer)

PUNE DISTRICT EDUCATION ASSOCIATION'S

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

DECLARATION

I affirm that I have completed my Hospital Pharmacy training at **Phoenix Hospital** during **12/04/2024 to 12/05/2024**. 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 2023-2024 . 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- Jai Anil Lagad.

Place- Akkale Orchid, Near Renuka Mata Mandir, Keshav Nagar.

Sign-

Date-07/08/2024

ACKNOWLDGEMENT

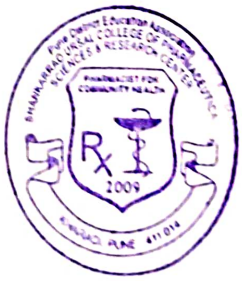
I would like to express my special thanks to Principal **Dr. Ashok Bhosale** and Training and Placement In-charge **Mrs.Trusha Shangrapawar** for their continuous support in training, which helped me to get in doing a lot of excellent practical experience and I came to know about so many new things.

I would like to take this opportunity to thanks **"Phoenix Hospital"** for allowing me to undertake the training.

Above all, my heartful veneration goes to my God, Mother & Father who are part of my life, for their constant inspiration, love, care, patience and moral support which helped me to boost my confidence.

Gratitude to all.

Mr. Jai Anil Lagad. **Date :** 07/08/2024



Phoenix
Multi Speciality Clinic

Dr. Mukesh Mahajan
MBBS, MD, DNB, IDCCM,
FICM (Critical care Medicine)
CCEBDM (Diabetes)
Reg. No. : 2007/04/0487

DATE: 12/05/2024

CERTIFICATE OF TRANING

This is to certify that Mr. Lagad Jai Anil student of B.Pharma 4th year, VIII Semester of PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-411014 Maharashtra has successfully completed her Industrial training from 12/04/2024 to 12/05/2024 at Phoenix Multi speciality clinic in the areas of Hospital Pharmacy.

During this period we have found him hardworking, sincere and known to learn various aspects of our Hospital Pharmacy.

We wish him all the best in his future endeavors.

FOR PHOENIX HOSPITAL

DR .MUKESH MAHAJAN

Dr. Mukesh Mahajan
M.B.B.S.,MD.,DNB
Consultant Intensivist
Reg. No.2007/04/0487

D.D.Mohite
Durga Generic Medicine Store
Shop No. 1, Mill No. 6/1794,
Sr. No. 35, Manjri Road, Lonkar Wasti,
Near New Orbis School, Keshavnagar,
Mundhwa, Pune-36. Contact - 8087994454

For Appointment : 8010360823 | 89992 89478 | 9823231238
dr.mukeshmahajan@gmail.com
Phoenixmultispecialityclinic12.com
phoenixmultispecialityclinic@gmail.com

Timing :
Monday to Saturday - 10:00 am 1:00 pm &
6:00 pm to 9:00 pm
Sunday : 11:00 am to 1:00 pm

Address :
Akkale Orchid, Near Renuka Mata Mandir,
Keshav Nagar, Pune - 411036.

Pune District Education Association's

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

Centre, Kharadi, Pune-14.

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

Pune District Education Association's

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

Guide Allotment for Practice School for Final Year B. Pharm (Sem- VII) 2019P
Academic Year 2023-2024.

Sr.No.	Name of the Guide	Roll. No	Name of the Student	Topics
1.	Prof. Dr V.U.Barge.	1	Atole Akanksha Shivaji	A review on Liposomes; A promising Technique for Drug Delivery
		2	Badhe Payal Santosh	A review on High Performance Thin layer Chromatography.
		3	Bavdhane Nilam Harishchandra	A review on Validation of Analytical Method.
2.	Prof. Dr.R.Y.Patil.	6	Bohra Sayam sunil	Comparative Studies of Marketed Formulations of Arista
		7	Choudhari Abhijeet Shivlal	
		8	Choudhary Yogesh Kuparam	
		9	Dhale Rushikesh Krishna	Comparative Studies of Marketed Formulations of Bhasma
		10	Dhumal Siddhant Vikas	
		11	Doke Shubham Dadabhau	
3.	Dr. Amit Kasbe.	14	Dorage Shreya Dattatray	Analysis of marketed formulation by U.V Spectroscopy
		15	Dumbre Jagruti Sandeep	
		16	Gaikwad Nikita Nana	
4.	Dr S.S Kakade.	19	Ghule Sonali Balasaheb	Solubility Enhancement of Fenofibrate by solid Dispersion Method
		20	Ghule Vaibhavi Dattatray	
		21	Girase Pallavi Mahendra	
5.	Dr. P.H Khade.	24	Hambir Utkarsha Gulabrao	Preparation and Evaluation of Herbal Lipstick
		25	Hole Shubham Mahadev	
		26	Holkar Nikita Rajaram	
6.	Mr. Vikram Veer.	29	Jadhav Vaibhav Santosh	U.V. Spectrophotometer Handling and Determination of some Drugs
		30	Jagtap Hrishikesh Sudam	
		31	Jagtap Rutvik Anil	
7.	Mr. Krunal Kanase.	34	Kamble Esha Rajendra	Production of Mosquito Repellant Insecticides using Orange peels
		35	Kaspate Shubham Biru	
		36	Khaladkar Tejas Santosh	
		37	Kharabe Khushi Rohidas	Formulation and Evaluation of Herbal Toothpaste
		38	Kirtane Vaibhav Vishwajeet	
		39	Kolhe Gauri ishawar	
8.		42	Mane Sakshi Sayaji	

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	Mrs. Trusha Sangrapawar.	43	Mate Mayur Rameshwar	Preparation and Evaluation of Herbal Lipstick
		44	Mohite Aditya Rahul	
9.	Mr. Vipul Dasade.	47	Naiknavare Deepali Radhakisan	Pharmacognostic Evaluation and Antimicrobial Potential of *Moringo oleifera*
		48	Narvekar Snehal Sukhdev	
		49	Pabale Sourabh Santosh	
		50	Pandkar Saniya Rajendra	
		51	Patange Vaibhav Narayanrao	Leucorrhoea Care by Ayurveda
		52	Pawar Pratiksha Prashant	
		53	Pawar Vikas Rajaram	
		54	Pujari Vaishnavi Vijaykumar	
10.	Mrs. Tejaswini Khande.	57	Rajpurohit Srushti Harisingh	Determination of Absorption Maxima and Area Under Curve Method of Telmisartan
		58	Raskar Laukik Chandrakant	
		59	Rathod Bharat Babulal	
		60	Salunke Shreya Pravin	
11.	Mrs. Kiran Ghule.	61	Sawant Aarti Ramdas	Review of Analytical methods and Stability indicating parameters
		62	Shegokar Yash Anil	
		63	Shewale Pranali Ramkrushna	
		64	Solanke Prathamesh Nandkishor	
12.	Mrs. B.G Shelar.	65	Sonawane Drushti Hemant	Formulation and Evaluation of Transdermal Patches.
		66	Tambe Vaibhav Vishnu	
		67	Thite Rohan Nitin	
		68	Thokal Sakshi bhaskar	
13.	Mr. N.S. Neharkar.	69	Thombre Mrudula Mahesh	Review of Analytical Method and Stability Indicating Parameters.
		70	Thopate Saurabh Dattatray	
		71	Thorat Suyash Vikas	
		72	Todmal Bhakti Nilesh	
14.	Mrs. Anjali Pande.	56	Raje Vasundhara Satishrao	Formulation and Evaluation of Diclofenac Sodium Gel
		73	Vidhate Rachna Suresh	
		74	Zalte Omkar Ganesh	
		75	Jedhe Gaurav Avinash	
15.	Dr Ashmita Sakare	04	Bhosale Gitanjali pandurang	U.V. Spectrophotometer Handling and Determination of some Drugs
		05	Bochare Shrinath Rangnath	
		12	Dolare Sakshi popat	
		13	Dombe Akshada Nilkanth	

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		17	Gaikwad Utkarsh Ramesh	Introduction of Chromatography and Characterization of Compounds by using TLC
		18	Ghavate Siddhi Ashok	
16.	Mrs. P.J.Bansod	22	Gosavi Subhash Santosh	To Carry Out Comparative Study between Different Brands of Marketed Metformin Tablet
		23	Gund Rutuja Santosh	
		27	Ingole Rajlaxmi Sanjay	
		28	Jadhav Shivjeet Ramesh	To Formulate and Standardize the Prepared Marketed Triphala Churna With Marketed Triphala Churna
		32	Kadam Manish Ramdas	
		33	Kale Vinit Ganpat	
17.	Mrs. Trupti Shah	55	Puri Ravi Kailas	Formulation of Mouth Dissolving Tablet
		40	Lagad Jai Anil	
		41	Mane Rohini Vijaykumar	
		45	Mohite Sumit Santosh	Formulation of Herbal Hair Oil Containing Onion Extract.
		46	Munde Amarnath Balkrishna	

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14

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Pune District Education Association's

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

Guide Allotment for Project work for Final Year B. Pharm (Sem- VIII) 2019P

Academic Year 2023-2024.

It is the responsibility of staff members to verify their **topic titles**, allotted students, make appropriate changes (if **necessary**), and **submit** with **their signatures**.

Sr.No.	Name of the Guide	Roll. No	Name of the Student	Title of Topic	Signature of Guide
1.	Prof. Dr V.U.Barge.	1	Atole Akanksha Shivaji	Development and Validation of Analytical Method for Determination of Methimazole in Bulk and Pharmaceutical Dosage Forms.	
		2	Badhe Payal Santosh		
		3	Bavdhane Nilam Harishchandra		
2.	Prof. Dr.R.Y.Patil.	6	Bohra Sayam sunil	Comparative in-vitro Study of Hydroalcoholic and Cow Urine Leaf Extracts of Nyctanthes arbor tristis for Anti- Arthritic Activity.	
		7	Choudhari Abhijeet Shivlal		
		8	Choudhary Yogesh Kuparam		
		9	Dhale Rushikesh Krishna	Standardization Evaluation and Comparative study of Marketed and freshly prepared Chyawanpras.	
		10	Dhumal Siddhant Vikas		
3.	Dr. Amit Kasbe.	14	Dorage Shreya Dattatray	Formulation and Evaluation of Herbal Soap.	
		15	Dumbre Jagruti Sandeep		
		16	Gaikwad Nikita Nana		
4.	Dr S.S Kakade.	19	Ghule Sonali Balasaheb	Formulation Development of Fast Disintegration Tablet of Fenofibrate Solid Dispersion.	
		20	Ghule Vaibhavi Dattatray		
		21	Girase Pallavi Mahendra		
5.	Dr. P.H Khade.	24	Hambir Utkarsha Gulabrao	Formulation and Evaluation of Herbal Herbal Lipstick.	
		25	Hole Shubham Mahadev		
		26	Holkar Nikita Rajaram		

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6.	Mr. Vikram Veer.	29	Jadhav Vaibhav Santosh	Determination of Drug Content of Erythromycin Estolate by using U.V. Spectroscopy	
		30	Jagtap Hrishikesh Sudam		
		31	Jagtap Rutvik Anil		
7.	Mr. Krunal Kanase.	34	Kamble Esha Rajendra	Formulation and Evaluation of Polyherbal Toothpaste by using Medicinal Plants.	
		35	Kaspate Shubham Biru		
		36	Khaladkar Tejas Santosh		
		37	Kharabe Khushi Rohidas	Formulation and Evaluation of Mosquito Repellent Cream.	
		38	Kirtane Vaibhav Vishwajeet		
		39	Kolhe Gauri Ishawar		
8.	Mrs. Trusha Sangrapawar.	42	Mane Sakshi Sayaji	Formulation and Evaluation of Herbal Soap.	
		43	Mate Mayur Rameshwar		
		44	Mohite Aditya Rahul		
9.	Mr. Vipul Dasade.	47	Naiknavare Deepali Radhakisan	Formulation and Evaluation of Phytosomes for Psoriasis.	
		48	Narvekar Snehal Sukhdev	Formulation and Evaluation of Liposomes for treatment of Skin Burn.	
		49	Pabale Sourabh Santosh		
		50	Pandkar Saniya Rajendra		
		51	Patange Vaibhav Narayanrao	Formulation and Evaluation of Phytosomes for Psoriasis.	
		52	Pawar Pratiksha Prashant		
		53	Pawar Vikas Rajaram		
		54	Pujari Vaishnavi Vijaykumar	Formulation and Evaluation of Liposomes for treatment of Skin burn.	
10.	Mrs. Deepika Prajapati	57	Rajpurohit Srushti Harisingh	Screening of Moringa Oleifera aqueous extract for Antimicrobial activity.	
		58	Raskar Laukik Chandrakant		
		59	Rathod Bharat Babulal		
		60	Salunke Shreya Pravin		

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11	Mrs. Kiran Ghule.	61	Sawant Aarti Ramdas	U.V. Analytical Method Development and Validation for Lamivudine.	
		62	Shegokar Yash Anil		
		63	Shewale Pranali Ramkrushna		
		64	Solanke Prathamesh Nandkishor		
12	Mrs. B.G Shelar.	65	Sonawane Drushti Hemant	Formulation and evaluation of Transdermal Patch.	
		66	Tambe Vaibhav Vishnu		
		67	Thite Rohan Nitin		
		68	Thokal Sakshi bhaskar		
13	Mr. N.S. Neharkar.	69	Thombre Mrudula Mahesh	Formulation and Evaluation of Dolutegravir and Lamivudine Tablet.	
		70	Thopate Saurabh Dattatray		
		71	Thorat Suyash Vikas		
		72	Todmal Bhakti Nilesh		
14	Mrs. Anjali Pande.	56	Raje Vasundhara Satishrao	Formulation and Evaluation of Diclofenac Sodium Gel by using Carbopol 940.	
		73	Vidhate Rachna Suresh		
		74	Zalte Omkar Ganesh		
		75	Jedhe Gaurav Avinash		
15	Dr Ashmita Sakare	04	Bhosale Gitanjali pandurang	Physiochemical Analysis and Thin Layer Chromatography of Polyherbal Extract	
		05	Bochare Shrinath Rangnath		
		18	Ghavate Siddhi		
		13	Dombe Akshada Nilkanth	Analytical Method Development and Validation of Aceclofenac in Bulk and Pharmaceutical Dosage Forms.	
		17	Gaikwad Utkarsh Ramesh		
		12	Dolare Sakshi popat		
16	Mrs. Poonam Jadhav	22	Gosavi Subhash Santosh	Formulation and Evaluation of Nano - sponges	
		23	Gund Rutuja Santosh		
		27	Ingole Rajlaxmi Sanjay		

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		28	Jadhav Shivjeet Ramesh	Formulation and Evaluation of Micro - sponges	
		32	Kadam Manish Ramdas		
		33	Kale Vinit Ganpat		
17	Mrs. Trupti Shah	55	Puri Ravi Kailas	Preparation of Mouth dissolving Tablet containing Antacid.	
		40	Lagad Jai Anil		
		41	Mane Rohini Vijaykumar		
		45	Mohite Sumit Santosh	Preparation of Herbal Oil Containing Onion Extract.	
		46	Munde Amarnath Balkrishna		

Dr R.Y Patil
Coordinator

Dr Ashok V Bhosale
Principal

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M. Pharm Research Projects

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

Date: 20/01/2024

List of Dissertation topics guided for M. Pharm. Students

Specialization: Pharmaceutics

(Academic Year: 2023-2024)

Roll No.	Name of student	Name of guide	Title of Dissertation
1.	Dagadgave Sudhir Prakash	Dr. Ashok Bhosale; Co-guide: Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Mouth Dissolving Tablet of Prochlorperazine Maleate.
2.	Daundkar Anuradha Shashikant	Dr. Ashok Bhosale; Co-guide: Dr. Sujit Kakade	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Rofecoxib
3.	Dhumal Neha Vinod	Dr. Ashok Bhosale; Co-guide: Dr. Prashant Khade	Formulation and Evaluation of Capsaicin Emulgel Using Natural Permeation Enhancer
4.	Gaikwad Rohit Bhimrao	Dr. Sujit Kakade	Formulation and Evaluation of Fusidic Acid and Ocimum Tenuiflorum Loaded Ethosomal Gel: Enhancing Therapeutic Efficacy Through Advanced Delivery System Development
5.	Gavali Prathmesh Pandurang	Dr. Sujit Kakade	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Meloxicam
6.	Haralkar Bhagwat Bhaskar	Dr. Sujit Kakade	Formulation and Evaluation Captopril Loaded Orodispersible Film from Modified Finger Millet Starch as Superdisintegrant
7.	Hirve Prathmesh Dnyaneshwar	Dr. Sujit Kakade	Formulation and Evaluation of Fast Disintegrating Tablet of Solid Dispersion of Sertraline HCl
8.	Jaiswal Vishakha Dhiraj	Dr. Sujit Kakade	Formulation and Evaluation of Mucoadhesive Buccal Tablet of Aceclofenac.
9.	Mengade Dnyaneshwari Suryakant	Dr. Prashant Khade	Preparation, Evaluation and Optimization of Nanosuspension of Simvastatin
10.	Moze Vaishnavi Prakash	Dr. Prashant Khade	Formulation and Evaluation of Terbinafine Hydrochloride Emulgel.
11.	Nigade Abhimanyu Sanjay	Dr. Prashant Khade	Design, Development and Evaluation of nanoparticles containing Lamivudine for HIV-1 Activity
12.	Panchal Shubham Shrirang	Dr. Prashant Khade	Formulation,Evaluations and optimization of Linum usitatissimum Mucilage-Based Nanoparticles for Effective Delivery of Atorvastatin calcium
13.	Parade Nilesh Sanjay	Dr. Prashant Khade	Design, Development and Evaluation of Nicotinamide Microemulson gel for Topical drug delivery

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14.	Randil Nikhil Santram	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Sustained Release Tablet of Ciprofloxacin.
15.	Virkar Prathmesh Ravindra	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Floating Tablet of Cimetidine.
16.	Waster Komal Balaji	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Ethosomal Gel Loaded with Mupirocin and Tridax Procumbens for the Treatment of Impetigo.
17.	Yewale Nirmala Sunil	Mrs. Trusha Shanghrapawar	Formulation and Evaluation of Mucoadhesive Sublingual Tablet of Bromocriptine Mesylate.

Dr. Sujit Kakade
HOD Pharmaceutics

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

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A Thesis Report
On

"Formulation and Evaluation of Fusidic Acid and *Ocimum Tenuiflorum* Loaded Ethosomal Gel: Enhancing Therapeutic Efficacy Through Advanced Delivery System Development."

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

In partial fulfilment for the degree of

Masters of Pharmacy in Pharmaceutics

SUBMITTED BY

MR. ROHIT BHIMRAO GAIKWAD

(M.Pharm. IVth Semester)

GUIDED BY

DR. SUJIT KAKADE

(Assistant Professor)

(HOD of Pharmaceutics Department)

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEG OF PHARMACEUTICAL
SCIENCES AND RESEARCH CENTRE,
KHARADI, PUNE – 411014

2023-2024

Dr. Sujit Kakade

PRINCIPAL
P. D. E. A's
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Kharadi, Pune-411014

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(Assistant Professor)

(HOD of Pharmaceutics Department)

PUNE DISTRICT EDUCATION ASSOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE,

KHARADI, PUNE – 411014

Dr. Sujit Kakade

2023-2024

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Kharadi, Pune-411014

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

CERTIFICATE

This is to certify that the research work entitled "Formulation and Evaluation of Fusidic Acid and Ocimum Tenuiflorum Loaded Ethosomal Gel: Enhancing Therapeutic Efficacy Through Advanced Delivery System Development" has been completed for the partial fulfillment of degree of Master of Pharmacy in Pharmaceutics by Mr. Rohit Bhimrao Gaikwad, a student of M.Pharm IV Semester during academic year 2023-2024. He has carried out his project satisfactorily under the guidance of Dr. Sujit Kakade at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune -411014.

Date: 31/07/2024

Place: Kharadi

Dr. Ashok Bhosale
Principal
P.D.E.A.'s S. U. College of
Pharmaceutical Sciences &
Research Centre, Kharadi.

examined

Dr. Sujit Kakade

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

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

CERTIFICATE OF THE GUIDE

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Date: 31/07/2024

Place: Kharadi

Dr. Sujit Kakade
(Research Guide)
Assistant Professor
P.D.E.A's S. U. College of Pharmaceutical Sciences & Research Centre, Kharadi.

Dr. Sujit Kakade

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

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Name of the College : Pune District Education Association's Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre, Kharadi, Pune-411 014. **[College code- 1235]**

B.O.S. : Pharmaceutical Chemistry

Sr.no.	Name of Student	Topic	Internal Guide	Remark
1	Avhad Pratiksha Bhagwan	Formulation development and analytical method development and validation for sustained release tablet containing Glibenclamide	Dr. Vijaya U. Barge	
2	Borase Pallavi Sarjerao	Formulation development and analytical method development and validation for nanogel formulation containing Kojic acid		
3	Deshmane Kamlesh Ravindra	Formulation development and analytical method development and validation for mouth dissolving tablet containing Bromelain		
4	Gaikwad Rajratna Deepak	Formulation development and analytical method development and validation for transdermal patch containing Glibenclamide		
5	Gavhane Mayuri Vaibhav	Analytical method development and validation of Lamivudine by using RP-HPLC	Dr. Ravindra Y. Patil	
6	Ghawate Dipti Popat	Analytical method development and validation of Verapamil Hydrochloride by using RP-HPLC.	Dr. Amit J. Kasbe	
7	Jadhav Purva Suresh	Analytical method development and validation of Eberconazole nitrate by HPLC		
8	Jadhav Rutuja Pravinkumar	Analytical method development and validation for the determination of Rivaroxabane in bulk and pharmaceutical dosage form using HPLC.		
9	Kalamkar Tanmayi Dattatray	Formulation development and analytical method development for Nanofibrous tablet of Glibenclamide	Mr. Vikram S. Veer	
10	Kendre Komal Anand	Analytical method development and validation of Allopurinol in bulk and it's dosage form by using RP- HPLC		
11	Patil Dipti Sambhaji	Formulation development and analytical method development of nanofibrous gel containing Ketoconazole and Clotrimazole		
12	Pawal Suvarna Pradip	Analytical method development and validation of Sparfloxacin by using RP-HPLC	Mr. Krunal G. Kanase	
13	Pinjari Pranali Vasant	Analytical method development and validation of Econazole nitrate by using RP-HPLC	Mr. Krunal G. Kanase	
14	Rode Mangesh Mohan	Formulation development and MTT assay of herbal Vitamin C powder and it's HPLC method development	Mr. Vivek B. Ingale	
15	Shaikh Almisba Faruk	Analytical method development and validation of marketed formulation of Nefopam HCl by using RP-HPLC	Mr. Vivek B. Ingale	
16	Gawali Kanifnath Subrao	Analytical method development and validation of Trifluoperazine by using HPLC-MS/MS	Mr. Vikram S. Veer	

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A Thesis Report

On

" ANALYTICAL METHOD DEVELOPMENT AND VALIDATION BY HPLC FOR MARKETED PREPARATION OF REMDESIVIR"

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

In partial fulfillment for the degree of masters of

Pharmacy in Pharmaceutical Quality Assurance

SUBMITTED BY

KADAM KIRAN ASHOK

(M. Pharm. Semester-IV)

GUIDED BY

Dr. Mrs. V. U. Barge

(Vice Principal & Professor)

PUNE DISTRICT EDUCATION ASOCIATION'S

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE

KHARADI, PUNE-411014

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CERTIFICATE

This is to certify that the thesis work presented entitled "ANALYTICAL METHOD DEVELOPMENT AND VALIDATION BY HPLC FOR MARKETED PREPARATION OF REMDESIVIR" has been completed for the partial fulfillment of degree of Master of Pharmacy in Pharmaceutical Quality Assurance by **Mr. Kadam Kiran Ashok**, a student of M. Pharm Sem-IV during academic year 2023-24. He has carried out his project satisfactory under the guidance of **Dr.Vijaya Barge** at Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune- 411014.

Date: 16/8/2024

Place: Kharadi

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(P.D.E.A'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre Kharadi, Pune)

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CERTIFICATE OF THE GUIDE

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Date: 16/8/2024

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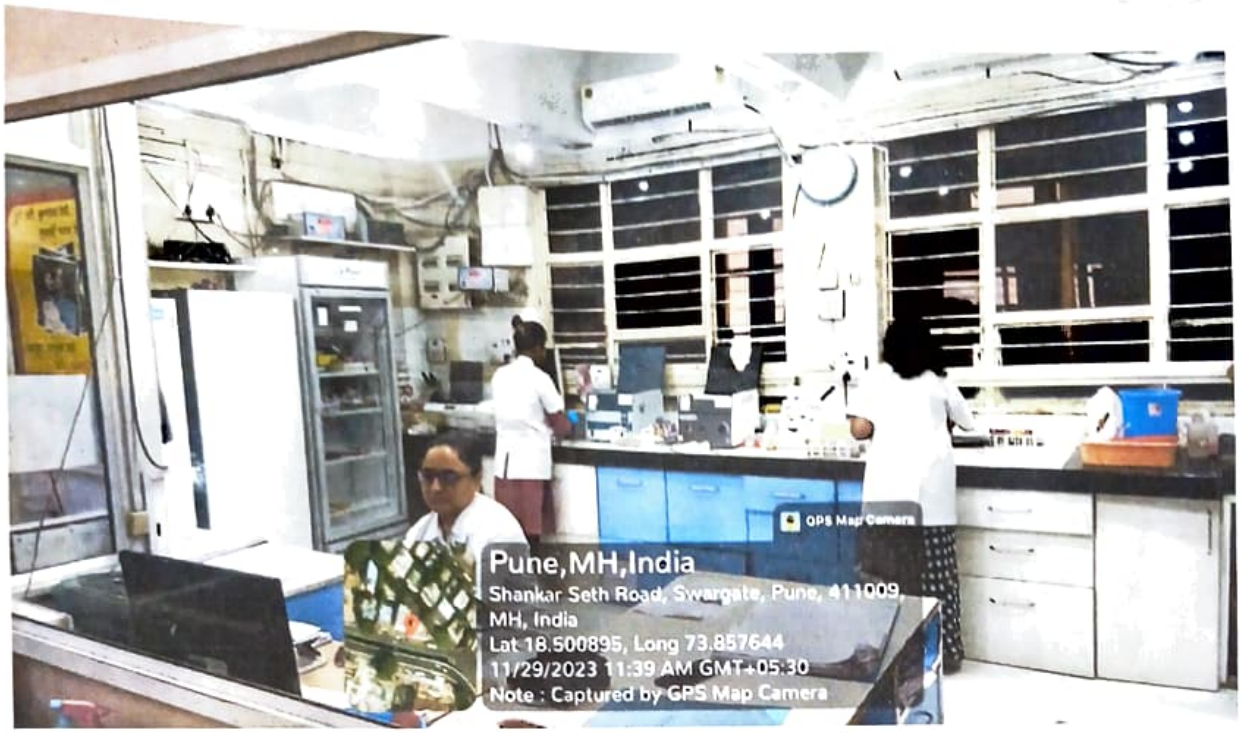
Blood Bank Visit

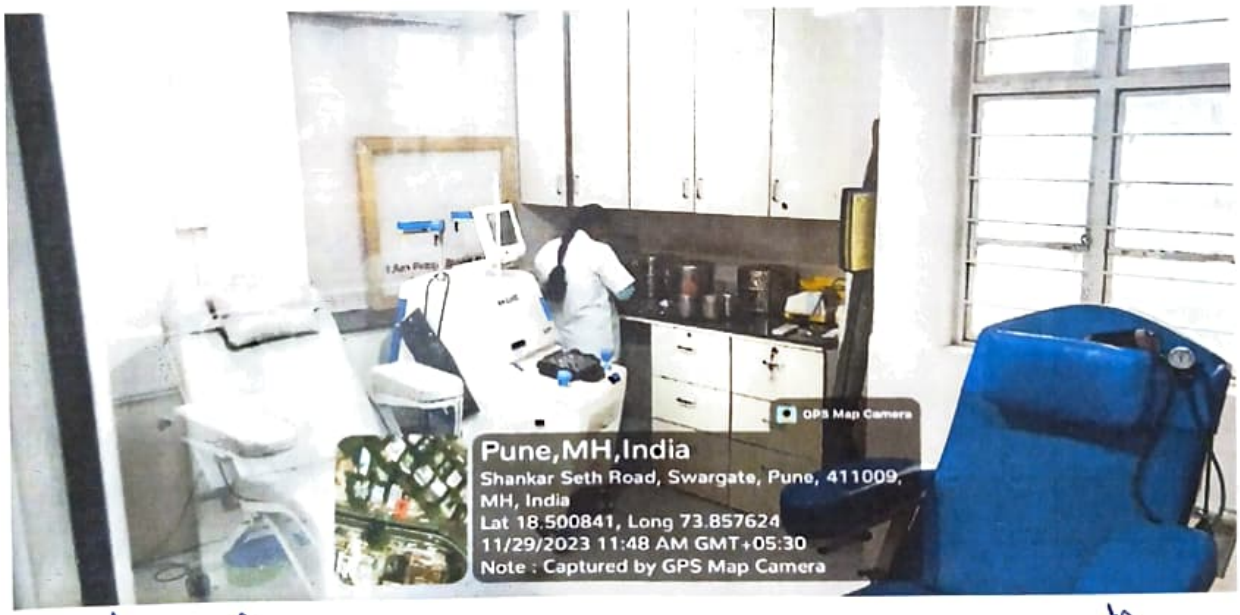
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-411 014.

Blood Bank Visit

Date: 29/11/2023

Blood Bank Visit – 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 29 th November 2023. Blood Bank Visit was attended by First Year Students The visit was informative, as a record of 61 students participated in it. Ms. Abhiruchi Jagdale 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.





Mr. Kranal Kanase

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Pharmaceutical Sciences & Research Centre

B. Participatory learning

Students learn software handling

List of Softwares used for Research

Academic Year 2023-24

INDEX

Sr. No.	Name of Software	Version	Page Number
1.	Chem Sketch	2021.1.2.	2
2.	PKSolver	-	17
3.	PCP Disso	3.0	18
4.	Design-Expert® software (DX13)	13.0	19

1. Chem Sketch

A. Introduction

This is an introduction to the program ChemSketch, from ACD Labs. You can use ChemSketch to draw chemical structures, and to view them as three dimensional (3D) models.

The approach in this tutorial is to show by example. I will lead you through one example in some detail, showing how to draw the structure, and how to convert it to 3D. After that, I will briefly show some other features.

No attempt is made here to teach all of ChemSketch. The idea is to guide you to some basics. If you can do the things shown here, you should then be ready to pursue more features of the program on your own -- as you need them.

B. Getting and installing ChemSketch

Requirements. ChemSketch should run under Windows versions from Windows 2000 onwards. (I am running v 2016 1.1 with Windows 10, 64 bit.)

If you want to run ChemSketch with other systems, see Notes: Requirements and versions.

Obtaining ChemSketch. Go to https://www.acdlabs.com/resources/free-chemistry-software-apps/. Choose ACD ChemSketch Freeware.

The current version is 2016, originally posted at their web site November 2016. (According to the ChemSketch "About" screen, the specific program version is now 2016 1.1, dated July 2016.) If you find a more recent version, please contact me, and I will update these instructions as needed.

Installation. Install ChemSketch by running the exe file that you downloaded. The installation program installs **two** programs, ChemSketch itself and a program called 3D. ChemSketch is the drawing module, and 3D is the module for viewing 3D structures. ChemSketch is introduced in Section C below, and 3D is introduced in Section E. More about how these two programs (or "modules") interact with each other in Sections E and I.

Settings. ChemSketch will run fine "out of the box". However, there are things one can set as you wish; they are on the **Options** menu, choose **Preferences**. Version 11 introduced one setting that may well be worth a try. On the **General** tab, click **Use Antialiasing**. This feature will result in less jagged lines on the screen output. More information about this feature is in the section Antialiasing, but it is probably ok to just turn it on. Whether it is on or off by default varies with the version; in version 14, it seems to be off.

C. Drawing your first molecule

In this section, you will draw a simple organic molecule, to get started with the basic features of ChemSketch. The molecule is propane, $CH_3CH_2CH_3$.

Open ChemSketch (for example, by clicking on its icon).

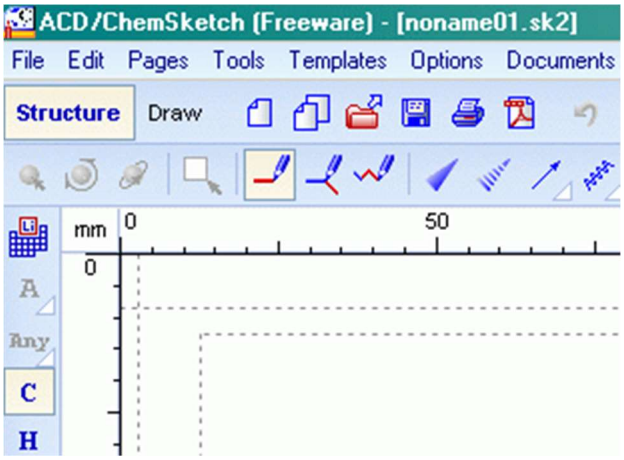


Fig. Screen shot of the upper left hand corner of the opening screen.

Two of the tool buttons are already "lit up" when you open ChemSketch. One of these is along the left side, labeled C, for carbon. The other is a tool that looks something like a pencil drawing a line, along the 2nd horizontal row of tools near the 20-25 tics on the ruler. This tool, named "Draw Normal", is the tool you use for ordinary drawing. Also, ChemSketch is in "structure" mode, as indicated by the word "Structure" being lit up (upper row of buttons, at left).

All of the settings mentioned here should be ok when you first open ChemSketch. However, if you change them, you may need to get back to them.

Single click anywhere on the main screen. You should see CH_4 appear on the screen.

Position the pointer over that CH_4. You will know when the pointer is properly positioned because a faint box will appear around the C atom (along with its hydrogens). Single click. You should now see $H_3C\text{-}CH_3$ (which is ethane).

Position the pointer over either C-region of that $H_3C\text{-}CH_3$. You will know when the pointer is properly positioned because a faint box will appear around the C atom you have chosen (along with its hydrogens). Single click. You should now see a 2D structure of propane (Fig 3):

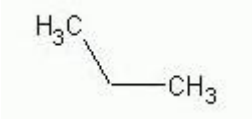


Fig 3. Propane.

Lessons from this section -- the basic tools of ChemSketch:
As you draw the propane structure, note the following general points...
To add a Carbon, you click on the place where you want it added. You use the C tool -- the default-- for this.
Each time you add a C, the number of hydrogens shown will adjust appropriately.
With these simple tools, you are drawing molecules of C and H.

D. 3D structures – introduction

At this point, you have a 2D structure on the screen in ChemSketch. You want to convert it to a 3D structure. There are two ways to do this; these are described in the following two sections. You can use either of them; they both work fine, and are approximately equivalent in ease and features. If you are just playing around to see some structures, it may be simplest to stay within ChemSketch (Section E). On the other hand, if you are already familiar with RasMol, you might prefer to save the structure in a file format that RasMol can read (Section F).

E. 3D structures, within ChemSketch

1. Convert the 2D drawing to 3D. To do this, go to **Tools** menu, and choose **3D Structure Optimization**. Alternatively, you can click the button near the right end of the second toolbar; the button looks like a model of CH_4 and lights up with the name **3D Optimization**. On my computer, it is "off the screen", and I have to choose >> ("more buttons") to get to it. (Note that this step is the same whichever method you use for getting a 3D view.)

If you want to do further editing of the structure, first undo the 3D optimization. Go to the **Edit** menu, and choose **Undo 3D optimization**.

2. Click on the rectangular button labeled **Copy to 3D**, near lower left corner of screen (Fig 4, below). ChemSketch will now switch to the 3D module, and display the molecule you have drawn.

If you do not see the **Copy to 3D** button, it means you have not yet opened the 3D Viewer program. That is ok; just go open it now. You can open 3D Viewer by clicking on the **3D Viewer** tool button near the right end of the upper tool bar. On my computer, it is "off the screen", and I have to choose >> ("more buttons") to get to it. Clicking this button opens 3D Viewer, and copies the current structure to that module. Another way to open the 3D Viewer is to go to the **ACD/Labs** menu, and choose **3D Viewer**. (Be sure you have done the 3D optimization before copying to 3D.)

If you do not see the **3D Viewer** tool button, you may need to add it to the toolbar. To do that, click on the odd symbol at the right hand end of the upper toolbar; the symbol looks like a hyphen with a down-arrowhead under it. You will get a list of buttons. Near the bottom is "3D Viewer". Click it, to add it to the toolbar. (This also lets you see what the button looks like.)

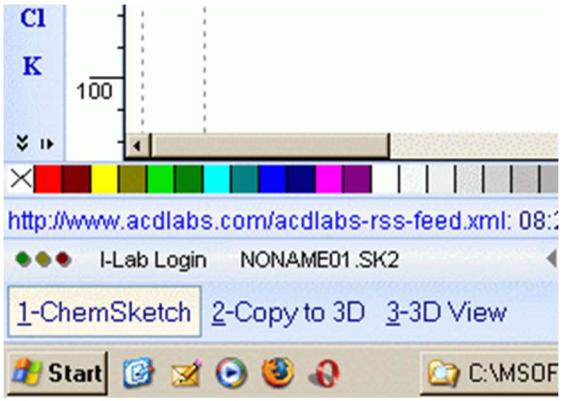


Fig Screen shot of the lower left hand corner of the ChemSketch screen -- after the 3D Viewer has been opened. If you do not see the buttons described here, see the paragraphs immediately above.

Note the **Copy to 3D** and **3D View** buttons, above/right of the Start button (which is shown in its default, most common, location at the lower left of the screen), and three lines below the default palette. (Also note the button there labeled **ChemSketch**. When you are in the 3D module, this button at the lower left, near Start, lets you switch back to the ChemSketch module.)

You can view and manipulate the 3-dimensional structure, in the 3D module. As examples...
- Go to the **View** menu, and choose **Balls & Sticks**. (You can also use the tool button that lights up with that name.)
- To rotate the structure, hold down the left mouse button while moving the mouse.

Double bonds may or may not show in the 3D module -- depending on the "view". (Drawing of double bonds is introduced in a section below: Double bonds (propene).) They show in **Wireframe** view, but not the other views. The geometry that is shown is correct, taking into account the double bond, but the doubleness of the bond per se is not shown in some views. (This is true for many viewing programs.) If you want to see the double bonds, you might also try viewing the structure in RasMol. To do this, see the next section: 3D structures, for RasMol. For a discussion of showing double bonds in RasMol, see the RasMol page, Cyclohexene.

Now that you know about the role of the 3D program... You can load both 3D and ChemSketch at once, by originally opening 3D. That is, loading the 3D program automatically loads ChemSketch (but not the other way). If you do this, you will need to click on the "ChemSketch" button at the bottom left to get to ChemSketch.

F. 3D structures, for RasMol

This section describes another way to make a 3D version of the 2D structure you drew in ChemSketch. It saves the file in a format that can be read by RasMol. This method requires using one more program, but may be useful if you are already familiar with RasMol.

There are three steps:

1. Convert the 2D drawing to 3D. To do this, go to **Tools** menu, and choose **3D Structure Optimization**. Alternatively, you can click the button near the right end of the second toolbar; the button looks like a model of CH_4 and lights up with the name **3D Optimization**. On my computer, it is "off the screen", and I have to choose >> ("more buttons") to get to it. (Note that this step is the same whichever method you use for getting a 3D view.)

2. Save the file in the MOL format, which RasMol can read. To do this, go to **File** menu, and choose **Save As**. At the bottom of the Save As dialog box, choose **file format** = MDL Molfiles (V2000) (*.mol). Give the file a name of your choice, and click **Ok** to save it. (In previous versions, there was only one option for MDL Molfiles; now you need to choose V2000.)

Prior to version 10, this step was done using **Export**, rather than **Save As**. Now, either command will work. That is, the functions of Export are now duplicated in Save As. Since Save As is the more conventional command, I recommend using it.

3. Open the file in RasMol. To do this, load RasMol. Go to the **File** menu, and choose **Open**. Open the selector box at the bottom, showing **Files of Type:**, and choose MDL Mol File Format. Now find the Mol file that you saved in Step 2, above, and Open it. Except for this one special step, specifying the file type, viewing the file in RasMol is entirely normal. See the RasMol page for information on this program.

G. Drawing in ChemSketch -- more basic features

This section will show you how to draw some other molecules. Each example will introduce one new feature of using ChemSketch. The instructions in this section will help you draw the 2D structure, as you did for propane (Section C, above). Then you can convert to 3D, as you did before [Sections D (introduction), E (within ChemSketch), F (making files for RasMol)]. The instructions for converting to and viewing in 3D above work for all structures drawn in ChemSketch.

1. Double bonds (propene)

Propene (propylene; CH_2=CH-CH_3) differs from propane in having a double bond. The drawing strategy is to draw propane, then change one C-C single bond to a double bond.

First, draw propane, as described above in Section C.

Now, put the pointer on one of the C-C **bonds** in the propane structure. You will know when the pointer is properly positioned, because a faint box will appear around the bond. Single click. The bond will change to a double bond, and the CH_3 will change to CH_2. You now have the 2D structure for propene (Fig 5):

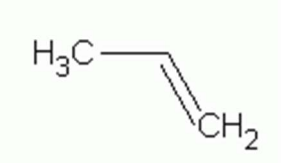


Fig 5. Propene.

Each time you click on a bond, it will increase from single to double to triple bond, or will change from triple back to single. Just click on the bond over and over, and you will toggle among these choices.

2. Heteroatoms (ethanol)

The "skeleton" of ethanol (ethyl alcohol; CH_3CH_2OH) differs from propane in having an O atom instead of one of the C atoms. That is, ignoring the hydrogens, propane is C-C-C and ethanol is C-C-O. The drawing strategy is to draw propane, then change one carbon atom to an oxygen atom.

A "heteroatom" is an atom other than C or H. Chemistry drawing programs usually draw C atoms by default, and they usually provide the proper number of hydrogen atoms. It is up to the user to specify atoms other than C or H.

First, draw propane, as described above in Section C.

Now, click on the O tool (for oxygen), on the toolbar along the left side; the O tool will light up. (The O tool is a little below the C tool, which you have been using so far, by default.) Then, put the pointer on one of the C atoms at either end of the propane structure. You will know when the pointer is properly positioned, because a faint box will appear around the atom (with its hydrogens). Single click. The C will change to an O, and the number of hydrogens will adjust appropriately. That is, the CH_3 will change to OH. You now have the 2D structure for ethanol (Fig 6):

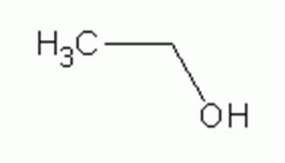


Fig 6. Ethanol.

This illustrates the general procedure for changing one atom to another in a ChemSketch structure.

In this case, if you changed the middle C to an O, you would make dimethyl ether, $H_3C\text{-}O\text{-}CH_3$.

If the heteroatom you want is not shown at the left, click on the periodic table button at the top of that column of tool buttons (just left of the "mm"; see Fig 2); it lights up as "Periodic Table of Elements". Choose the element you want from the periodic table. (The elements directly available at the left, with their own tool buttons, will vary.)

3. Rings and templates

ChemSketch provides templates of several "complex" structures, allowing you to add these structures as a unit. We illustrate that here with a ring.

Go to **Templates** menu, and choose **Table of Radicals**. (You can also reach this by pressing **F6**. There is also a tool button for this feature: it is along the right side, just below the ruler and just above tool buttons for some specific ring templates; it lights up as **Table of Radicals**.)

Find the section of the **Table of Radicals** called **Cycles**. Move the pointer to the benzene ring, and click on it. You will now be returned to the main screen. Position the pointer as desired, and single click. The benzene ring will be put on the screen.

The pointer will still carry the benzene ring. To add a second benzene ring to your structure, position the pointer over any specific atom of the first ring,

and single click. To fuse two rings, position the pointer over a bond in one ring, and single click.

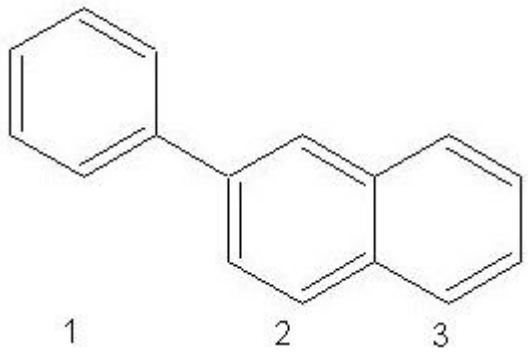


Fig. 2-phenylnaphthalene, drawn using the benzene ring template. Steps... Select the benzene ring template. Lay down ring #1, at the left. Lay down ring #2 at a specific atom on the first ring. Lay down ring #3 at a specific bond in #2.

And the pointer still carries the benzene ring! How do you get it to stop? Click something else. For example, you might click the C tool, at the left, to go back to adding individual carbon atoms. (Or, click on the lasso tool, so the pointer no longer carries anything. You can also right click, but this does not work for other tools, such as the common C tool.)

H. Lewis structures (more templates)

Briefly noted. The topic seems to not be in the help file at all.

Some aids for drawing Lewis structures are available on templates. Go to **Templates** menu, choose **Template Window**. Choose the **Lewis structures** or **Reaction symbols** template. (If either is not listed at the left, explore the drop down menu, near top left.)

The **Lewis structures** template offers several pre-drawn structures, as well as an assortment of dots and/or x's, which you can position as you wish. The **Reaction symbols** template offers a small number of symbols, but perhaps of a more convenient size. I suggest you explore what both templates offer. Note that the **Lewis structures** template has a second page, with some instructions.

I. Interactions between the ChemSketch and 3D modules

The above sections presented certain specific sequences of using the two modules, ChemSketch and 3D. As you become familiar with these two modules, you will learn that there is considerable flexibility about how you use them. Some points...

You can open either program or both programs in any order. It doesn't really matter. Open whatever you want whenever you want. But hint: If you know you want both, open 3D first; it automatically opens ChemSketch along with it.

If both programs are open, you can switch between them using the buttons at the lower left corner (Figure). If those buttons do not appear, it means that you have not yet opened the other module. If one program is open, the easy way to open the other one is from the **ACD/Labs** menu.

Caution. The "Copy to 3D" function does not seem to know whether you actually have a 3D structure. It will allow you to transfer a 2D drawing to the 3D module. So, the mere fact that you are in the 3D module does not mean that you have a proper 3D structure. Be sure to carry out the **3D Structure Optimization**. The good news is that you can actually do this within either module. In the 3D module, the **3D Structure Optimization** function is available from the **Tools** menu or a tool button. (This function is labeled both **3D Structure Optimization** and **3D Optimization**, in various places.)

J. Stereochemistry: Drawing cis-trans isomers at double bonds

Sometimes you want a particular group to point in a certain direction, and the drawing program may insist it point in another direction. This section presents one simple but versatile little trick to deal with this. The specific example is drawing cis-2-butene. By default, ChemSketch seems to want to draw the trans isomer.

Here is how you can draw the cis isomer. This is illustrated in Fig 8, below. The three parts of the figure represent three stages in the drawing. To make the figure, I copied each stage into a new position, so you could see each stage. But normally you would just do all the steps sequentially on one drawing.
1. Draw 2-butene, following the usual procedures. This gives you (a) in the figure. The problem is that the right hand methyl group points down, and you want it to point up.
2. Add one more methyl group -- the one that points up. This gives you (b) in the figure.
3. Remove the lower methyl group, the one you do not want. To do this, choose the **lasso** tool (upper toolbar, near left); using this tool, select the group you want to remove; then remove it with CTRL/X or delete. Now you have (c) in the figure, the desired cis-2-butene.

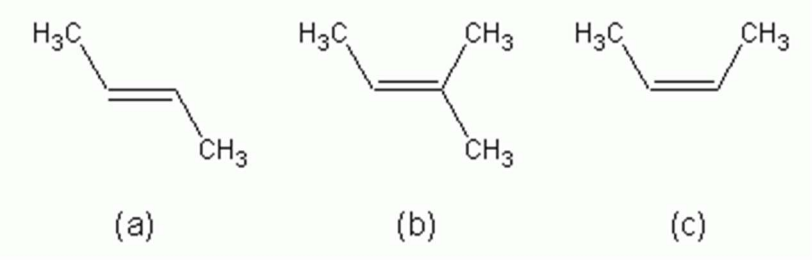


Fig. How to draw a specific cis-trans isomer.

The procedure described above is useful whenever you want a group to point in a specific direction different from the program default. For example, you may be simply drawing an extended alkyl chain, but want it oriented a certain way.

K. Stereochemistry: Wedge bonds

Wedge bonds allow you to specify that an attached atom is above or below the plane.

Fig 9, below, shows an example. In this example, wedge bonds are used to show a specific stereoisomer at a stereocenter. This was done in three stages. First, I drew an ordinary structure for bromochloroiodomethane (that is, a C with Br, Cl, I, H attached). This is shown at the left. Then, I made two copies of this, on the right. (The copies were for my convenience in making the figure. In normal use, you would just modify the original.) In the top right copy, I changed two of the bonds to up wedges and two to down wedges. In the lower right copy, I did something similar, but switched which bonds are up and which are down.

Procedure for changing an ordinary bond to a wedge bond: To do this, choose a wedge bond tool, and then click on the desired bond. The wedge bond tools are at about 50 on the tool bar just above the ruler; see Fig 2. The solid wedge ("Up Stereo Bonds") is for a bond pointing up, and the dashed wedge ("Down Stereo Bonds") is for a bond pointing down. You can also use the wedge bond tools to draw new bonds.

I have named the structures in Fig 9, using the naming feature of ChemSketch. I showed the names here so you can see that the left hand structure does not get an R/S designation, and the two right hand structures do get R/S designations. Convince yourself that these are correct. The procedure for getting the names is shown below in the section Naming structures.

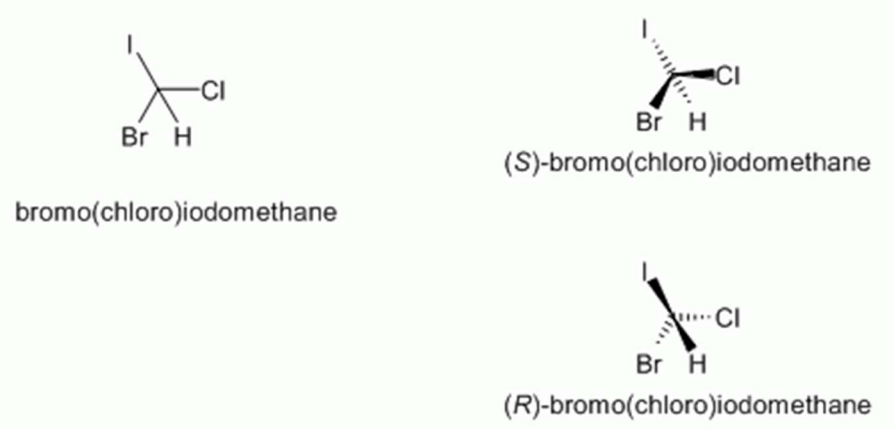


Fig. Screen shot to show wedge bonds. Explanation is above.

Caution. ChemSketch will put wedges wherever you tell it to -- even if they are physically unreasonable. For example, you could draw all four bonds around a C with up wedges -- which is not possible. The ChemSketch naming procedure will not put an isomer designation on such an improper structure.

L. Unusual atoms labels (X for halogen, Me, etc)

Sometimes you want to label an "atom" (a particular position on a structure) with something other than an ordinary element symbol. Examples include: D for deuterium, X for a general halogen, Me for methyl.

The symbols D and T, for the hydrogen isotopes, are available from the regular periodic table (near its lower right). That periodic table was introduced above near the end of the section on Heteroatoms (ethanol).

A more general way to insert an unusual "symbol" is the feature **Edit Atom Label**. This tool is on the left tool bar -- but off the screen. So, expand the left tool bar (>> = "more buttons") and look for the button labeled abc; it will light up as **Edit Atom Label**. Click on the abc button; the cursor will now have an odd symbol starting with ab attached to it. Click on the atom you want to change (or anywhere on the drawing screen). A new box opens, called Edit Label. You now have two main choices: First, you can type in the label you want, and press insert. Or you can choose an item from the list there, and press insert.

M. Showing charges

How does one make a charged species, such as the acetate ion shown in the following figure?

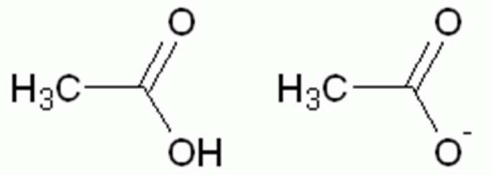


Fig 10. Screen shot to show an example of a structure with a charge on an atom. Left: acetic acid Right: acetate ion

The general approach is to draw the neutral molecule first, then change the charge as needed. We will assume you know how to draw the neutral molecule, acetic acid (left) in this case.

Here are two ways to change the charge. The first is simpler for this case; the 2nd is more general.

Both use functions on the left-hand column of buttons. If you do not see the desired button, right-click in the column, and you will get a nice readable list of the buttons, well labeled.

Method 1. Use the "decrement charge" button. You may see instead an "increment charge" button (with a red + on it). If so, click on the little lit-up corner (lower right), and choose the - option. The button will now be for "decrement charge". Click on it, and then click on the O of interest. That should give you the desired ion. (Note that ChemSketch, by default, adjusts the number of H shown to fit.)

Method 2. Use the "atom chemical properties" button. Click on it, and then click on the O atom. You will get a dialog box with much to offer. Choose charge = -1. Click Ok. That should give you the desired ion.

N. Naming structures

To name a structure you have drawn, use the "Generate name for structure" tool. You can access this from the **Tools** menu (expand the **Generate** item), or from the button near the right hand end of the upper toolbar.

Fig. Screen shot to show how ChemSketch names a structure. In this case, I drew a 3-C chain, added a fourth C at the middle position and then changed it to a Cl. I then used the "Generate name for structure" tool; ChemSketch wrote the IUPAC name, 2-chloropropane, just below the structure.

If you want to remove a name that ChemSketch has put on the screen... If naming was the most recent action, then using **Undo** (on the **Edit** menu) will remove it. More generally, click on the name to select it, then "delete" it (such as by using CTRL/X).

The "Name" feature will name geometric isomers of alkenes using the E,Z system.

Example. Draw 2-butene. Name it. ChemSketch seems to draw the E isomer (which is trans), by default, and it properly names it as the E isomer. Now, put a Cl at the 2-position (replacing the H). Replacing an H with a Cl switches the ranking at this position (relative to the methyl group). Name the new compound; it is now, properly, named as Z.

O. SMILES and InChI

SMILES and InChI are both ways to describe a chemical structure in simple text characters.

SMILES = Simplified Molecular Input Line Entry Specification. InChI = (IUPAC) International Chemical Identifier.

This is not the place to try to explain them, but if you want to try them, they are available. Both are available from the **Tools** menu; expand the **Generate** item, and you will see SMILES and InChI commands. There are commands for structure-to-code and code-to-structure.

P. Import and export (file types)

In the Section 3D structures, for RasMol we made use of the ability of ChemSketch to save (export) a file in another file format. In this case, we used the MOL format, thus making the file suitable for use with the RasMol program.

In fact, ChemSketch can **Open** (or **Import**) and **Save** (or **Export**) files using several formats. Many of these are file formats used by other programs that deal with chemical structures. For these **File** menu commands, the file type choices are available in the usual dialog box that comes up for choosing file name and type.

Open vs **Import**? In earlier versions of ChemSketch, the Open command was for the ChemSketch file format, and Import was used for other file formats. Starting with version 10, the functions of Import are duplicated in Open. That is, the two are now equivalent. I recommend use of the more common Open command; Import remains as a legacy command for those who remember it from early versions. Similarly, **Save As** and **Export** are now equivalent. (What about **Save** and **Save As**? **Save** is intended for saving a new copy of an existing file, with the same name, type, and location. **Save As** is intended when you want to change something. For a new file, the two commands become equivalent; that is, using **Save** will bring up the **Save As** dialog box.)

Starting with v 10, ChemSketch can save structures as PDF files. This feature is available from the **File** menu, **Save As** command. [This does not work for 3D models (i.e., from the 3D module).] There is also a button for this, on the upper tool bar, next to the **Print** button. It looks like the common Adobe Acrobat logo and is labeled **Export to PDF**.

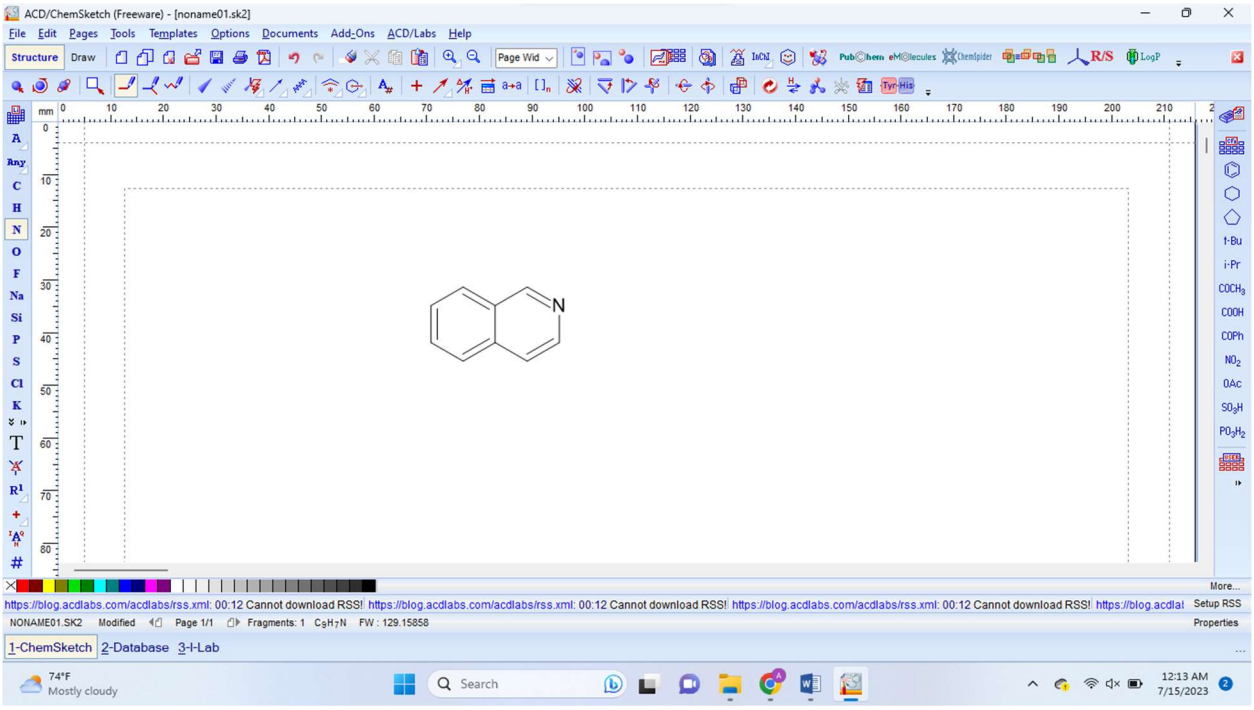
A somewhat related operation is the use of ChemSketch structures in Microsoft Word. To do this, copy the desired information from the ChemSketch screen in the usual way. Then, in Word, use Paste Special (Edit menu) to insert the information into a Word document.

Q. Antialiasing

Antialiasing makes lines and edges appear smoother on the screen. Information on how to turn on this feature was introduced in the section Getting and installing ChemSketch; scroll down to **Settings**, at the end of that section. Whether it is on or off by default varies with the version; in version 14, it seems to be off.

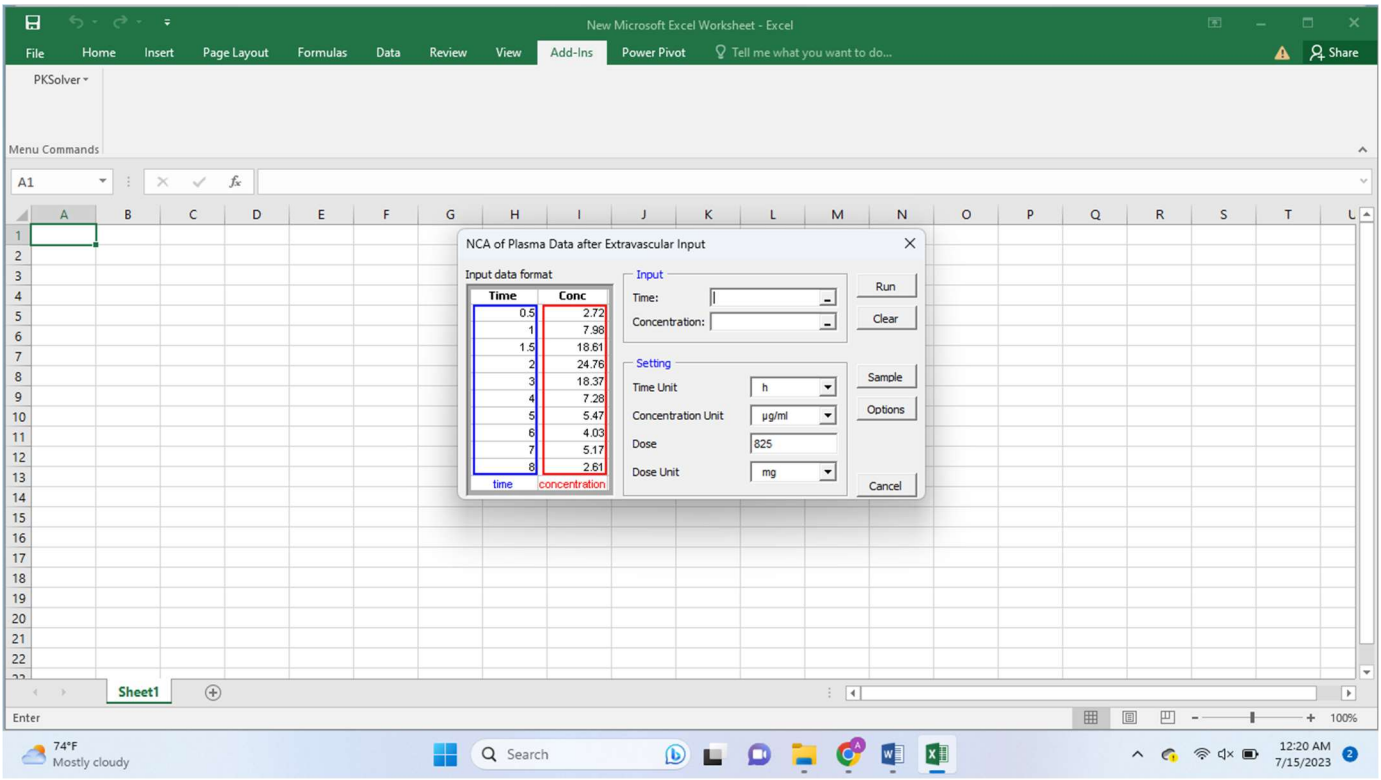
The smoothing is applied as part of displaying the structure; it is not stored in the file. Thus, one can gain the benefit of antialiasing with pre-existing files, and can turn it on or off as desired.

Since antialiasing is a display feature, not intrinsic to the drawing, it may or may not be included when you copy a structure to another application. A true screen capture will include the smoothing. On the other hand, copying the structure and pasting it into Word or Powerpoint (with Paste Special) does not include the smoothing. (The free program IrfanView contains a good screen capture feature. IrfanView is at https://www.irfanview.com/.)



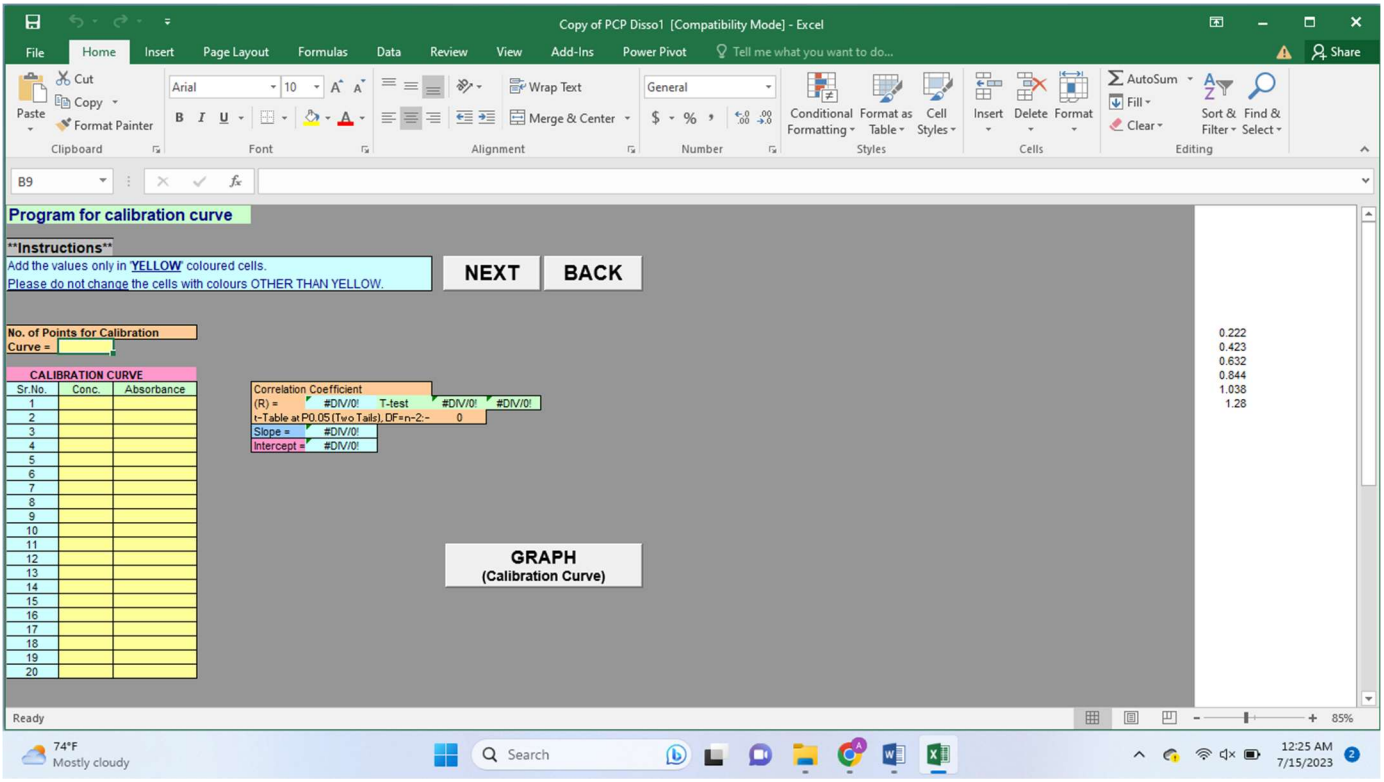
2. PKSolver

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 concentration time profile based on the classical one-compartment model.



3. PCP Disso

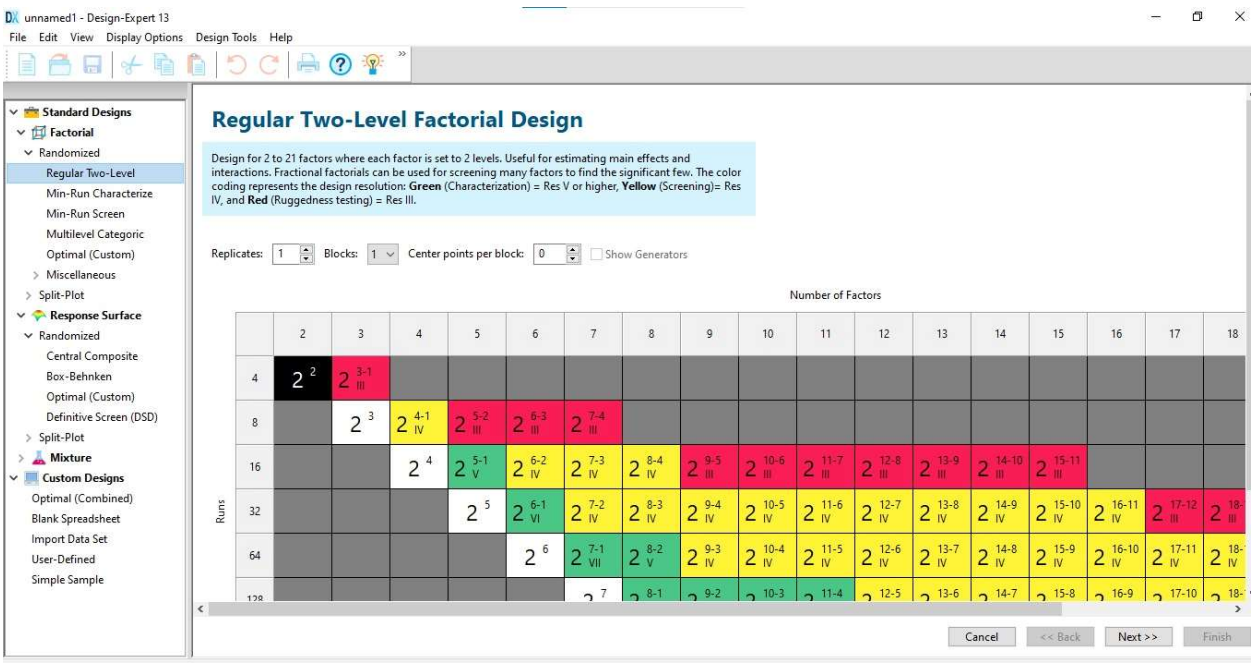
For calibration curve, percent drug release, model fitting and F2 factor from the dissolution studies.

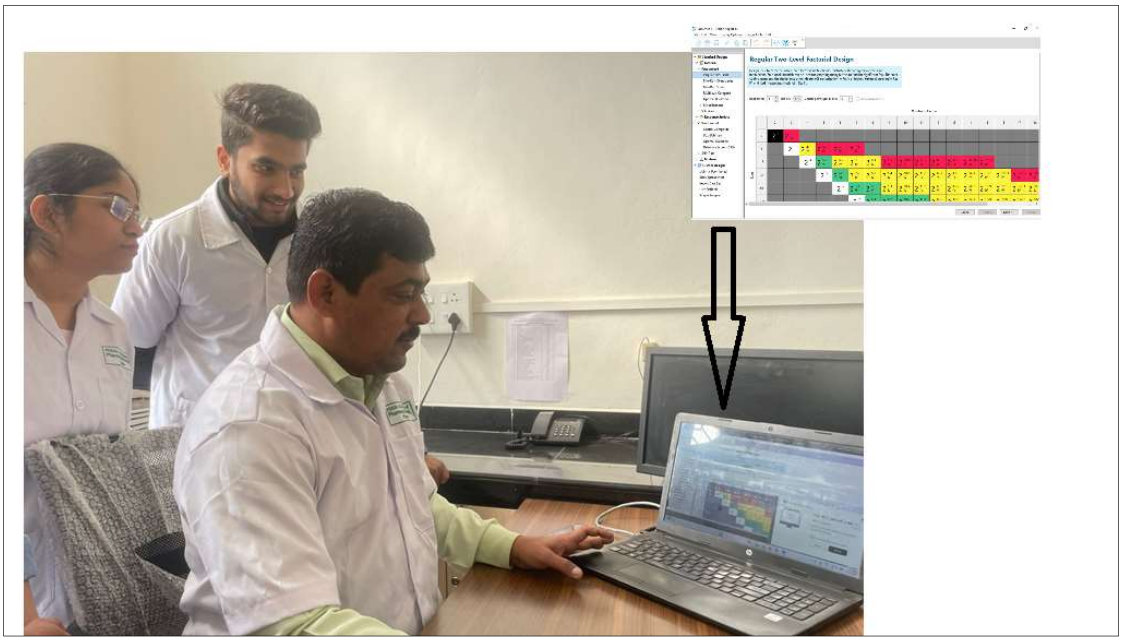


4. Design-Expert® software (DX13)

Design-Expert 13 (DX13) is a software tool that can be used to optimize products and processes. It offers a variety of statistical tools, including:

1. Two-level factorial screening designs: Helps identify the most important factors that affect a product or process
2. General factorial studies: Helps find the best combination of categorical factors
3. Response surface methods (RSM): Helps find the best process settings for optimal performance
4. Mixture design techniques: Helps find the ideal recipe for a product formulation
5. Logistic regression: Helps analyze binary data, such as whether a process is pass/fail
6. Poisson regression: Helps fit more accurate models when the response is a count data
7. Multiple analyses: Helps model all responses in different ways for easy comparison





Dr. Amit Kasabe demonstrating and operating of the Design-Expert 13 (DX13) is a software tool to the M. pharmacy students.

Dr. Amit Kasabe
Subject Teacher

Instrument Handling

Students Handling Instrument

Class: First Year M. Pharm P.Q.A
Semester: I (2019 Pattern)
Subject: Quality Control and Quality Assurance (MQA103T)
Academic Year: 2023-24
Aim: Introduction to UV spectrophotometer, it working, principle and applications.

PRINCIPLE

Ultraviolet-visible spectroscopy or ultraviolet-visible spectrophotometry (UV-Vis or UV/Vis) refers to absorption spectroscopy or reflectance spectroscopy in the ultraviolet-visible spectral region. Ultraviolet-visible (UV-VIS) spectroscopy is an analytical method that can measure the analyte quantity depending on the amount of light received by the analyte.

Ultraviolet/Visible area (UV-Vis) measurements span wavelengths from around 200 nm to 800 nm. The absorption by a molecule of ultraviolet or visible radiation results in transitions between the molecule's electrical energy levels. The optical and electronic properties of different materials, such as films, powders, monolithic solids, and liquids, are suitable for characterization.

UV-vis spectroscopy is a cost-effective, simple, versatile, non-destructive, analytical technique suitable for a large spectrum of organic compounds and some inorganic species. As a function of wavelength, UV-vis spectrophotometers measure the absorption or transmission of light that passes through a medium.

In order to classify and measure the concentration of substances in liquid streams, high performance liquid chromatography and ultra-high performance liquid chromatography incorporate UV-vis detectors. It allows the detection of all animals by integrating these techniques with mass spectrometry.

THEORY

When the interaction between incident radiation and the electron cloud in a chromophore results in an electronic transition involving the promotion of one or more of the outer shell or the bonding electrons from a ground state into a higher energy state, ultraviolet-visible (UV-Vis) spectra are derived.

Generally, the UV and visible spectral bands of substances are large. And may not exhibit a high degree of compound recognition accuracy. Nonetheless, they are sufficient for quantitative assays and are useful as an alternate means of detection for several substances. The radiation from typical hot solids consists of several wavelengths and depends primarily on the temperature of the solid and is predictable from the principle of chance, the energy released at each given wavelength.

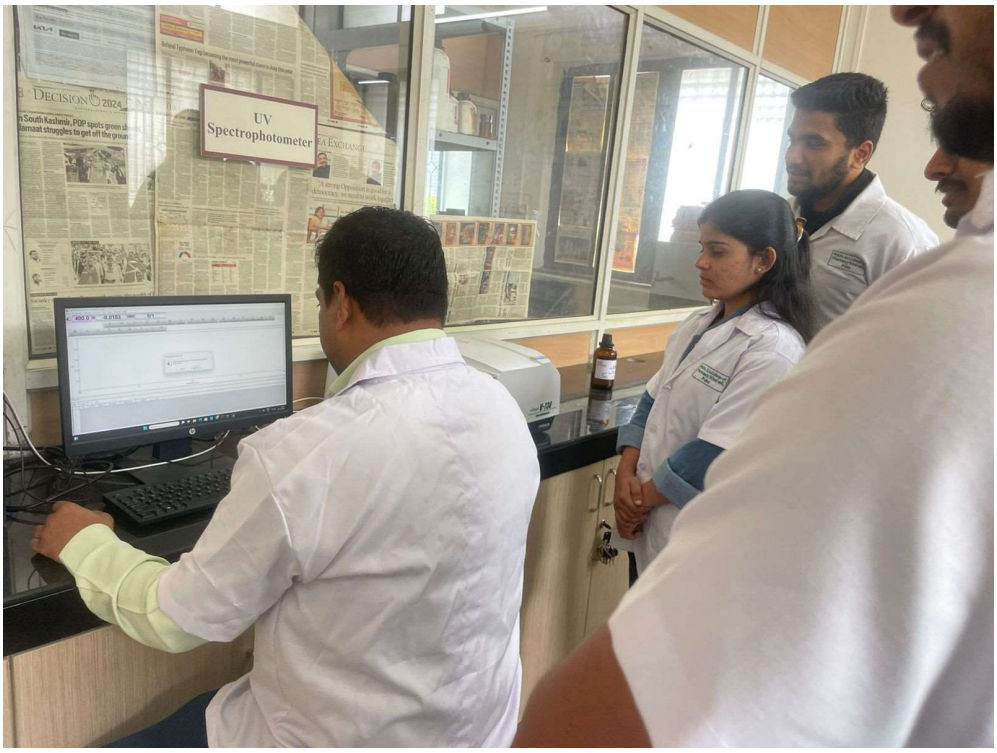
More recently, using a version of this-the tungsten-halogen lamp-has become standard practice. Radiation is transmitted deep into the UV zone through the quartz envelope. The most popular source is the deuterium lamp for the UV region itself, and a UV-Visible spectrometer would normally have all types of lamps to fill the whole wavelength spectrum.

APPLICATIONS

In research, ultraviolet/visible spectroscopy is used more commonly than in detection. Through first reacting the sample to bring the metal into solution as an ion, the trace metal content of an alloy, such as manganese in steel, can be determined.

A common technique for quantitative analysis of analytes in QA/QC, analytical research, and government regulatory laboratories is UV-Visible spectrophotometry. The fundamentals of the approach are learned in school, such as Beer's Law. UV-Visible Mid-range to Upper-end Spectrophotometers are typically used in research laboratories, including university and industrial laboratories.

The ion is then complexed or made to react so that it can be measured in a shape, such as manganese as the manganate (VII) ion. When the spectrum is registered, the absorbance is the most valuable bit of information since the concentration of the solution can be determined if the absorption coefficient of the chromophore is known and thus the mass of the metal in the sample.



UV Spectrophotometer demonstration

Dr. Amit Kasabe
Subject Teacher

Group Activities

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and
Research Centre, Kharadi, Pune-411 014.

Group Discussion

Course: Pharmacology III

Course code:BP602T

Class: Third Year B. Pharm.

Semester: Sem-VI (2019P)

Academic Year: 2023-24

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

Subject: Pharmacology-III (BP602T)

Class: T.Y.B. Pharm, Sem- VI (2019 Pattern)

Academic Year: 2023-24

Date: 15/02/2024

Group Discussion on

Topic Name:

First line drugs of Antitubercular Agents

Sr. No.	Name of Students	Sign
1.	Choudhari · Mayuri · Anil	
2.	Galande Anagha · Anil	
3.	Chowdhari Gaurav · Dattatray	
4.	Gabhale Harsh Ramchandra	
5.	Thorat Sejal Santosh ·	
6.	Dalvi Shravani · Yeshwant	
7.	Hake Komal Hiraman	
8.	Bhorkade Shraddha Bhimanna	
9.	Ankita anil shinde	
10.	Avantika Bharat Dhore	
11.	Awhale Vaishnavi . T.	
12.	Pratibha Kodag	
13.	chavan Divya kalyan	
14.	Kshirsagar Aishwarya	
15.	Choudhary Jeetendra	
16.	Pawar Aditi	
17.	Chaugule Akanksha	

18.	Neha Deepak Rikame	
19.	Bhagyalaxmi Baliram kadam	
20.	Akshay Ashruba Shinde	
21.	Shreeyash Shiva Sodde	
22.	Siddesh Kokate	
23.	Jadhav Anannya	
24.	Dhumal saksui	
25.	Mrunali Tade	
26.	Thombare Yogiraj Vitthal	
27.	Thorat Sejal Santosh.	
28.	Toradmal Gaurav Pradip	
29.	Sakshi harish wadhai	
30	Vajrashetti Isha S.	

Deepika Prajapati

Name and Signature of subject Teacher

Student Centric Methods
(Academic year 2023-24)

Class: F.Y.M. Pharm.
Semester: II (2019 Pattern)
Subject: Computer Aided Drug Development (MPH203T)
Date: 21.03.2024

Group Discussion

Topic: Artificial Intelligence

Students participating in a group discussion utilizing charts on the subject of Artificial Intelligence.

Nitin

Mr. Nitin Neharkar
Subject Teacher

Class: F.Y.M. Pharm.
Semester: II (2019 Pattern)
Subject: Computer Aided Drug Development (MPH203T)
Date: 21.03.2024

List of Students Participated in Group Discussion on the Topic of Artificial Intelligence.

Sr. No.	Students Name
1.	Adsul Harshali Vijaykumar
2.	Galam Chaitali Chandrakant
3.	Harpale Shrutika Tanaji
4.	Pathan Albina Nasar
5.	Pawar Rajeshwari Dattatraya
6.	Rathod Rahul Sheshrao

Nitin

Mr. Nitin Neharkar
Subject Teacher

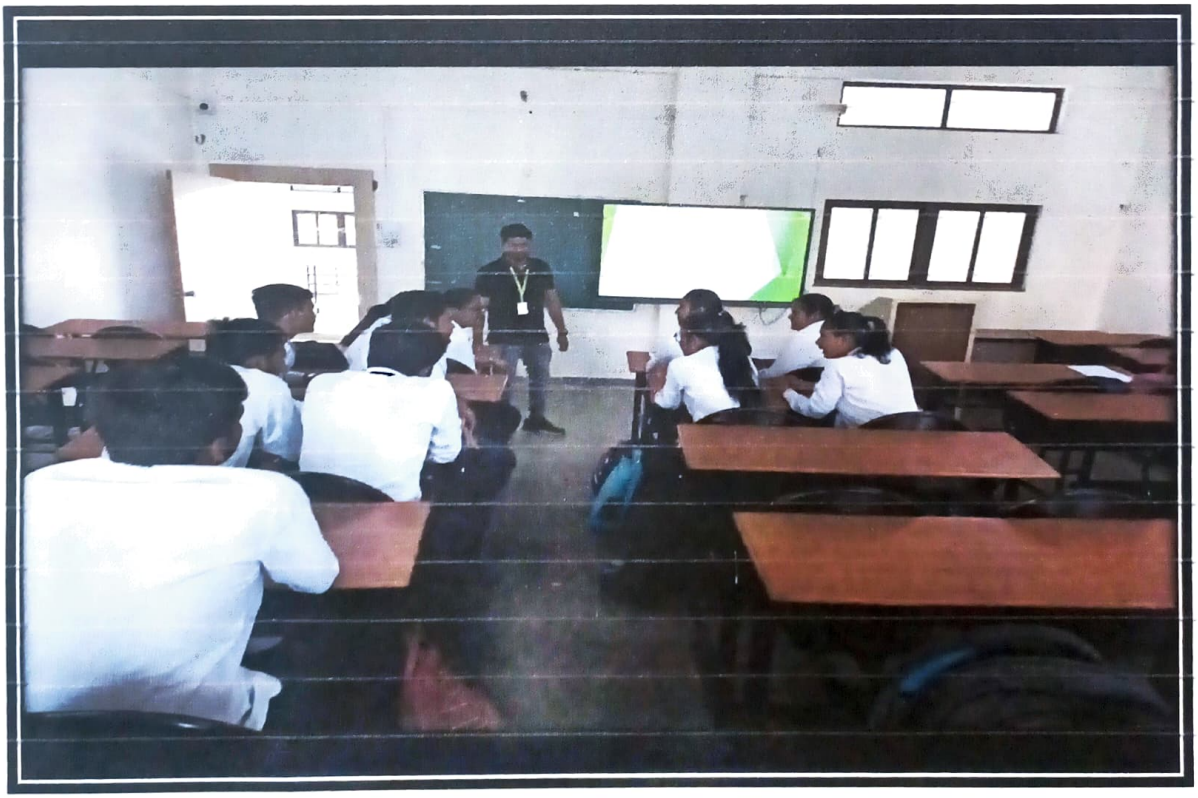
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences
and Research Centre, Kharadi, Pune-14

Student Centric Methods
(Academic year 2023-24)

Class: Final Year B. Pharm.
Semester: VIII (2019 Pattern)
Subject: Biostatics and Research Methodology (BP801T)
Date: 15.03.2024

Group Discussion

Topic: Research Methodology



Students participating in a group discussion utilizing charts on the subject of research methodology.

Nitin

Mr. Nitin Neharkar
Subject Teacher

Class: Final Year B. Pharm.
Semester: VIII (2019 Pattern)
Subject: Biostatics and Research Methodology (BP801T)
Date: 15.03.2024

List of Students Participated in Group Discussion on the Topic of research methodology

Sr. No.	Students Name
1.	Atole Akanksha Shivaji
2.	Badhe Payal Santosh
3.	Bavdhane Nilam Harishchandra
4.	Bhosale Gitanjali pandurang
5.	Dhale Rushikesh Krishna
6.	Dhumal Siddhant Vikas
7.	Dolare Sakshi popat
8.	Dumbre Jagruti Sandeep
9.	Gaikwad Nikita Nana
10.	Gaikwad Utkarsh Ramesh
11.	Ghavate Siddhi Ashok
12.	Ghule Sonali Balasaheb
13.	Kaspate Shubham Biru
14.	Khaladkar Tejas Santosh
15.	Kharabe Khushi Rohidas
16.	Kirtane Vaibhav Vishwajeet
17.	Kolhe Gauri ishawar
18.	Lagad Jai Anil
19.	Mane Rohini Vijaykumar
20.	Thokal Sakshi bhaskar

Nitin

Mr. Nitin Neharkar
Subject Teacher

Pune District Education Association's

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

Participation of students in Seminars/ Workshops/ Conferences organized by the institute

Participation of students in Seminars/ Workshops/ Conferences organized by the institute

Academic Year 2023-24

Name of the workshop/ seminar	Number of Participants	Link to the Activity report on the website
Research Methodology		
Avishkar	**30**	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/553/Avishkar-2023%20college%20report%20(1).pdf
Seminar on Research Methodology	**95**	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/537/Report%20on%20%20seminar%20on%20Research%20Methodology%202023-24..pdf
Seminar on Unexplored Opportunities in Pharma Field	**89**	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/554/Opportunity%20pharma%20field.pdf
Pharma Product Development and Marketing Strategies	**78**	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/555/Pharma%20Product%20development%20report%20(1).pdf
Course in Medical Writing	**33**	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/556/Medical%20Writing%20course.pdf
Seminar on Entrepreneurship Awareness	**121**	https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/538/Enterprenership%20programme%20report%20(1)%20(1).pdf

Participation of students in Seminars/ Workshops/ Conferences organized by other institutes

S. Y. M. Pharm Students
Dept. of Pharmaceutics
(Academic Year: 2023-24)

Roll No.	Name of student
1.	Dagadgave Sudhir Prakash
2.	Daundkar Anuradha Shashikant
3.	Dhumal Neha Vinod
4.	Gaikwad Rohit Bhimrao
5.	Gavali Prathmesh Pandurang
6.	Haralkar Bhagwat Bhaskar
7.	Hirve Prathmesh Dnyaneshwar
8.	Jaiswal Vishakha Dhiraj
9.	Mengade Dnyaneshwari Suryakant
10.	Moze Vaishnavi Prakash
11.	Nigade Abhimanyu Sanjay
12.	Panchal Shubham Shrirang
13.	Parade Nilesh Sanjay
14.	Randil Nikhil Santram
15.	Virkar Prathmesh Ravindra
16.	Waster Komal Balaji
17.	Yewale Nirmala Sunil

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PAPER ID : IJRAR24A3067

Registration ID : 284924

R.B.Joshi

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THIS IS TO CERTIFY THAT

Mr./Ms./Mrs./Dr. Anuradha Shashikant Daundkar

of SVCOPSRC, Khoradi pune. has Participated as a Delegate at National Conference on "Overseas Opportunities for Pharma Aspirants" convened on December 2, 2023. His/Her participation is well appreciated.

Dr. Akshada Koparde
Dean Academics & Convener, KIP, KVV, Karad

Dr. Namdeo Jadhav
Dean & Organizing Chairman, KIP, KVV, Karad

Ms. Archana Kaulagekar
Deputy Director, International affairs, KVV, Karad

Dr. M. V. Ghorpade
Registrar, KVV, Karad

PUNE DISTRICT EDUCATION ASSOCIATION'S

SETH GOVIND RAGHUNATH SABLE COLLEGE OF PHARMACY & POLY, SASWAD

Certificate

This is to certify that, **Ms. Anuradha S. Daundkar** from Shankarrao ursal college pf pharmacy Kharadi, pune has participated as a Delegate/Resource Person in One day International Webinar on **"Intellectual Property Rights: Challenges, Risks, and Solutions"** held on 22nd December 2023 organized on the occasion of Birthday celebration of Hon. Sharadchandraji Pawar Saheb and Birth Anniversary of Smt. Sharadabai Pawar.

Mrs.J.R.Jagtap	Mrs.D.B.Jagtap	Dr.S.J.Pawar	Dr.R.S.Chavan
IQAC Co-ordinator	Co-ordinator	Co-ordinator	Principal

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5th International Conference on Traditional Medicine

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CERTIFICATE

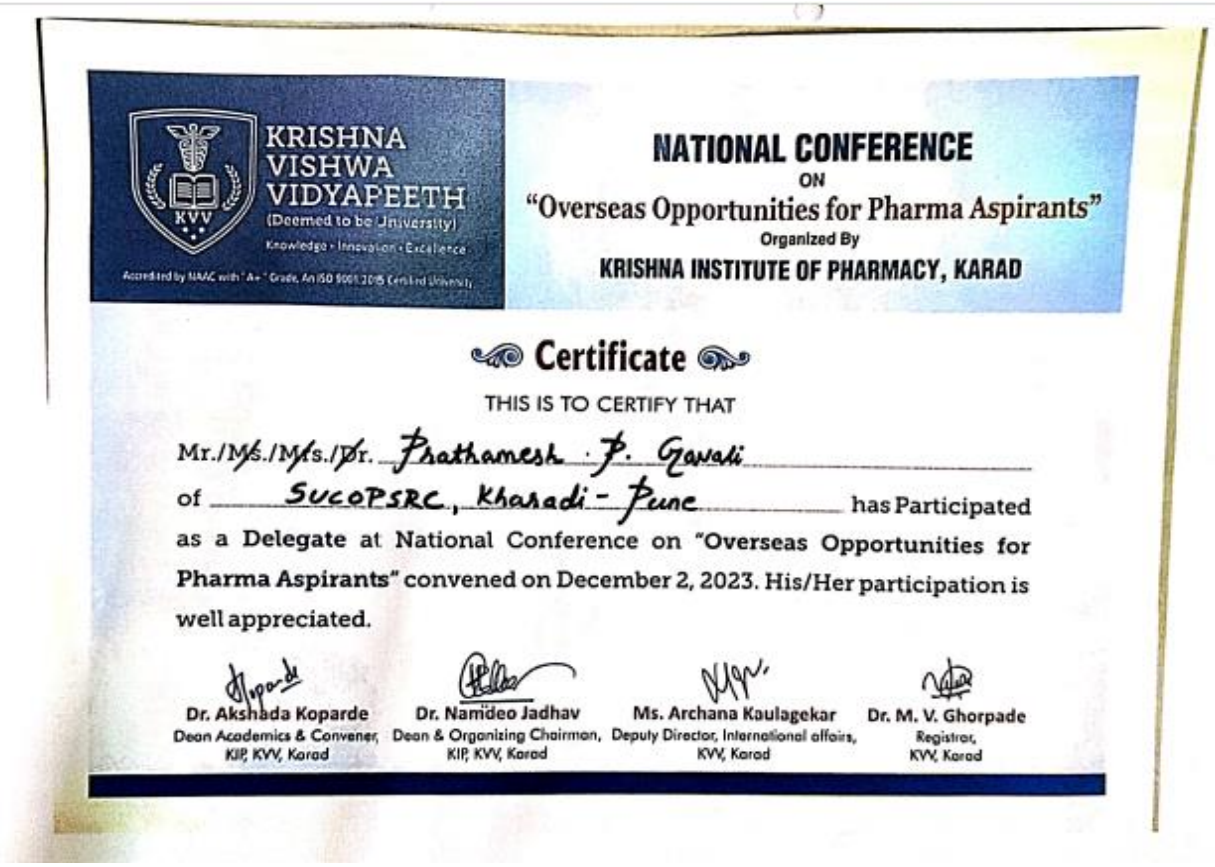
This is to Certify that,

Rohit Gaikwad

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.

We duly acknowledge his / her participation.

Mr. K. A. Suryavanshi	Dr. Y. V. Ushir
Coordinator	Program Chair



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Mr./Ms./Mrs./Dr. Prathamesh P. Gavali

of SVCOPSRC, Khasadi - Pune has Participated as a Delegate at National Conference on "Overseas Opportunities for Pharma Aspirants" convened on December 2, 2023. His/Her participation is well appreciated.

Dr. Akshada Koparde	Dr. Namdeo Jadhav	Ms. Archana Kaulagekar	Dr. M. V. Ghorpade
Dean Academics & Convener, KIP, KVV, Karad	Dean & Organizing Chairman, KIP, KVV, Karad	Deputy Director, International affairs, KVV, Karad	Registrar, KVV, Karad

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Published in IJRAR (www.ijrar.org) UGC Approved - Journal No : 43602 & 7.17 Impact Factor

Volume 11 Issue 2 April 2024, Date of Publication: 16-April-2024

PAPER ID : IJRAR24B1652
Registration ID : 287202

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organized by APP Maharashtra State Branch and
APP American International Branch
in collaboration with APP Natural Product Research & Development Division
at RMP's Bhalchandra College of Pharmacy, Khanapur, Haweli, Pune, Maharashtra
in commemoration of 'International Happiness Day,
Given on 21st day of March 2024.

PROF. MRUNAL SHIRSAT
CONVENER & PRINCIPAL
BHALCHANDRA COLLEGE OF PHARMACY
KHANAPUR, HAWELI, PUNE, MAHARASHTRA

DR. SUNITA DAHIYA
ORGANIZING CHAIRMAN
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Volume 11 Issue 2 May 2024, Date of Publication: 11-May-2024

PAPER ID : IJRAR24B3099

Registration ID : 290132

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of Shankarrao Ursal college of pharmacy, Pune has Participated as a Delegate at National Conference on "Overseas Opportunities for Pharma Aspirants" convened on December 2, 2023. His/Her participation is well appreciated.

Dr. Akshada Koparde, Dean Academics & Convener, KIP, KVV, Karad

Dr. Namdeo Jadhav, Dean & Organizing Chairman, KIP, KVV, Karad

Ms. Archana Kaulagekar, Deputy Director, International affairs, KVV, Karad

Dr. M. V. Ghorpade, Registrar, KVV, Karad

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Review on Fast Disintegrating Tablet and Manufacturing Technologies

Published in Volume 9 Issue 4, April-2024

Co-Authors - Nilesh Parade,Bhagwat Haralkar,Dr. Sujit Kakade,Dr. Ashok Bhosale

Paper ID - IJRTI2404084

ISSN 2456-3315

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Reg. No.: PHARMACON-J023/1522

This is to certify that Dr./Prof./Mr./Ms. Bhagwat Bhaskar Haralkar

has participated as delegate in the PHARMACON 2023, International Conference on "Advancements in Pharmaceutical Innovation: Exploring Benefits and Opportunities" on 02nd December 2023.

Organized by: Faculty of Pharmacy, Swami Vivekanand Subharti University, Meerut, INDIA & Pharmaceutical Educational Society (PESOTS)

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CERTIFICATE OF PARTICIPATION

Reg. No.: PHARMACON-2023/1730

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Organized by: Faculty of Pharmacy, Swami Vivekanand Subharti University, Meerut, INDIA & Pharmaceutical Educational Society (PESOTS)

Maj Gen (Dr.) G.K. Thapliyal
Vice-Chancellor

Prof. (Dr.) Shalya Raj
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Dr. Akshada Koparde
Dean Academics & Convener,
KIP, KVV, Karad

Dr. Namdeo Jadhav
Dean & Organizing Chairman,
KIP, KVV, Karad

Ms. Archana Kaulagekar
Deputy Director, International affairs,
KVV, Karad

Dr. M. V. Ghorpade
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In recognition of the publication of the paper entitled

Mucoadhesive Drug Delivery Systems: A Review

Published in Volume 9 Issue 4, April-2024

Co-Authors - Dr. Sujit Kakade,Dr. Ashoke Bhosale

Paper ID - IJRTI2404012

Editor-In Chief

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CERTIFICATE

It is certified that

Shri Vishakha Jaiswal from

PDEA Shankarrao Ursal college of Pharmaceutical Sciences and Research Center,

has attended Shivaji University, Kolhapur sponsored National Level Seminar on "IMPLICATIONS OF ANTIMICROBIAL RESISTANCE ON HEALTHCARE AND NOVEL INTERVENTION STRATEGIES" on 29th & 30th April, 2024 at Rajarambapu College of Pharmacy, Kasegaon.

Co-Convener

Dr.M.A.Bhutkar

Department of Pharmaceutics,
Rajarambapu College of Pharmacy, Kasegaon

Convener

Dr. S. K. Mohite

Principal, Rajarambapu College of Pharmacy, Kasegaon

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CERTIFICATE

This is to Certify that,

Jaiswal Vishakha Dhiraj

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.

We duly acknowledge his / her participation.

Mr. K. A. Suryavanshi
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Dr. Y. V. Ushir
Program Chair

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PDEA

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KHARADI, PUNE - 411014

E-mail : sucopsrc_2009@yahoo.co.in | Website : www.pdeasubpharm.edu.in

Certificate

This is to certify that Mr. /Ms. /~~Mrs.~~ Nirmala Yewale

of S.Y.M. Pharm Class has participated / won Winner up

prize from PG category in the 'AVISHKAR 2023' competition (College level) organized in association with IQAC Cell, Savitribai Phule Pune University, Pune on 27th September 2023.

Prof. Vikram Veer
Co-ordinator

Dr. Ashok Bhosale
Principal

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SAVITRIBAI PHULE PUNE UNIVERSITY

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AAVISHKAR - 2023

ZONAL LEVEL RESEARCH PROJECT COMPETITION

Certificate of Participation

This is to certify that Mr./Miss. Yewale Nirmala

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Principal

Prof. Sanjay Dhole
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It is certified that

Wastar Komal Balaji from

Shankarrao Ursal College Of Pharmaceutical Sciences And Research Centre

has attended Shivaji University, Kolhapur sponsored National Level Seminar on "IMPLICATIONS OF ANTIMICROBIAL RESISTANCE ON HEALTHCARE AND NOVEL INTERVENTION STRATEGIES" on 29th & 30th April, 2024 at Rajarambapu College of Pharmacy, Kasegaon.

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This is to Certify that,

Komal Waster

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.

We duly acknowledge his / her participation.

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Coordinator

Dr. Y. V. Ushir
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This is to certify that ~~Mr.~~ / Ms. Komal Waster belongs to Class S.Y. M Pharm has actively participated in and completed two days Entrepreneurship Awarness Camp Sponsored By Board of Students Development, Savitribai Phule Pune University Conducted at Pune District Education Association's, Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14, in association with **Divine Corporation**. From 27th Feb 2024 to 28th Feb 2024.

Dr. Asmita Sakore
TPC Co-ordinator

Mrs. Deepika Prajapati
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Dr. Prashant Khade
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CERTIFICATE

It is certified that

Nikhil Santram Randil from

PDEA's Shankarrao Mohol College of Pharmaceutical Sciences & Research Centre

has attended Shivaji University, Kolhapur sponsored National Level Seminar on "IMPLICATIONS OF ANTIMICROBIAL RESISTANCE ON HEALTHCARE AND NOVEL INTERVENTION STRATEGIES" on 29th & 30thApril, 2024 at Rajarambapu College of Pharmacy, Kasegaon.

Co-Convener
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CERTIFICATE

This is to Certify that,

Randil Nikhil Santaram

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.
We duly acknowledge his / her participation.

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Dr. Akshada Koparde	Dr. Namdeo Jadhav	Ms. Archana Kaulagekar	Dr. M. V. Ghorpade
Dean Academics & Convener, KIP, KVV, Karad	Dean & Organizing Chairman, KIP, KVV, Karad	Deputy Director, International affairs, KVV, Karad	Registrar, KVV, Karad

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For His/ Her Active Participated In The During

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organized by APP Maharashtra State Branch and
APP American International Branch
in collaboration with APP Natural Product Research & Development Division
at RMP's Bhalchandra College of Pharmacy, Khanapur, Haveli, Pune, Maharashtra
in commemoration of 'International Happiness Day,
Given on 21st day of March 2024.

PROF. MRUNAL SHIRSAT
CONVENER & PRINCIPAL
BHALCHANDRA COLLEGE OF PHARMACY
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PROF. MRUNAL SHIRSAT
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National Conference

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Yewale Nima

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We duly acknowledge his / her participation.

Mr. K. A. Suryavanshi
Coordinator

Dr. Y. V. Ushir
Program Chair

Amrutvahini Sheti & Shikshan Vikas Sanstha's

AMRUTVAHINI COLLEGE OF PHARMACY

Amrutnagar, Sangamner, Dist. Ahmednagar (Maharashtra)

Certificate

Dr./ Mr./ Mrs. /Ms. YEVALE NIRMALA SUNIL

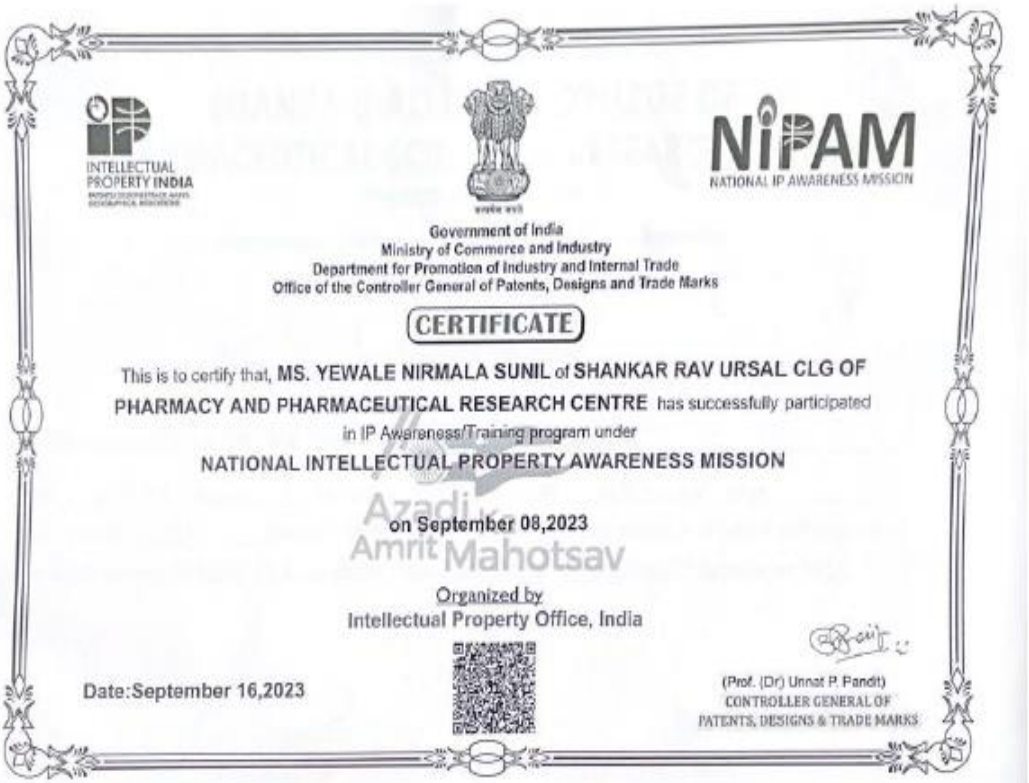
has participated as a Delegate / Organizing Committee member / Volunteer in One day National Conference on

"ADVANCES IN DRUG DISCOVERY, DEVELOPMENT AND REGULATORY ASPECTS"

in association with Indian Pharmaceutical Association (IPA), Institution's Innovation Council (IIC) held at Amrutvahini College of Pharmacy, Sangamner on 11th March, 2023.

Dr. M. M. Deshpande
Co-ordinator

Dr. M. J. Chavan
Principal & Convener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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
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This is to certify that, MS. YEWALE NIRMALA SUNIL of SHANKAR RAV URSAL CLG OF PHARMACY AND PHARMACEUTICAL RESEARCH CENTRE has successfully participated in IP Awareness/Training program under
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on September 08,2023
Azadi ka Amrit Mahotsav
Organized by
Intellectual Property Office, India
Date:September 16,2023
(Prof. (Dr) Unnat P. Pandit)
CONTROLLER GENERAL OF
PATENTS, DESIGNS & TRADE MARKS

Roll Call list : S.Y. M. Pharm.

Specialization: Pharmaceutical Quality Assurance

(Academic Year: 2023-24)

Roll No.	Name of student
18	Bangare Bhawana Tulshidas
19	Dahifale Rushikesh
20	Dalvi Pallavi Kishore
21	Deshmukh Pratiksha Pratap
22	Jadhav Vaishnavi Rajesh
23	Jaiswal Renuka Sunil
24	Kadam Kiran Ashok
25	Makude Payal Kishore
26	Mhaske Ganesh Ashok
27	Mirgudwad Jyoti Marotrao
28	Nalawade Avantika Dhananjay
29	Nirpane Om Balaji
30	Pawar Prashant Balasheb
31	Prajapati Simran Kantilal
32	Sable Krishna Sitaram
33	Shinde Trupti Bapu

PRINCIPAL
Pune District Education Association's
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Kharadi, Pune-411014.

Dr. Rajendra Gode Institute of Pharmacy &
Dr. Rajendra Gode College of Pharmacy
Amravati (MH)-444602

CERTIFICATE

OF APPRECIATION
THIS CERTIFICATE IS PRESENTED TO:

Pallavi Kishor Dalvi

attended all the sessions of

International Seminar

FACETS OF PHARMACY

held on 7 July to 10 July 2023

Prof. H.S.Sawarkar
Principal - DRGCOP

Dr. R.L.Bakal
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ShinEtsu

CERTIFICATE

This is to certify that ~~Mr./~~ Ms./~~Dr.~~ Pallavi kishor Dalvi

has participated in One Day National Conference on **"Functional Polymers: Applications and Advantages in Development of Oral Solid Dosage Forms"** organized by SCES's Indira College of Pharmacy, Pune in collaboration with SHIN-ETSU Chemical Tylose India Pvt Ltd. held on 16th February, 2024.

Mr. Nitin Bhusane Director, Shin-Etsu	Dr. (Mrs) Madhur Kulkarni Convener	Dr. Dayanand Kannur Vice-Principal	Dr. Anagha Joshi Principal

www.indiraicp.edu.in

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE

KHARADI, PUNE - 411014

Ph. : 020-27013835

E-mail : sucopsrc_2009@yahoo.co.in ▮ Website : www.pdeasubpharm.edu.in

Internal Quality Assurance Cell

Certificate

This is to certify that Dr./ Mr. /Mrs. /Ms. Deshmukh Pratiksha

of Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre kharadi

has participated as Delegate / Resource Person in One Day State Level Seminar on

" Research Methodology "

conducted on 29th March 2023

Dr. Prashant Khade
Co-ordinator

Dr. Ashok Bhosale
Principal & Chief Co-ordinator

Pune District Education Association's

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Ph. : 020-27013835
E-mail : sucopsrc_2009@yahoo.co.in ▮ Website : www.pdeasubpharm.edu.in

Internal Quality Assurance Cell

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has participated as Delegate / Resource Person in One Day State Level Seminar on

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Prof. Vikram Veer
Co-ordinator

Dr. Ashok Bhosale
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This is to Certify that,

Pratiksha Deshmukh

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.

We duly acknowledge his / her participation.

Mr. K. A. Suryavanshi
Coordinator

Dr. Y. V. Ushir
Program Chair

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CERTIFICATE

This is to certify that ~~Mr.~~/ Ms./~~Dr.~~ Deshmukh Pratiksha Pratap

has participated in One Day National Conference on **"Functional Polymers: Applications and Advantages in Development of Oral Solid Dosage Forms"** organized by SCES's Indira College of Pharmacy, Pune in collaboration with SHIN-ETSU Chemical Tylose India Pvt Ltd. held on 16th February, 2024.

Mr. Nitin Bhusane Director, Shin-Etsu	Dr. (Mrs) Madhur Kulkarni Convener	Dr. Dayanand Kannur Vice-Principal	Dr. Anagha Joshi Principal

www.indiraicp.edu.in

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SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE

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Ph. : 020-27013835

E-mail : sucopsrc_2009@yahoo.co.in | Website : www.pdeasubpharm.edu.in

Internal Quality Assurance Cell

Certificate

This is to certify that Dr./ Mr. /Mrs. /Ms. Vaishnavi R. Jadhav

of Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre kharadi

has participated as Delegate / Resource Person in One Day State Level Seminar on

" Research Methodology "

conducted on 29th March 2023

Dr. Prashant Khade
Co-ordinator

Dr. Ashok Bhosale
Principal & Chief Co-ordinator

Pune District Education Association's

SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE

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Ph. : 020-27013835

E-mail : sucopsrc_2009@yahoo.co.in | Website : www.pdeasubpharm.edu.in

Internal Quality Assurance Cell

Certificate

This is to certify that Dr./ Mr. /Mrs. /Ms. Vaishnavi R. Jadhav

of Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre kharadi

has participated as Delegate / Resource Person in One Day State Level Seminar on

" Research Methodology "

conducted on 29th March 2023

Dr. Prashant Khade
Co-ordinator

Dr. Ashok Bhosale
Principal & Chief Co-ordinator

Shree Chanakya Education Society's

INDIRA COLLEGE OF PHARMACY, PUNE

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This is to certify that ~~Mr.~~/ Ms./~~Dr.~~ Vaishnavi Rajesh Jadhav

has participated in One Day National Conference on **"Functional Polymers: Applications and Advantages in Development of Oral Solid Dosage Forms"** organized by SCES's Indira College of Pharmacy, Pune in collaboration with SHIN-ETSU Chemical Tylose India Pvt Ltd. held on 16th February, 2024.

Mr. Nitin Bhusane Director, Shin-Etsu	Dr. (Mrs) Madhur Kulkarni Convener	Dr. Dayanand Kannur Vice-Principal	Dr. Anagha Joshi Principal

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Internal Quality Assurance Cell

Certificate

This is to certify that Dr./ Mr. /Mrs. /Ms. Renuka S. Jaiswal

of Shankarrao Ursal College of Pharmaceutical Sciences & Research centre kharadi

has participated as Delegate / Resource Person in One Day State Level Seminar on

" Research Methodology "

conducted on 29th March 2023

Dr. Prashant Khade
Co-ordinator

Dr. Ashok Bhosale
Principal & Chief Co-ordinator

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22nd INTERNATIONAL SYMPOSIUM
On Advances in Technology and Business Potential of New Drug Delivery Systems
Hotel Sahara Star, Vile Parle, Mumbai, Maharashtra - 400 047

CERTIFICATE

OF PARTICIPATION

Presented To

Ms. Renuka Jaiswal

for attending the **22nd International Symposium on Advances in Technology and Business Potential of New Drug Delivery Systems** on Thursday, 29th February & Friday, 1st March 2024.

Dr. John Disouza
Vice-President, CRS Indian Chapter

Dr. Vandana Patravale
President, CRS Indian Chapter

125 / 521

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International Conference on Traditional Medicine-SMBT

5th International Conference on Traditional Medicine

Organized By

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Nandihills, Dhamangaon, Tal. Igatpuri, Dist. Nashik, Maharashtra-422403, India.

CERTIFICATE

This is to Certify that,

Renuka Jaiswal

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.

We duly acknowledge his / her participation.

Mr. K. A. Suryavanshi
Coordinator

Dr. Y. V. Ushir
Program Chair

Shree Chanakya Education Society's

INDIRA COLLEGE OF PHARMACY, PUNE

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ShinEtsu

CERTIFICATE

This is to certify that ~~Mr.~~/ Ms./~~Dr.~~ Renuka jaiswal

has participated in One Day National Conference on **"Functional Polymers: Applications and Advantages in Development of Oral Solid Dosage Forms"** organized by SCES's Indira College of Pharmacy, Pune in collaboration with SHIN-ETSU Chemical Tylose India Pvt Ltd. held on 16th February, 2024.

Mr. Nitin Bhusane Director, Shin-Etsu	Dr. (Mrs) Madhur Kulkarni Convener	Dr. Dayanand Kannur Vice-Principal	Dr. Anagha Joshi Principal

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BHARATI VIDYAPEETH'S

COLLEGE OF PHARMACY

SECTOR 8, C.B.D. BELAPUR, NAVI MUMBAI 400614.

NBA ACCREDITED

Hon'ble Dr. Patangrao Kadam
M.A. LL.B. Ph.D
Founder Bharati Vidyapeeth, Pune

CERTIFICATE

This is to certify that Mr.Kadam Kiran Ashok *attended the National Conference entitled "PHARMA REGULATORY CONCLAVE 2023" held from 30th November to 2nd December 2023.*

Dr. C.S. Ramaa	Dr. K. R. Jadhav	Dr. Vilasrao J. Kadam
Convener	**Convener**	**Principal**

CERTIFICATE
OF PARTICIPATION

THIS IS TO CERTIFY THAT

Kadam Kiran Ashok

Has participated in one-day workshop

INNOVATE & PATENT: ROADMAP TO INTELLECTUAL PROPERTY

Organized at ACTREC, Kharghar, Navi Mumbai on 11th October 2023

Organizing secretary	Convener	Joint Organizing secretary
Dr. Kavita Pal	Dr. Vikram Gota	Dr. K. Manjunth. Nookala
ACTREC, Kharghar, Navi Mumbai	ACTREC, Kharghar, Navi Mumbai	ACTREC, Kharghar, Navi Mumbai

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5th International Conference on Traditional Medicine

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Nandihills, Dhamangaon, Tal. Igatpuri, Dist. Nashik, Maharashtra-422403, India.

CERTIFICATE

This is to Certify that,

Sirmran Prajapati

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.

We duly acknowledge his / her participation.

Mr. K. A. Suryavanshi
Coordinator

Dr. Y. V. Ushir
Program Chair

Shree Chanakya Education Society's

INDIRA COLLEGE OF PHARMACY, PUNE

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CERTIFICATE

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

has participated in One Day National Conference on **"Functional Polymers: Applications and Advantages in Development of Oral Solid Dosage Forms"** organized by SCES's Indira College of Pharmacy, Pune in collaboration with SHIN-ETSU Chemical Tylose India Pvt Ltd. held on 16th February, 2024.

Mr. Nitin Bhusane Director, Shin-Etsu	Dr. (Mrs) Madhur Kulkarni Convener	Dr. Dayanand Kannur Vice-Principal	Dr. Anagha Joshi Principal

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ShinEtsu

CERTIFICATE

This is to certify that Mr./ ~~Ms./Dr.~~ Trupti Bapu Shinde has participated in One Day National Conference on **"Functional Polymers: Applications and Advantages in Development of Oral Solid Dosage Forms"** organized by SCES's Indira College of Pharmacy, Pune in collaboration with SHIN-ETSU Chemical Tylose India Pvt Ltd. held on 16th February, 2024.

Mr. Nitin Bhusane Director, Shin-Etsu	Dr. (Mrs) Madhur Kulkarni Convener	Dr. Dayanand Kannur Vice-Principal	Dr. Anagha Joshi Principal

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Nandihills, Dhamangaon, Tal. Igatpuri, Dist. Nashik, Maharashtra-422403, India.

CERTIFICATE

This is to Certify that,

Trupti Shinde

participated & completed as a **delegate** during International Conference held at SMBT Campus on January 05th & 06th 2024.

We duly acknowledge his / her participation.

Mr. K. A. Suryavanshi
Coordinator

Dr. Y. V. Ushir
Program Chair

TWO DAYS INTERNATIONAL WORKSHOP

ON

RECENT ADVANCES & DEVELOPMENTS IN TRANSDISCIPLINARY RESEARCH

July 26-27, 2023

Jointly organized by

SRI VENKATESWARA UNIVERSITY, TIRUPATI

&

SEVEN HILLS COLLEGE OF PHARMACY (Autonomous), TIRUPATI

Certificate of Participation

This is to certify that

Prof./ Dr./ Mr. / Mrs. / Ms. **SABLE KRISHNA SITARAM**

has participated as Delegate in a Two days International Workshop on **"RECENT ADVANCES & DEVELOPMENTS IN TRANSDISCIPLINARY RESEARCH"** *Jointly organized by Sri Venkateswara University, Tirupati & Seven Hills College of Pharmacy (Autonomous), Tirupati on 26th & 27th July 2023.*

Convenor
Prof.K.Saravanakumar
Professor
Seven Hills College of Pharmacy
(Autonomous)
Tirupati

Patron
Dr.M.Niranjan Babu
Principal
Seven Hills College of Pharmacy
(Autonomous)
Tirupati

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Certificate

This is to certify that Dr/Mr/Ms/Mrs Sable krishna Sitaram

has actively participated and presented poster in 8th MET RxPLORE National Level Research Conference 2023 held at Bhujbal Knowledge City, MET's Institute of Pharmacy, Nashik in association with Associations of Pharmacy Teachers of India, on 3rd March 2023.

Dr. N. L. Dashputre	Mr.R.T. Mogal	Dr. D.S.Bhambere	Dr. S.S.Chhajed	Dr. S. J. Kshirsagar
Co-ordinator	Co-ordinator	Co-ordinator	Co-ordinator	Convenor

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

Presentations are made by the students

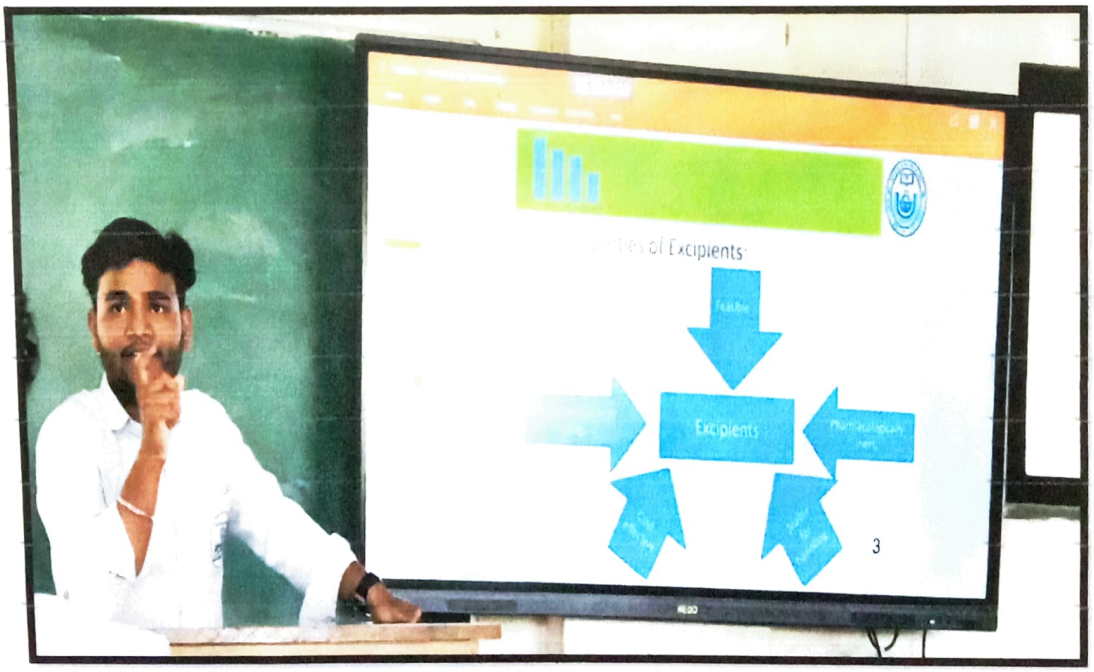
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-14

Class: Final Year B. Pharm.

Semester: VIII (2019 Pattern)

Subject: Seminar on Practice School

Date: 06/12/2023



Mr. Vaibhav Jadhav presenting seminar on Practice School

Mr. Veer V.S.
Subject Incharge

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

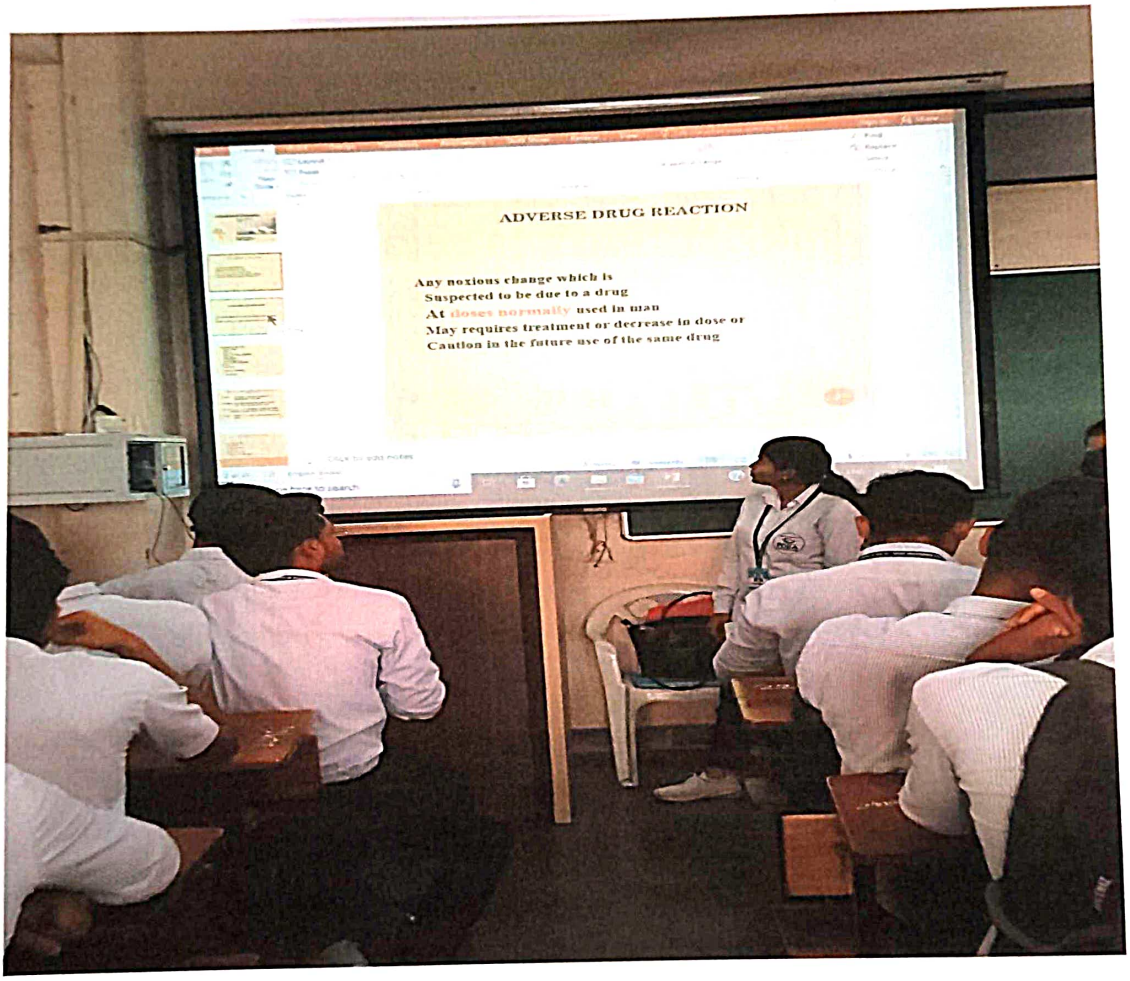
Subject: Pharmacology-III (BP602T)

Class: T.Y.B. Pharm, Sem- VI (2019 Pattern)

Academic Year: 2023-24

Date: 20/02/2023

Student Presenting a Seminar



Name and Signature of subject Teacher

Deepika Prajapati Deepika

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

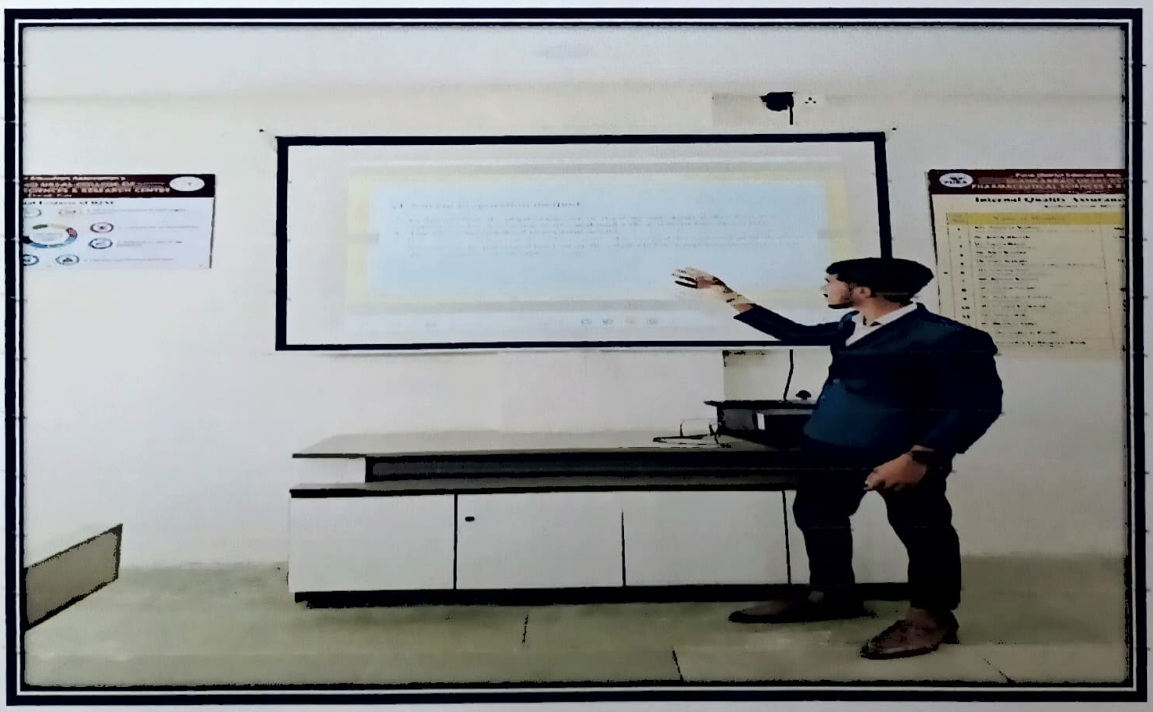
Student Centric Methods

(Academic year 2023-24)

Class: Final Year B. Pharm.
Semester: VIII (2019 Pattern)
Subject: Practice School
Date: 11.05.2024

Practice school Presentation

Topic: Formulation and Evaluation of Dolutegravir Tablet.



Practice school Presentation on the Topic of Formulation and Evaluation of Dolutegravir Tablet.

Nitin

Mr. Nitin Neharkar
Subject Teacher

Class: Final Year B. Pharm.
Semester: VIII (2019 Pattern)
Subject: Practice School
Date: 11.05.2024

List of Students Participated in Practice School

Sr. No.	Students Name
1.	Thopate Saurabh
2.	Thorat Suyash
3.	Thombare Mrudula

Mr. Nitin Neharkar
Subject Teacher

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

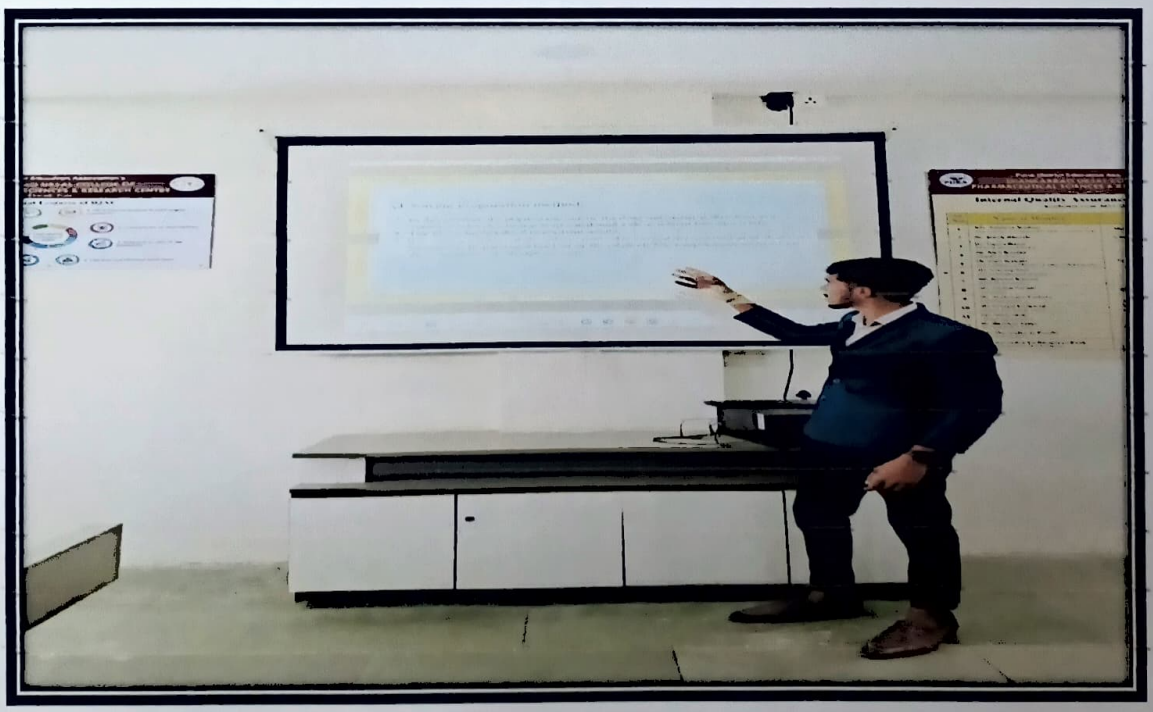
Student Centric Methods

(Academic year 2023-24)

Class: Final Year B. Pharm.
Semester: VIII (2019 Pattern)
Subject: Practice School
Date: 11.05.2024

Practice school Presentation

Topic: Formulation and Evaluation of Dolutegravir Tablet.



Practice school Presentation on the Topic of Formulation and Evaluation of Dolutegravir Tablet.

Nitin

Mr. Nitin Neharkar
Subject Teacher

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

Class: Final Year B. Pharm.
Semester: VIII (2019 Pattern)
Subject: Practice School
Date: 11.05.2024

List of Students Participated in Practice School

Sr. No.	Students Name
1.	Thopate Saurabh
2.	Thorat Suyash
3.	Thombare Mrudula

Nitin

Mr. Nitin Neharkar
Subject Teacher

PUNE DISTRICT EDUCATION ASSOCIATION'S

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

Class-S.Y.M. Pharm, Sem-IV

Subject-Pharmaceutics

Academic Year – 2023-24

Students of M.Pharm IV sem, Mr. Nikhil Randil, delivering seminar on Sustained Release Drug Delivery System. (22/6/2024)

Name and Signature of Subject Teacher-

Mrs. Trusha P. Shangrapawar

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Pune District Education Association's

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

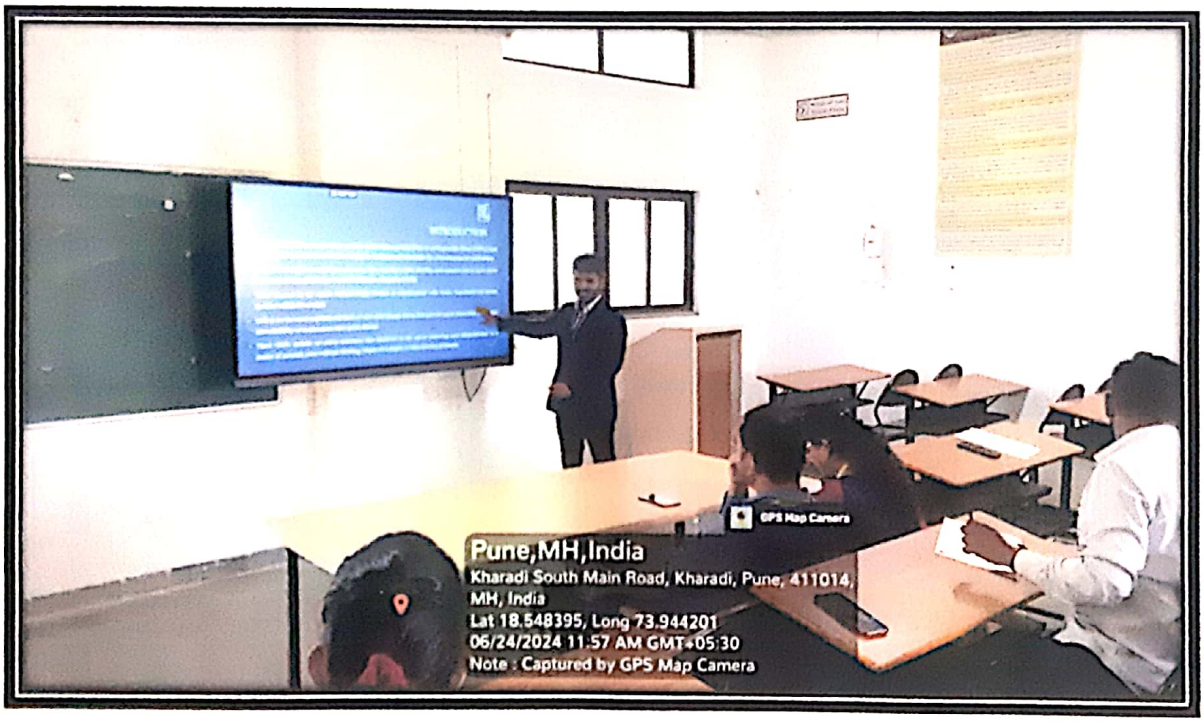
Class: S. Y. M. Pharm.

Semester: IV (2019 Pattern)

Subject: Predissertation Seminar

Date: 24/06/2024

Topic: Formulation and Evaluation Captopril Loaded Orodispersible Film from Modified Finger Millet Starch as Superdisintegrant



Mr. Haralkar Bhagwat Presenting Seminar on his Research Work

Dr. Sujit Kakade
Research Guide

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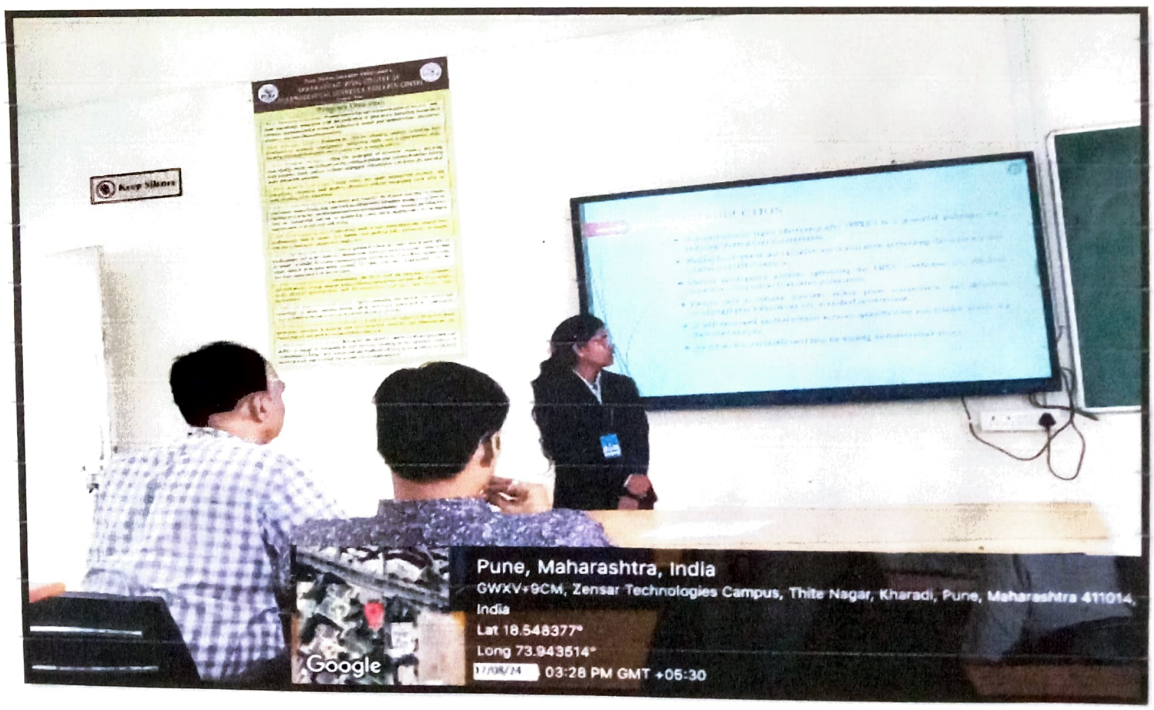
Class: S. Y. M. Pharm.

Semester: IV (2019 Pattern)

Subject: Seminar on Dissertation Topic

Date: 22/08/2024

Topic: Analytical method development and validation of Sucralfate by using reverse phase HPLC



Ms. Prajapati Simran Kantilal presenting seminar on Dissertation Topic

Mr. Veer V.S.
H.O.D- Pharmaceutical Chemistry

Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14

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Class: F. Y. Ph. D. (Dept. of Pharmaceutical Chemistry)
Subject: Seminar on Research Work
Date: 11.05.2024
Year of the study: 2023-2024

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

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Sciences & Research Centre
Kharadi, Pune - 411014

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14.

Student-made charts, displays, and posters

Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Drug Delivery System (MPH 102T)
Date: 02/11/2023

Chart Preparation

Topic: Classification of Occular Drug Delivery System

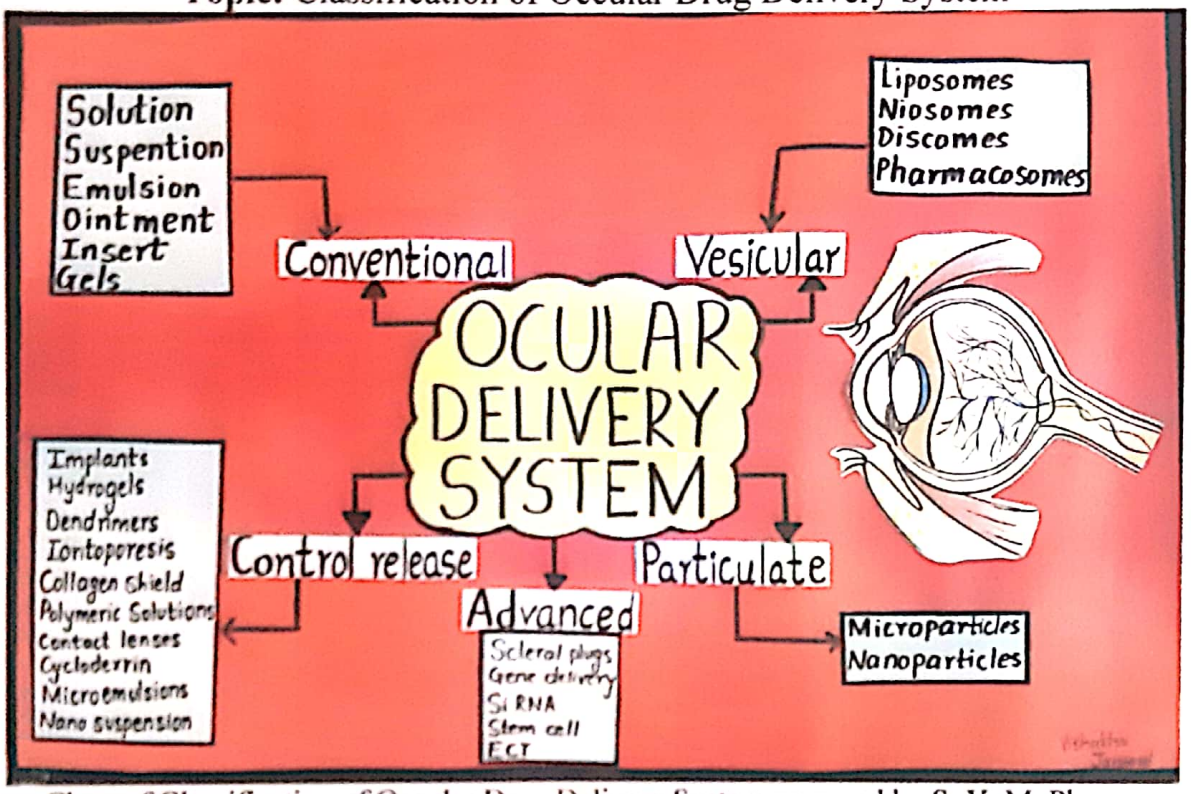

Chart of Classification of Occular Drug Delivery System prepared by S. Y. M. Pharm. Students

Dr. Sujit Kakade
Subject Teacher

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Kharadi, Pune-411014

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Class: F. Y. M. Pharm.
Semester: I (2019 Pattern)
Subject: Drug Delivery System (MPH102T)
Date: 02/11/2023

List of Students Participated in Chart Preparation on the
Topic of Classification of Occular Drug Delivery System

Sr. No.	Roll No.	Candidate Name
1	02	Daundkar Anuradha Shashikant
2	04	Gaikwad Rohit Bhimrao
3	08	Vishakha Dhiraj Jaiswal

Dr. Sujit Kakade
Subject Teacher

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Kharadi, Pune-411014

2/2

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Class: S. Y. M. Pharm.
Semester: II (2019 Pattern)
Subject: Cosmetics and Cosmeceuticals (MPH204T)
Date: 08/02/2024

Chart Preparation

Topic: Hair Growth Cycle

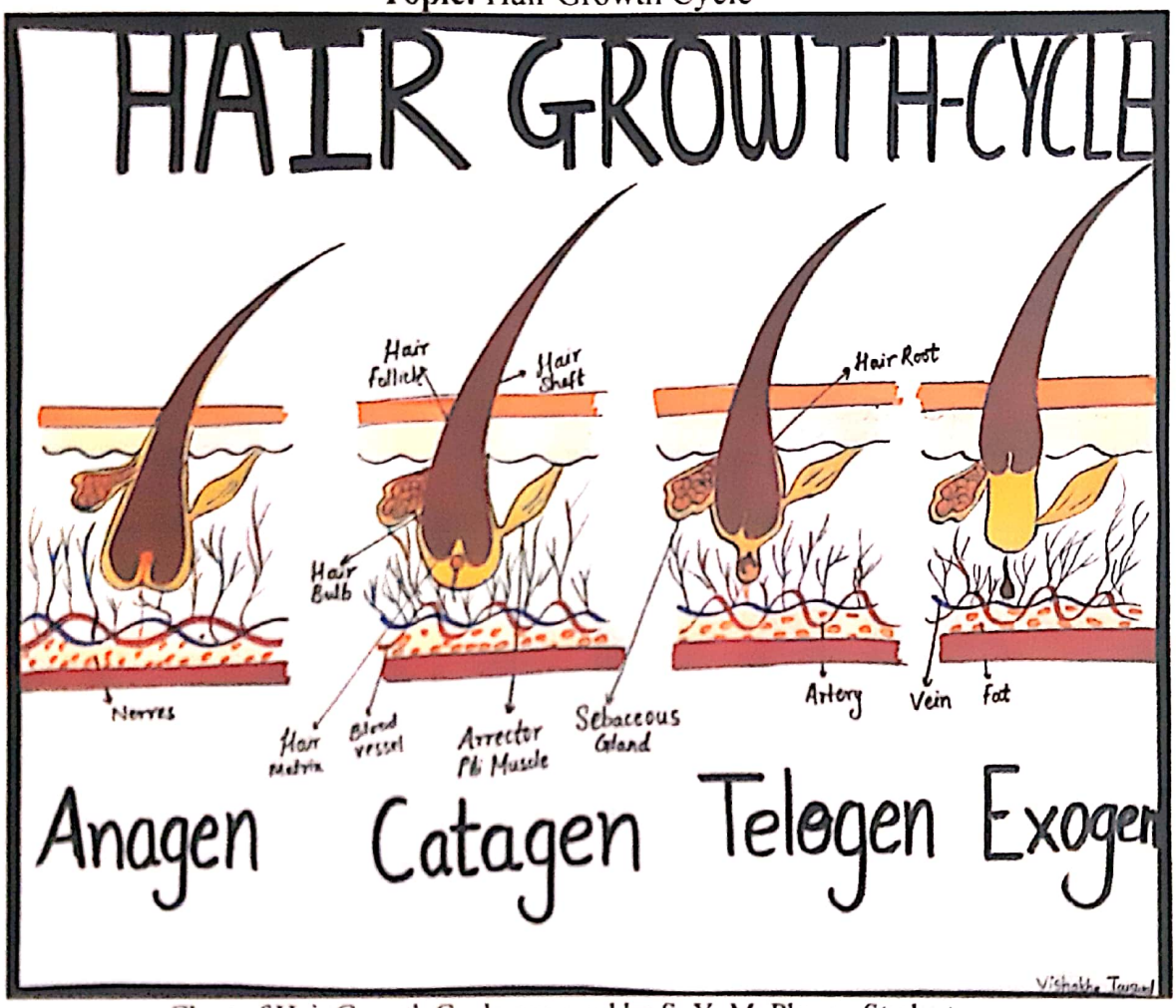

Chart of Hair Growth Cycle prepared by S. Y. M. Pharm. Students

Dr. Sujit Kakade
Subject Teacher

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P. D. E. A's
Shankarrao Ursal College of
Pharmaceutical Sciences & Research Centre
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Class: S. Y. M. Pharm.
Semester: II (2019 Pattern)
Subject: Cosmetics and Cosmeceuticals (MPH204T)
Date: 08/02/2024

List of Students Participated in Chart Preparation on the Topic of Hair Growth Cycle

Sr. No.	Roll No.	Candidate Name
1	05	Gavali Prathmesh Pandurang
2	06	Haralkar Bhagwat Bhaskar
3	08	Vishakha Dhiraj Jaiswal

Dr. Sujit Kakade
Subject Teacher

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Class: First year M. Pharm.

Semester: I (2019 Pattern)

Subject: Modern Pharmaceutical Analytical Techniques(MPAT101T)

Academic Year: 2023-24

Chart Preparation

Topic: Thermogravimetric analysis (TGA)

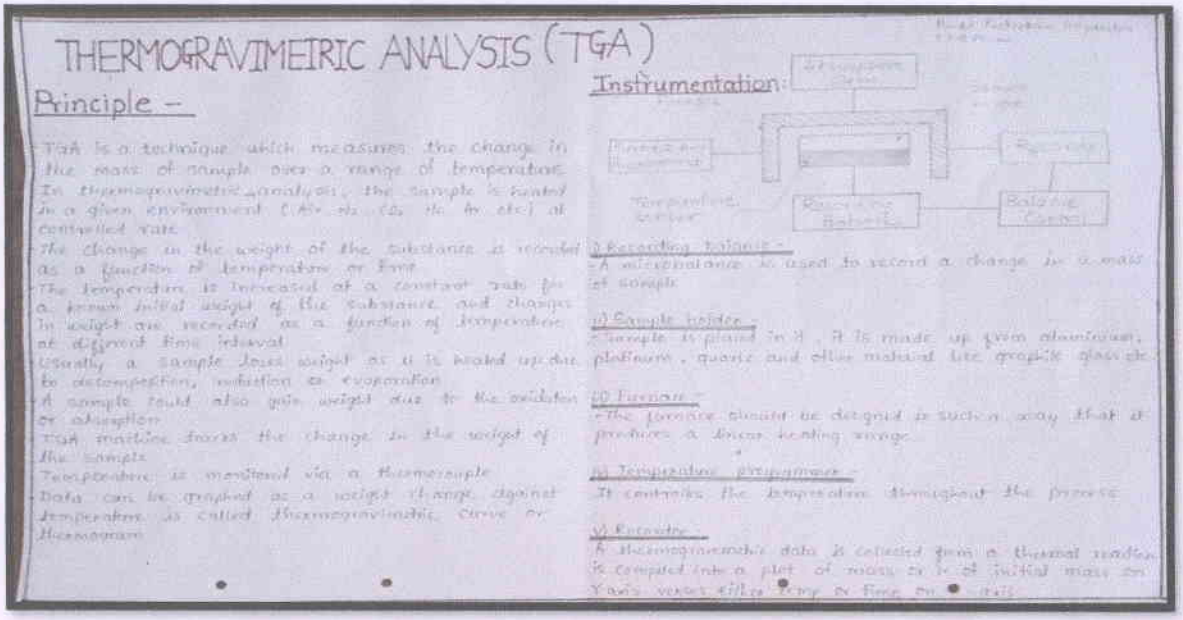

Chart of Thermogravimetric Analysis Prepared by F.Y.M.Pharm .students

Dr. Vijaya Barge
Subject Teacher

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14.

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

Class: First year M. Pharm.

Semester: I (2019 Pattern)

Subject: Modern Pharmaceutical Analytical Techniques(MPAT101T)

Academic Year: 2023-24

Chart Preparation

Topic: Ion Exchange Chromatography

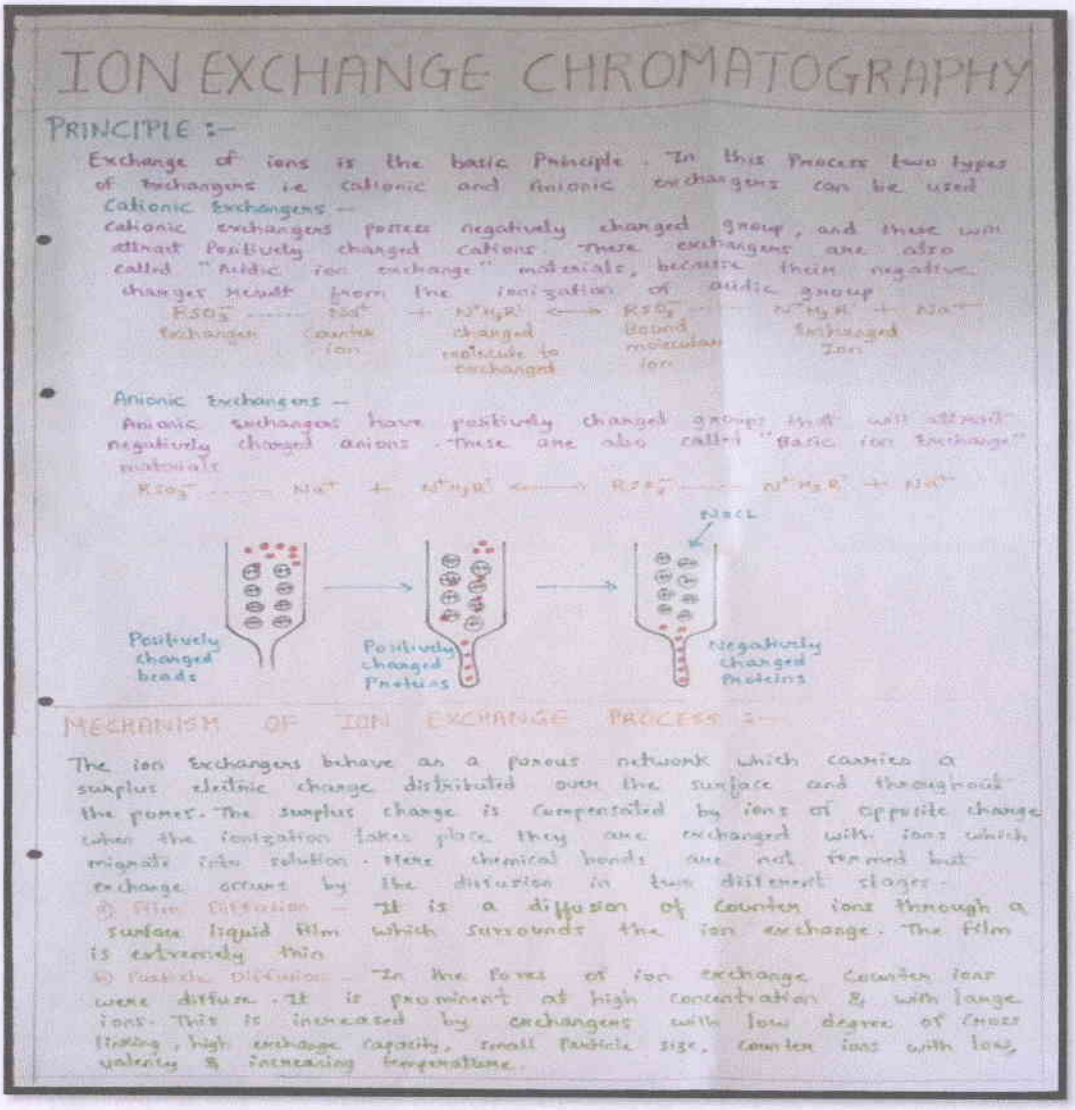

Chart of Ion Exchange Chromatography Prepared by F.Y.M.Pharm .students

Dr. Vijaya Barge
Subject Teacher

Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Class: First year M. Pharm.

Semester: I (2019 Pattern)

Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)

Academic Year: 2023-24

Chart Preparation

Topic: Differential Thermal Analysis (DTA)

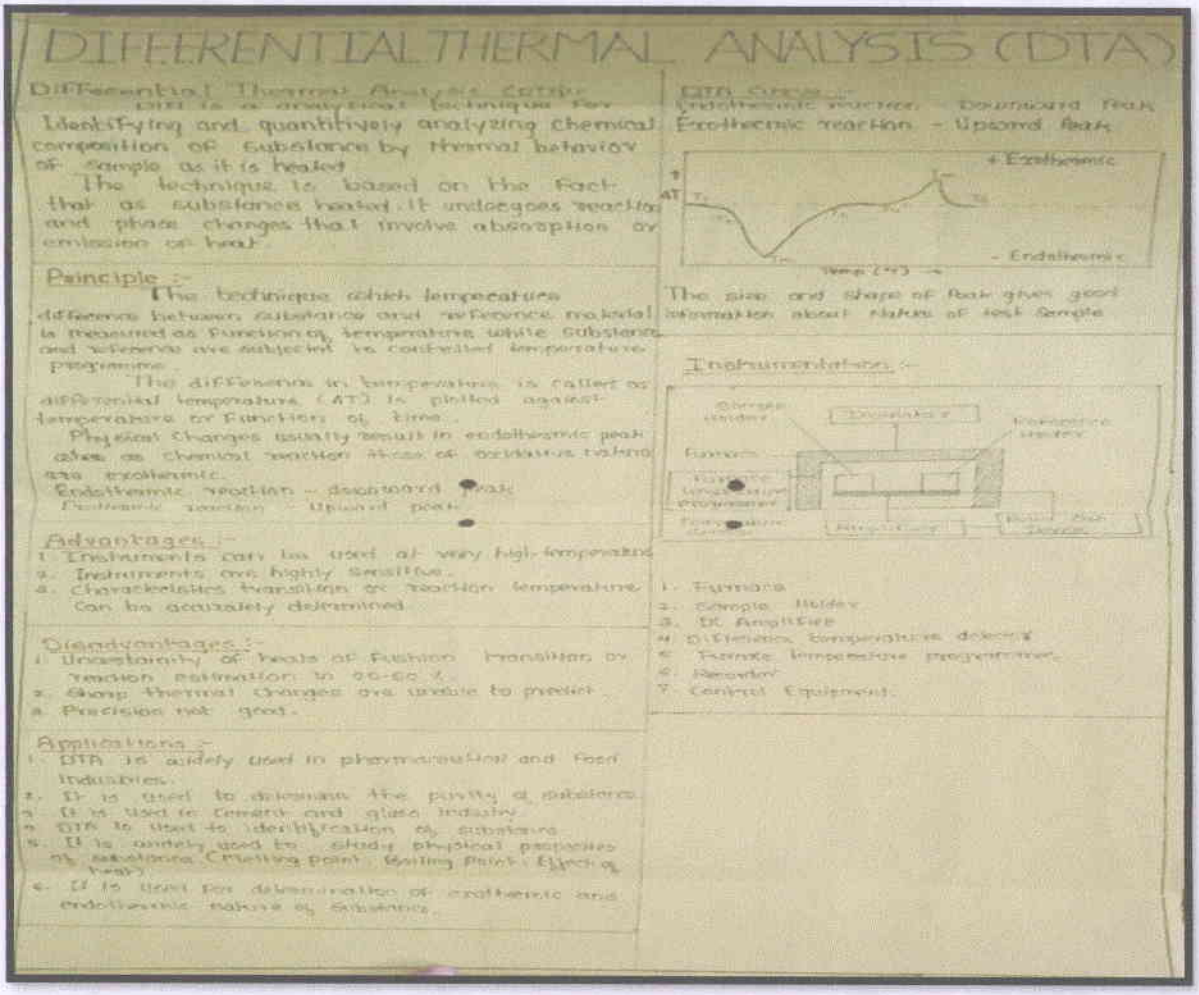

Chart of Differential Thermal Analysis Prepared by F.Y.M.Pharm .students

Dr. Vijaya Barge
Subject Teacher

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14.

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

Class: First year M. Pharm.

Semester: I (2019 Pattern)

Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)

Academic Year: 2023-24

List of students participated in chart preparation

Sr.no	Roll no.	Candidate name
1	29	Shaikh Afiya Ramzan
2	31	Darshana Sanjay Undre
3	27	Pratiksha Balasaheb Sarode
4	28	Ravikiran Dattatray Sarode

Dr. Vijaya Barge
Subject Teacher

Principal
PDEA'S Shankarrao Ursal College
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Research Centre, Kharadi, Pune-14.

Student involvement in the Wall Magazine/ Pharma Tab Activity

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Kharadi, Pune- 411014.

WALL MAGAZINE COMMITTEE

Academic Year 2023-2024

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.	Ms. Kiran Ghule	Member (Asst.Prof.)	703003666[illegible]	Kiranghule95@gmail.com
6.	Ms..Mansi Bangar	Member (Student First Year B. Pharmacy)	7821043795	Manasibangar18@gmail.com
7.	Ms.Safura Tamboli	Member (Student Second Year B. Pharmacy)	9156303240	Safura123@gmail.com
8.	Ms.Sakshi Thokal	Member (Student final Year B. Pharmacy)	8767091145	Sakshithokal1905@gmail.com
9.	Ms.Mrunali Tade	Member (Student Third Year B. Pharmacy)	9370491505	tadebapu1967@gmail.com
10.	Khedekar Sheetal/Adsul Harshali	Member (Student First Year M. Pharmacy)	9552566297	Harshaliadsul80@gmail.com
11.	Ms.Tejaswini Kande	Member Secretory (Asst Prof.)	8669062889	tejukande1214@gmail.com

T.R.Kande

Tejaswini Kande

co-ordinator

Dr. Ashok Bhosale

Principal

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

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

(ACADEMIC YEAR 2023-2024)

Date: 01/09/2023

Notice No.: 86

WALL MAGAZINE COMITTEE

All the students of B. Pharm and M. Pharm are hereby informed that submit their Poems, Drawings, Sketches, Essay, Best Thoughts for Wall Magazine Committee to Mrs.Tejaswini kande on or before 08/09/2023.

T.P.Kands

Tejaswini Kande

Dr Ashok Bhosale

PRINCIPAL

P D. E. A's

Shankarrao Ursal College of

Pharmaceutical Sciences & Research Centre

Kharadi, Pune-411014.

Pune Districts Education Associations

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

Details of Display for Wall Magazine

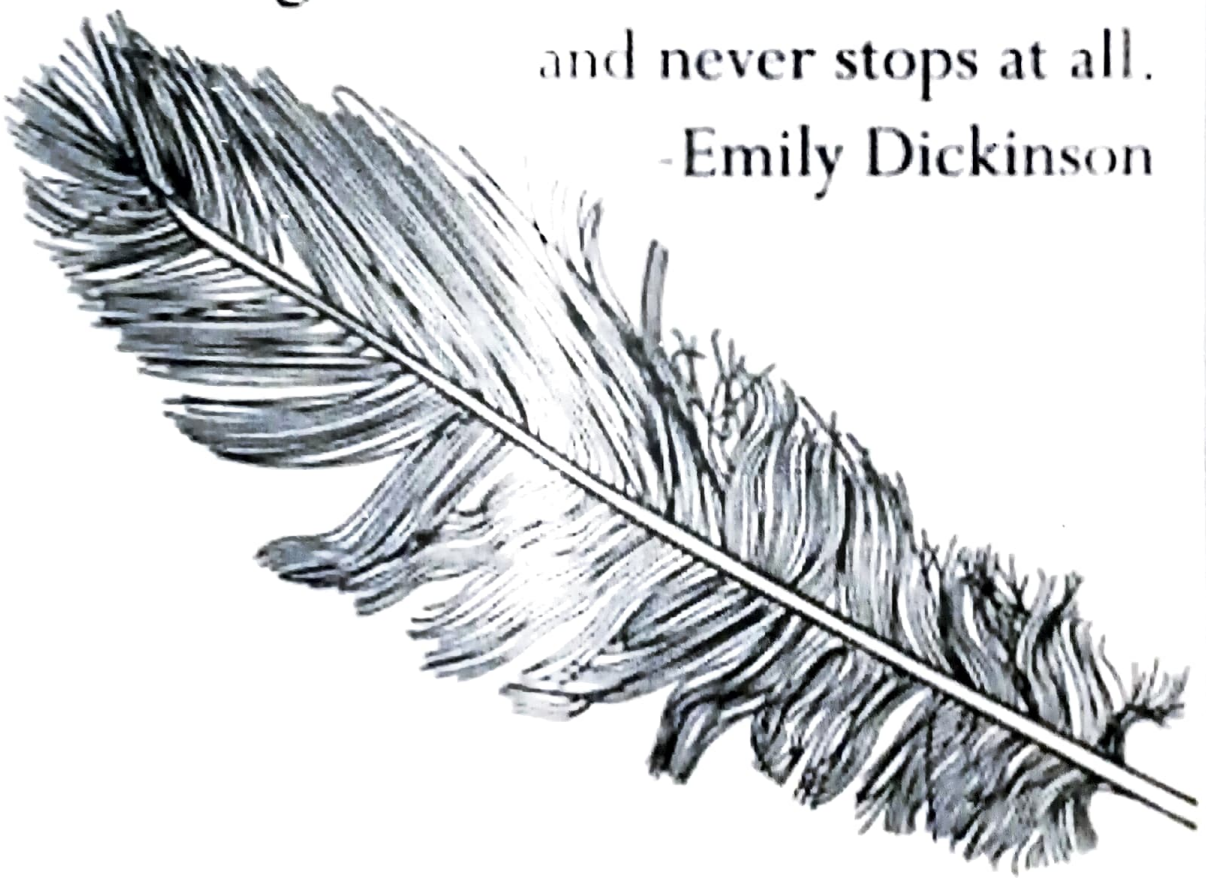
Academic Year 2023-2024

Student Contribution

Sr. No.	Particulars	Name of Students	Class	Source	Signature
1.	Drawing	Potkule Apeksha	S.Y.B.PHARM	Self	
2.	Drawing	Nirmal Kiran	S.Y.B.PHARM	Self	
3.	Drawing	Dhole Dnyaneshwari	S.Y.B.PHARM	Self	
4.	Drawing	Bhorkade Shraddha	S.Y.B.PHARM	Self	
5.	Drawing	Jagtap Shrutika	S.Y.B.PHARM	Self	
6.	Drawing	Mahajan Snehal	S.Y.B.PHARM	Self	
7.	Drawing	Bangare Bhawan	S.Y.M.PHARM	Self	
8.	Drawing	Nigade Abhimanyu	S.Y.M.PHARM	Self	
9.	Drawing	Hirave Prathmesh	S.Y.M.PHARM	Self	
10.	Drawing	Kale Sanika	S.Y.B.PHARM	Self	
11.	Drawing	Shreya Salunke	FINAL Y. B. PHARM	Self	
12.	Drawing	Ransing Mayur	S.Y.B.PHARM	Self	
13.	Poem	Raskar Laukik	FINAL YEAR B PHARM	Self	
14.	Poem	Avantika Nalawade	S.Y.M.PHARM	Self	
15.	Drawing	Jambhalkar Akansha	S.Y.B.PHARM	Self	
16.	Drawing	Chavan Divya	T.Y.B.PHARM	Self	
17.	Drawing	Dombe Abhishek	S.Y.B.PHARM	Self	
18.	Drawing	Girase Pallavi	FINAL YEAR.B. PHARM	Self	

Name:- Shreya P. Salunke
Year:- Final Y. Bpharm
Salunke.

Hope is the thing with feathers
that perches in the soul.
And sings the tune without the words,
and never stops at all.
-Emily Dickinson



Name :- Raskar Laukik chandrakant
Class :- Final Year B. Pharm.

Work is Worship

Work is workship
says the days that have lapped
As we sowed
So we have reaped

we have repeaed love
from this lovely land
ploughed it with preservence,
Holding each others mind

Reflection of ourself
In each other we saw
we saw this place,
From woods to concrete grow

our daydreams,
had many colours
The happiness we shared,
like the fragrance from flowers

new ideas, new ways,
we've acquired with zeal
new technique, new thoughts,
In this ordeal.

The nook and corner of this place
Reverberate in our heart
The time we spend together,
And found it difficult to part

Now, the time has come,
To wave goodbye,
And to embrace each other,
Refreshing the days gone by

But promice we've made
At this final frontier we've learned,
That, work is workship

Name - Avantika Nalawade
(SY. M pharm)
Roll No - 28

Pune District Education Association's

Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre

Kharadi, Pune- 411014.

(ACADEMIC YEAR 2023-2024) Date: 04/11/2023

WALL MAGAZINE COMITTEE

Notice No.: 171

All the students of D. Pharm, B. Pharm and M. Pharm are hereby informed that submit their Poems, Drawings, Sketches, Essay, Best Thoughts on **A4 size paper** to Mrs. Tejaswini kande / Ms. Ruchita Bhalerao for Wall Magazine on or before 25/11/2023. It is compulsory to all the students otherwise strict action will be taken.

T.R.kande

Ms. Tejaswini Kande
Co-ordinator

Ruchita

Ms. Ruchita Bhalerao
Co-Coordinator

Dr. Ashok Bhosale
Principal

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

Pune Districts Education Associations

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

Details of Display for Wall Magazine

Academic Year 2023-2024

Student Contribution

Sr.No.	Category of Articles	Name of Student	Class	Source	Signature
1.	Drawing	Choudhary Rekha	S.Y.B.PHARM	Self	Rekha
2.	Drawing	Shivale Gauri	S.Y.B.PHARM	Self	shivale
3.	Poem	Jadhav Vaishnavi	S.Y.M.PHARM	Self	Vaishnavi
4.	Poem	Rathod Bharat	FINAL YEAR B PHARM	Self	Rathod
5.	Drawing	Rajpurohit Srushti	FINAL YEAR B PHARM	Self	srushti
6.	Drawing	Jagtap Shravani	S.Y.B.PHARM	Self	Jagtap
7.	Drawing	Dhumal Sakshi	T.Y.B.PHARM	Self	Dsakshi
8.	POEM	Giramkar Neha	S.Y.B.PHARM	Self	Gneha
9.	POEM	Sorte Ashish	S.Y.B.PHARM	Self	Ashish
10.	POEM	Babar Mansi	T.Y.B.PHARM	Self	Mansi.
11.	POEM	Chorbele Yash	T.Y.B.PHARM	Self	Yash
12.	POEM	Jadhav Kalyani	T.Y.B.PHARM	Self	Kalyani
13.	POEM	Kalbhor Vaishnavi	T.Y.B.PHARM	Self	Vaishnavi
14.	POEM	Kodag Pratibha	T.Y.B.PHARM	Self	Pratibha.
15.	POEM	Jadhav Komal	T.Y.B.PHARM	Self	Komal
16.	POEM	Kale Tejal	T.Y.B.PHARM	Self	Tejal

Believe in Yourself
& Stand for your dream..
Even in the midst of
difficult times.. You need
to Maintain the Confidence
& Conviction that you can
achieve what you want..

Name - Vaishnavi R. Jadhav.
S.Y M Pharm (22)

"Hope" is the thing with feathers
That perches in the soul,
And sings the tune without the words,
And never stops at all.

And sweetest in the gale is heard;
And sore must be the storm
That could abash the little bird
That kept so many warm.

I've heard it in the chilliest land
And on the strangest sea;
Yet, never, in extremity,
It asked a crumb of me.

–Emily Dickinson

Name : Bharat Rathod
Class : Fnd-Y. B. Pharm

Bhagavad Gita Chanting

@BhagavadGitaChanting

When you are worried about failure,
then you will hardly take any risks in life.

When you don't take any risks in life, then you
will do only a few things that you are sure to win.

When you are sure to win, that means
you are not trying anything new.

NEW BEGINNINGS ARE ALWAYS RISKY
BUT WORTH THE REWARD!

~Sri Govindu

Name : Srushti H. Rajpurohit
Class : Final. Y. B. Pharm

Pune District Education Association's

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

Participation of students in University/State/National level competitions

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 : 13/9/2023 Ref. No.: SUCOPSRC/867/2023-2024

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,
The Secretory,
Pune District Zonal Sports Committee,
Savitribai Phule Pune University
Ganeshkhind, Pune-411007.

Sub: Regarding Sports Coordinator.

Sir/Madam

With reference to above cited subject, I am giving consent to you that Mr. Shreekrushna Thete will be representative of our college team as Sports coordinator in Intercollegiate Tournaments of Savitraibai Phule Pune University.

This is for your kind information and necessary action.

Thanking You,

Yours Faithfully

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

कार्यालयीन प्रत

S.S.P. Mandal's

Chandmal Tarachand Bora College

Arts • Commerce • Science

NAAC Re-accredited : 'B++' Grade

Best College Award (Rural)

(Affiliated to Savitribai Phule Pune University : ID No. PU / PN / ASC / 019/ [1968])

Shirur (Ghodnadi) 412210 Pune. Tel.: 02138 - 222301, 224170

Resi.: 222214, E-mail : ctborainfo68@gmail.com

Dr. K. C. Mohite
M.Sc, M.Phil, Ph.D
Principal

DBT STAR COLLEGE

DST - FIST SPONSORED COLLEGE

Ref. No.

Date : 15/9/2023

Attendance Certificate

This is to certify that Prof. Shreekrishna Thete

Of PDEA's SVCOPSRC college Khadki

Was present for the **Pune District Zonal Sports Committee Intercollegiate Badminton (Men)** Competition Held at S. S. P. **Mandal's Chandmal Tarachand Bora College, Shirur** On **15th September, 2023.** It is further certified that He/She performed the duty as a Team Manager/Coach for the Competition.

C.T. Bora Arts, Com. & Sci. College Id No. PU/PN/ASC 019/1968 SHIRUR

Dr. K. C. Mohite
Principal

PUNE DISTRICT ZONAL SPORTS COMMITTEE

C/O Bharatiya Jain Sanghatana's
Arts, Science & Commerce College,
Wagholi, Pune – 412207

Ref. No. : BJSC/PDSZ/118/2023-2024

Date : 07 / 10 /2023

Attendance Certificate

This is to certify that Prof. Shreekrushna Thete.

PDEA's SUCOPSRC, Khadadi College

has attended dated 06.10.2023 to 07.10.2023 the Pune District Zonal Sports Committee Inter Collegiate (Men / Women) competition held at Bharatiya Jain Sanghatana's Arts, Science & Commerce College, Wagholi, Pune - 412207.

(Dr. Ramesh Gaikwad)
Secretary
Pune District Zonal Sports Committee

(Dr. Sanjay Gaikwad)
Principal
B.J.S. College, Wagholi, Pune

Pune District Education Association's
Prof. Ramkrishna More Arts, Commerce & Science College
(Autonomous) Affiliated to Savitribai Phule Pune University (Id No. PU/PN/ASC/090/1992)
Estd. : June 1992

Sec. No. 28, Ganganagar, Pradhikaran,
AKURDI, PUNE - 411 044.
PH. : 020-27650276

020 - 27659740
rmacscollege@yahoo.co.in
www.pdearmacs.co.in

NAAC Grade A+ (CGPA : 3.46)
DBT : STAR COLLEGE STATUS

Outward No. : RMC / A /

Date : 17/10/2023

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam
Senate Member
Savitribai Phule Pune University, Pune

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. M. G. Chaskar
Dean
Science & Technology Dept.
SPPU, Pune

ATTENDANCE CERTIFICATE

This is to certify that Prof./Dr --Nitin Nehaekar--

Of --PDEA's SUCOPSRC--

College --Khadki--has attended Pune District Zonal Sports Committee's Inter Collegiate Football Men Championship held at Hedgewar Krida Sankul, Ajmera Colony, Pimpri as Team Manager / Coach / Selection Committee Member / Official organized by Prof. Ramkrishna More Arts, Commerce & Science College Akurdi, Pune on 16th and 17th October 2023.

Lt. Dr. Dnyaneshwar Chimate
Director of Physical Education & Sports
Prof. Ramkrishna More Arts, Commerce
& Science College, (Autonomous),
Akurdi, Pune-411 044.

Dr. M. G. Chaskar
PRINCIPAL
Prof. Ramkrishna More Arts, Commerce
& Science College, (Autonomous),
Akurdi, Pune-411 044.

Indapur Taluka Gramvikas Pratishthan's

VISHWASRAO RANSING COLLEGE

(Arts, Commerce and Science)

Kalamb – Walchandnagar, Tal. Indapur, Dist. Pune 413114

E-Mail Id: **artsandcommerce_college@yahoo.com** website: **www.itgpacckalamb.in**

Principal: **Dr. A. B. Aher.** I. D. No. P. U. / P.N. / A.C. / 056 / (1984)

Ref. No.:2023-24/187 Date: 25/11/2023

Attendance Certificate

This is to certify that, Prof. Shreekrushna Thete of P.D.E.A's S.V.C.O.P.S.R.C., Khadki College has attended the Pune District Zonal Sports Committee's **Inter College Best-Physique tournament** held at **ITGP's, Vishwasrao Ransing College, Kalamb-Walchandnagar**, Tal. Indapur, Dist. Pune on **25th November 2023**.

Dr. Suhas Bhairat
(Organizing Secretary)

ITGP's Vishwasrao Ransing College, Kalamb Estd.Date 1984

Principal Dr. Ankush Aher
(Organizing President)

'Rural Development through Education, Arts, Sports & Culture'

Estd. 1991

Acharya Atre Vikas Pratishthan Purandar's

Sharadchandraji Pawar College, Jejuri

(Arts & Commerce)

Chinchbaug, Jejuri, Tal.Purandar, Dist.Pune Maharashtra 412 303.

(Affiliated to Savitribai Phule Pune University) NAAC Reaccredited

ID No.: PU/PN/A/091 (1992)
AISHE NO C- 41457

- Ph.:02115 295054
- E-mail:s.p.collegejejuri@gmail.com
- Website: www.spcjejuri.edu.in

Principal : Dr. Balaji Natkare M.A.,SET, M.Phil.,Ph..D.

President : Hon.Vijay Kolte B.A., L.L.B.

O/W.No. S.P.C.

Date: 02/01/2024

Certificate of Attendance

This is to Certified that Prof./Dr. Kaunal Kanase

Of PDEA's SVCOPSRC, Khadki, College has attended the Inter Collegiate Ball Badminton (Men & Women) competition as Team Manager/Coach/Selection Committee Member / Official held at Sharadchandraji Pawar College, Jejuri on 02nd January 2024,

Dr. Shivaji Bhintade
Organizing Secretory
शारीरिक शिक्षण संचालक
शरदचंद्रजी पवार महाविद्यालय, जेजुरी
चिंचबाग, जेजुरी, ता. पुरंदर, जि. पुणे

Dr. Balaji Natkare
Principal
Sharadchanadraji Pawar College
Jejuri, Tal- Purandar, Dist- Pune.

Panchakshri Shivacharya Trust's Est :- 1973

CHANNABASWESHWAR PHARMACY COLLEGE (DEGREE)

Kava Road, Basweshwar Chowk, Latur-413512 (Maharashtra)

DTE Code :- 2253, University Code :- 947, MSBTE Code :- 2041

Phone No:-. (02382) 240192, Fax:-(02382) 243855, Email:- channabasweshwar@gmail.com, Website:- www.channabasweshwar.org

Approved by:- Govt. Of Maharashtra, PCI, New Delhi, Affiliated to :- S.R.T.M.University, Nanded , MSBTE, Mumbai.

1st State Level Intercollegiate Pharma Chess Tournament 2023-24

To,
The In-charge
1st State Level Inter Collegiate Pharma Chess
Tournament 2023-24
Channabasweshwar Pharmacy College(Degree),
Latur

Dear sir,

With reference to your appeal for 1st State Level Intercollegiate Pharma Chess Tournament 2023-24. I am pleased to forward herewith the entry of our students, please find, enclosed the entry form duly filled in.

Sr.No.	Name of Player	Present Course &Year	Signature
1.	Ingole chaitanya pravin	M.Pharm 1st yr	
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

Name of College: Shankarrao Ursal College of Pharmacy, Kharadi, Pune

Name of Sports In-Charge: Mr. Krunal Kanase. Sir

Contact No. 9890705873 E-mail: Krunal.kanse@gmail.com.

Sports In-charge
Sports Incharge
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Science's & Research Centre
Kharadi, Pune-411014

Seal of institute

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

1/12/23

Channabasweshwar Pharmacy College (Degree) LATUR

Panchakshri Shivacharya Trust's Est :- 1973

CHANNABASWESHWAR PHARMACY COLLEGE (DEGREE)

Kava Road, Basweshwar Chowk, Latur-413512 (Maharashtra)

DTE Code :- 2253, University Code :- 947, MSBTE Code :- 2041

Phone No:-. (02382) 240192, Fax:-(02382) 243855, Email.- channabasweshwar@gmail.com, Website:- www.channab

Approved by:- Govt. Of Maharashtra, PCI, New Delhi, Affiliated to :- S.R.T.M.University, Nanded , MSB

ENTRY FORM OF PLAYER

1. Name of the Player: Tagale Chaitanya Pravin
   (In (Block letter beginning with Surname)
2. Age: 23
3. Class in which Studying : M.pharm 1st yr. [Ceutics]
4. Date of Birth: 05-12-2000
5. Name of the Organization: _____
6. Eligibility number of Nanded University / Parent University: 110/1/2019/947/19
7. Enrollment No. for Diploma Students : -
8. Signature of Player: _____
9. Aadhar Card (Yes / No)
10. College ID (Yes/ No)
11. Mark Sheet (Yes / No)

SEAL OF ORGANISATION

Pune District Education Association SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES & RESEARCH CENTRE PHARMACIST FOR COMMUNITY HEALTH Rx 2009 KHARADI, PUNE 411014

SIGN & SEAL OF THE 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
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 : 06 / 10 / 2023 Ref. No.: SUCOPSRC / 335 / 2023-2024

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,
The Secretory,
Pune District Zonal Sports Committee,
Savitribai Phule Pune University
Ganeshkhind, Pune-411007.

Sub: Participation of our college students in Intercollegiate Football Tournaments.

Sir/Madam

With reference to above cited subject, I am giving consent of our college team to participate in Intercollegiate Football Tournaments of Savitraibai Phule Pune University.

This is for your kind information and necessary action.

Thanking You,

Yours Faithfully

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

सहसचिव
पुणे जिल्हा विभागीय क्रीडा समिती

Institute Copy

10

Pune District Education Association's

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

Participation of students in extracurricular events organized by the institute and other institutes

1. Participation of students in Institutional ExtracurricularActivities (A.Y. 2023-24)

Please visit this link for more information:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/534/Cultural%20activities%202023-2024.pdf

2. Students Participation in Extracurricular Activities organized by other institutes (A.Y. 2023-24)

Please visit this link for more information:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/566/5.3.3%20Final%20AQAR%20other%20institute%2024-24.pdf

Participation of students in Add-on and Certificate Courses

Pune District Education Association's

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

Report on Value Added Certificate Course in Clinical Research and Pharmacovigilance

Introduction:

Clinical Research and Pharmacovigilance are the important areas in pharmaceutical industry. Clinical Research is currently blooming industry worldwide.

Course Outcome:

At the end of the course students will be able to...

- Explain the regulatory requirements for conducting clinical trial
- Describe in detail about various types of clinical trial designs
- Explain the responsibilities of key players involved in clinical trials
- Describe the documentational requirements for Clinical trials
- Explain Adverse drug reaction and its management
- Describe basic concepts, and establishment of Pharmacovigilence
- Explain ADR reporting, methods and tools used in Pharmacovigilence
- Describe Pharmacoepidemiology, pharmacoeconomics and safety pharmacology

Course Hr. : 30 Hr

No. of Student Enrolment: 64

Name of Resource Person:

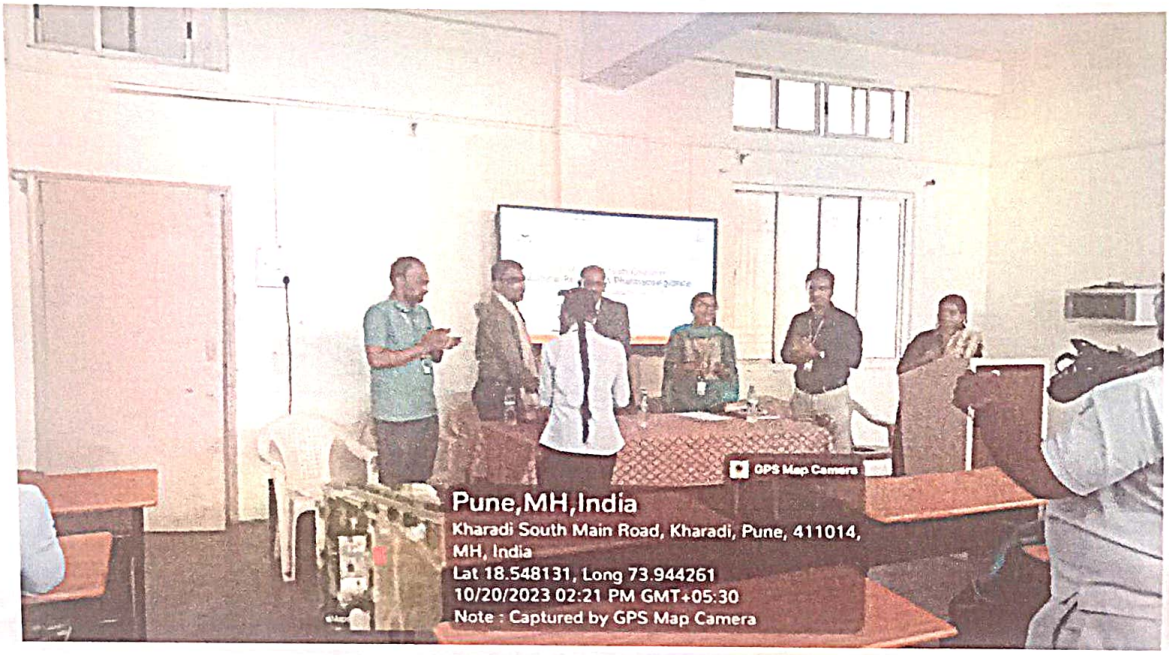
1. Dr. Shailesh Chauthankar ,Principal Investigator and Co-investigator at Synapse Labs Pvt.Lmt, Pune
2. Dr. Mahendra Gaikwad Safety Physician, Syneos Health , Pune

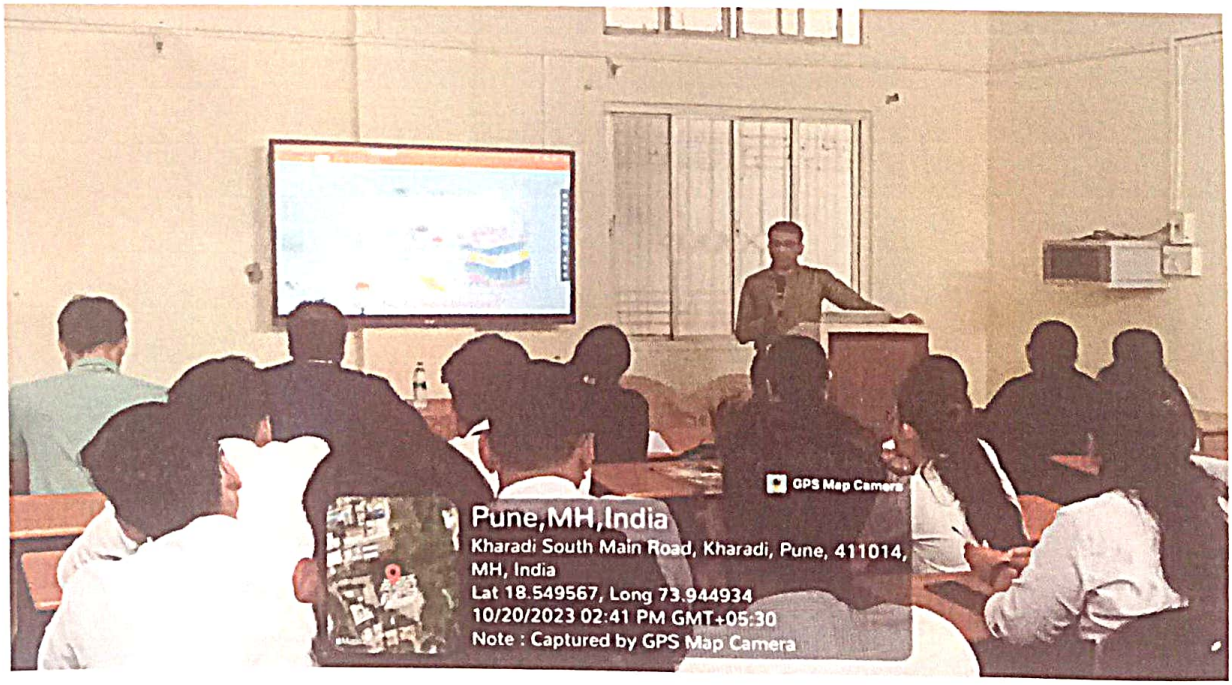
Dates: 20/10/2023 to 04/02/2024

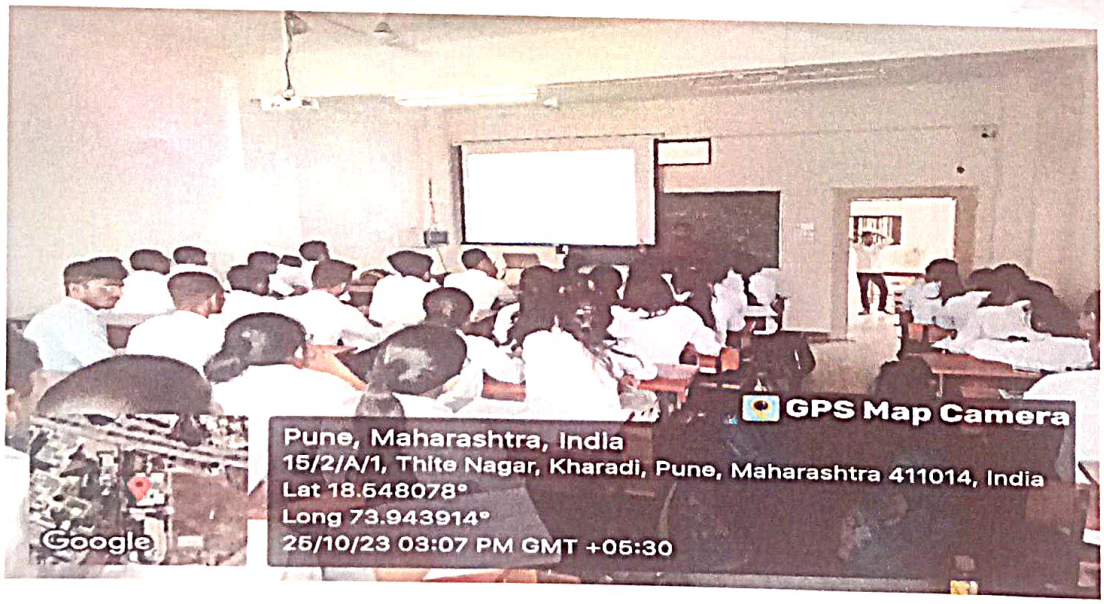
- ❖ Dr. Ashok Bhosale Principal , welcomed the resource person Dr. Shailesh Chauthankar
- ❖ The Resource person enlightened the audience on the importance of certificate course in clinical research and pharmacovigilance
- ❖ Dr. Shailesh Chauthankar delivered the course of clinical research and Dr. Mahendra Gaikwad delivered the course of Pharmacovigilance.

1/3

- Enrolled students of the programme actively participated in question and answer session.
- Total 64 students were completed the course
- Assessment is conducted to the students and evaluated , certificate are distributed to the students who successfully met the attendance criteria and qualified the assessment.







Glimpses of Certificate course in Clinical Research and Pharmacovigilance

Mr. Krunal Kanase

Course Coordinator

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

3/3

सावित्रीबाई फुले पुणे विद्यापीठ
गणेशखिंड, पुणे – ४११ ००७.
Savitribai Phule Pune University
Ganeshkhind, Pune – 411007.

स्वातंत्र्याचा अमृत महोत्सव

दूरध्वनी क्रमांक : ०२०-२५६२११५६/५७/६०
Telephone : 020-25621156/57/60
ईमेल / Email : boards@unipune.ac.in

शैक्षणिक विभाग (मान्यता कक्ष)
Academic Section (Approval Cell)
वेबसाइट / Website: www.unipune.ac.in

Ref. No. : CB/613 **Date : 05/07/2023**

To,
The Principal/Director
Pune District Education Associations Pune
District Education Associations Shankarrao
Ursal College of Pharmaceutical Sciences
And Research Centre Addr: 15/2A/1/1 Near
Zensar IT TowerKharadi Pune Tal: Pune
(corporation Area) Dist: Pune Pincode:
411014

Subject : Regarding Continuation for Value Added Courses ....

Sir/Madam,

With reference to your application regarding Value Added Course/Courses, you are hereby informed that, as per the decision taken by the University Authorities continuation of approval for the following Course/Courses is/are granted.

Sr.No.	Faculty	Course Name	Approved For A.Y.
1	Science and Technology	Clinical Research and Pharmacovigilance	2023-2024

(Dr. M. V. Rasve)
Deputy Registrar

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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 : 6 / 12/2022 Ref. No. : SUCOPK /649 /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

प्रति,
मा. कुलसचिव ,
सावित्रीबाई फुले पुणे विद्यापीठ, पुणे.

विषय : सन 2022-2023 या शैक्षणिक वर्षांमध्ये **Clinical Research & Pharmacovigilance** हा व्हॅल्यू ॲडेड सर्टिफिकेट कोर्स सुरू करणेबाबत.

संदर्भ : आपले पत्र क्रमांक साफुपुवि सीबीएस : 824 दिनांक : 11/11/2022.

महोदय ,

उपरोक्त विषय व संदर्भीय पत्रास अनुसरून आपणास कळविण्यात येते की, सन 2022-23 या शैक्षणिक वर्षाकरिता आमच्या महाविद्यालयात **Clinical Research & Pharmacovigilance** हा व्हॅल्यू ॲडेड सर्टिफिकेट कोर्स सुरू करणेबाबतचा प्रस्ताव आपल्या विद्यापीठाच्या संकेतस्थळावर ऑनलाईन सादर केलेला आहे. सादर केलेल्या प्रस्तावाची मूळ प्रत या पत्रासोबत जोडलेली आहे.

हा कोर्स सुरू करण्यासाठी आवश्यक देय असणारी संलग्नता फी रुपये 5000/- (रुपये पाच हजार) एवढी रक्कम दि. 30/11/2022 रोजी NEFT द्वारा जमा केलेली आहे. त्याची बँक पावती या पत्रासोबत जोडलेली आहे.

तरी सन 2022-23 या शैक्षणिक वर्षांमध्ये **Clinical Research & Pharmacovigilance** हा व्हॅल्यू ॲडेड सर्टिफिकेट कोर्स सुरू करण्यास विद्यापीठाची मान्यता मिळावी ही विनंती.

हे आपल्या माहितीस्तव व पुढील कार्यवाही करता सादर करीत आहे आहोत

कळावे.

आपला विश्वासू

डॉ. अशोक भोसले
प्राचार्य
पुणे जिल्हा शिक्षण मंडळाचे
शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटिकल
सायन्स ॲण्ड रिसर्च सेंटर, खराडी, पुणे.

सोबत: वरील प्रमाणे

कार्यालयीन प्रत

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सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)

युनिपुणे आयडी :
CPHP015050

Certificate Course Application

संस्था नाव	:	पुणे जिल्हा शिक्षण मंडळ		युनिपुणे आयडी	:	CPHP015050	
महाविद्यालयाचे नाव	:	शंकरराव उरसळ कॉलेज ऑफ फार्मासुटीकल सायन्स अँड रिसर्च सेंटर,खराडी.		विद्याशाखा	:	|Pharmacy|	
पत्ता	:	१५/२अ/१/१, झेन्सार आयटी टॉवर जवळ, खराडी,पुणे-४११ ०१४, पुणे (महानगर पालिका हद्द)					
प्राचार्यांचे नाव	:	अशोक विट्ठल भोसले					
प्राचार्यांचा प्रकार	:	कायम	सेवेतील शिक्षक संख्या	:	34		
जिल्हा	:	पुणे	तालुका	:	पुणे (महानगर पालिका हद्द)		

महाविद्यालयचा प्रकार कोणता?	:	शहरी	संबंधित संस्था धार्मिक/भाषिक अल्पसंख्याक दर्जा प्राप्त आहे काय ?	:	नाही
व्यवस्थापन कुणाचे आहे ?	:	खाजगी (कायम विना-अनुदानीत)	Is college purely a self-financing college ?	:	होय
12(b)(2f) of the UGC Act, मधे महाविद्यालय येते काय ?	:	नाही	महविद्यालय कुणासाठी?	:	सह-शिक्षण
रात्र महाविद्यालय आहे काय?	:	नाही			

प्राचार्य / संचालकांची माहिती

Name	Name Marathi	Designation	Mobile Number
Ashok Vitthal Bhosale	अशोक विट्ठल भोसले	Principal	9850890093

आपल्या महाविद्यालयात NAAC/NBA माहिती अस्तीत्वात नाही.

चलन संदर्भातील माहिती

अनू क्रं.	चलन क्रं.	चलन रक्कम
1	22690000064	5000.0000

नवीन अभ्यासक्रम

प्रस्ताव क्रं.	विद्याशाखा	अभ्यासक्रम
221100038	Science and Technology	Pharmacy - Clinical Research and Pharmacovigilance

Savitribai Phule Pune University

NEFT/RTGS Funds Transfer Application Form

(User Copy)

NEFT/RTGS Challan details

Remitters Details		Beneficiary Details	
College Name	Pune District Education Association Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre Addr: 15/2A/1/1 Near Zensar IT TowerKharadi Pune Tal: Pune (corporation Area) Dist: Pune, Pincode: 411014 [CPHP015050]	Name of Beneficiary	Finance & Accounts Officer , Savitribai Phule Pune University, Pune-7.
A/C Name	PDAE'S SUCOPS & RC KHARADI B. PHARM	Receving Bank	Axis bank
Account No	6415101000878	Bank Branch	CCPH
Bank Name	Canara Bank	Account no NEFT/RTGS	**959522690000064**
Bank Branch	KHARADI	IFSC Code	UTIB0CCH274
IFSC Code	CNRB0006415	Amount	5000.00
Amount	5000.00		
Amount in Word	Five Thousand rupees only		

30 NOV 2022

P33422020577 4016

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अस्तित्वात असलेल्या सर्व अभ्यासक्रम

अ.नं.	Application ID	Course Start Year	Faculty Name	Certificate Course	Course Duration	Co-Ordinator Name	Status
1	221100038	2022-2023	Science and Technology	Clinical Research and Pharmacovigilance	2	Kanase Krunal Ganpati	Report Uploaded

Go To Next

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पुणे जिल्हा शिक्षण मंडळाचे

शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटीकल सायन्सेस अॅन्ड 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 : 01/12/2022 Ref. No. : SUCOPK / 536/2022-2023

अध्यक्ष
अजित पवार

उपाध्यक्ष
राजेंद्र घाडगे

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

खजिनदार
अॅड. मोहनराव देशमुख

उपसचिव
एल. एम. पवार

प्राचार्य
डॉ. अशोक भोसले

प्रति ,
मा. कुलसचिव
सावित्रीबाई फुले पुणे विद्यापीठ
पुणे.

सोबतच्या प्रस्तावामध्ये सादर केलेली माहिती ही यासंदर्भातील नियम तसेच महाराष्ट्र शासन / विद्यापीठ सक्षम प्राधिकरणे यांनी वेळोवेळी निर्गमित केलेले आदेश /परिपत्रके/ निर्णय/ बृहत आराखडा व अन्य यांची पूर्ण माहिती घेऊन भरण्यात आली. आहे तसेच या सोबत मान्यता मिळालेल्या शिक्षकांची किंवा शिक्षक मान्यतेसाठी प्रस्ताव सादर केलेल्या शिक्षकांची यादी जोडलेली आहे. या माहितीमध्ये काही त्रुटी व असत्यता आढळल्यास सदर प्रस्ताव कोणत्याही स्तरावर नाकारण्याचे सर्व अधिकार विद्यापीठास असतील व त्यास संस्थेची कोणती हरकत असणार नाही.

डॉ. अशोक विठ्ठल भोसले
प्राचार्य
पुणे जिल्हा शिक्षण मंडळाचे
शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटिकल
सायन्स अॅण्ड रिसर्च सेंटर, खराडी, पुणे.

PUNE DISTRICT EDUCATION ASSOCIATION'S
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI, PUNE-411 014.

LIST OF FACULTY

Sr. No	Name of the faculty	Qualification	Designation
1.	Dr. Ashok V. Bhosale	M. Pharm, Ph.D. D.B.M.	Principal
2.	Dr. Vijaya U. Barge	M. Pharm, Ph.D	Professor & Vice Principal
3.	Dr. Ravindra Y. Patil	M. Pharm, Ph.D	Professor
4.	Dr. Amit J. Kasabe	M. Pharm, Ph.D	Associate Professor
5.	Mr. Vikram S. Veer	M. Pharm	Assistant Professor
6.	Mr .Krunal G. Kanase	M. Pharm	Assistant Professor
7.	Mrs. Archana H. Yadav	M. Pharm	Assistant Professor
8.	Mr. Sujit S. Kakade	M. Pharm	Assistant Professor
9.	Mr. Prashant H. Khade	M. Pharm	Assistant Professor
10.	Ms. Trusha P. Shnagrapawar	M. Pharm	Assistant Professor
11.	Mr.Vivek B. Ingale	M. Pharm	Assistant Professor
12.	Mr. Vipul V. Dhasade	M. Pharm	Assistant Professor
13.	Ms. Tejaswini R. Kande	M. Pharm	Assistant Professor
14.	Ms. Kiran R. Ghule	M. Pharm	Assistant Professor
15.	Ms. Bhagyshri G. Shelar	M. Pharm	Assistant Professor
16.	Ms. Naziya M. Sayyad	M. Pharm	Assistant Professor
17.	Mr. Nitin S. Neharkar	M. Pharm	Assistant Professor

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

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पुणे जिल्हा शिक्षण मंडळ, पुणे
४८/ १ अ, एरंडवणा, पौड रोड, पुणे - ४११ ०३८
Email :- honsecretary@pdeapune.org Web :- www.pdeapune.org

जा.क्र. पुजिशिमं/आस्था-८/महा-१८/२०२२-२३/ 218-27 दिनांक- 14 FEB 2023

प्रति,
मा.प्राचार्य,
शंकरराव उरसळ कॉलेज ऑफ फार्मास्युटिकल
सायन्सेस अँड्ड रिसर्च अँण्ड सेंटर, खराडी.

विषय:- सन २०२२-२३ या शैक्षणिक वर्षाकरीता क्लिनीकल रिसर्च अँण्ड फार्माकोव्हीजीलन्स हा सर्टिफिकेट कोर्स सुरू करणेबाबत....
संदर्भ:- आपले पत्र जा.क्र.५२८/२०२२-२३, दि.२५/११/२०२२

उपरोक्त संदर्भीय पत्रास अनुसरून कळविण्यात येते की, महाविद्यालयात सन २०२२-२३ या शैक्षणिक वर्षापासून क्लिनीकल रिसर्च अँण्ड फार्माकोव्हीजीलन्स हा स्किल बेस सर्टिफिकेट कोर्स सुरू करण्यास परवानगी मिळणेबाबत आपण कळविलेले आहे.

आपण महाविद्यालयात सन २०२२-२३ या शैक्षणिक वर्षापासून क्लिनीकल रिसर्च अँण्ड फार्माकोव्हीजीलन्स हा स्किल बेस सर्टिफिकेट कोर्स सुरू करण्यास आपल्या शिफारशीनुसार परवानगी देण्यात येत आहे.

कळावे,

मानद सचिव
पुणे जिल्हा शिक्षण मंडळ,पुणे

TNA
file
EHS
16.02.2023

P.D.E.A.'s S. U. College Of P. S. C.
INWARD NO: 992
D: 16/2/23

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Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre, Kharadi, Pune
Approved by- Pharmacy Council of India , New Delhi, Gov. of Maharshtra and All India Council forTechnical Education, New Delhi, Affiliated to Savitribai Phule Pune University, Pune
Phone No. 020-27013835
Email ID: sucopsrc_2009@yahoo.co.in
Website: www.pdeasubpharm.edu.in

Admission Form

Certificate Course in Clinical Research & Pharmacovigilance

(Approved by Savitribai Phule Pune University)

To,
The Principal,
PDEA's SUCOPSRC, Kharadi.

Sir,
I request you to kindly consider my candidature for admission to Certificate Course in Clinical Research & Pharmacovigilance course. I am submitting herewith all the necessary details.

1. **Name of Student :** Shrinath Rangnath Bochare
2. **Class of Student:** final year B pharm
3. **Roll No:** 05
4. **Gender** Male
5. **Date of Birth :** 16/07/2002
6. **Residential Address:** Income tax colony, old Jalna 431203
7. **Mobile No.:** 9503750297
8. **Email ID:** shrinathbochare@gmail.com

Remark of Coordinator:.....

Date:

श्रीनाथ B
Signature of Candidate

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre, Kharadi, Pune
Approved by- Pharmacy Council of India , New Delhi, Gov. of Maharshtra and All India Council forTechnical Education, New Delhi, Affiliated to Savitribai Phule Pune University, Pune
Phone No. 020-27013835
Email ID: sucopsrc_2009@yahoo.co.in
Website: www.pdeasubpharm.edu.in

Admission Form

Certificate Course in Clinical Research & Pharmacovigilance

(Approved by Savitribai Phule Pune University)

To,
The Principal,
PDEA's SUCOPSRC, Kharadi.

Sir,
I request you to kindly consider my candidature for admission to Certificate Course in Clinical Research & Pharmacovigilance course. I am submitting herewith all the necessary details.

1. **Name of Student :** Ingole Rajlaxmi Sanjay
2. **Class of Student:** Final year B.pharm (VII sem)
3. **Roll No:** 27
4. **Gender** Female
5. **Date of Birth :** 11/08/2001
6. **Residential Address:** Karad, Tal-Karad, Dist-Satara 415411
7. **Mobile No.:** 8010484478
8. **Email ID:** rajlaxmiingole5@gmail.com

Remark of Coordinator:.....

KSIngole
Signature of Candidate

Date: 20/10/2023

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre, Kharadi, Pune
Approved by- Pharmacy Council of India , New Delhi, Gov. of Maharshtra and All India Council forTechnical Education, New Delhi, Affiliated to Savitribai Phule Pune University, Pune
Phone No. 020-27013835
Email ID: sucopsrc_2009@yahoo.co.in
Website: www.pdeasubpharm.edu.in

Admission Form

Certificate Course in Clinical Research & Pharmacovigilance

(Approved by Savitribai Phule Pune University)

To,
The Principal,
PDEA's SUCOPSRC, Kharadi.

Sir,
I request you to kindly consider my candidature for admission to Certificate Course in Clinical Research & Pharmacovigilance course. I am submitting herewith all the necessary details.

1. Name of Student : Saurabh Dattatray Thopate

2. Class of Student: Final Year B. Pharmacy

3. Roll No: 70

4. Gender male

5. Date of Birth : 06-02-2003

6. Residential Address: Gondhalenagar, Hadapsar, pune-28

7. Mobile No.: 9146129940

8. Email ID: saurabhthopate36@gmail.com

Remark of Coordinator:

Date: 20-10-2023

Signature of Candidate

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Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences And Research Centre, Kharadi, Pune
Approved by- Pharmacy Council of India , New Delhi, Gov. of Maharshtra and All India Council forTechnical Education, New Delhi, Affiliated to Savitribai Phule Pune University, Pune
Phone No. 020-27013835
Email ID: sucopsrc_2009@yahoo.co.in
Website: www.pdeasubpharm.edu.in

Admission Form

Certificate Course in Clinical Research & Pharmacovigilance

(Approved by Savitribai Phule Pune University)

To,
The Principal,
PDEA's SUCOPSRC, Kharadi.

Sir,
I request you to kindly consider my candidature for admission to Certificate Course in Clinical Research & Pharmacovigilance course. I am submitting herewith all the necessary details.

1. Name of Student : Atole Akanksha Shivaji

2. Class of Student: Final Year B. Pharmacy

3. Roll No: 01

4. Gender Female

5. Date of Birth : 11-01-2002

6. Residential Address: A/P Ravangaon Tal.-Daund
Dist - Pune

7. Mobile No.: 7620391153

8. Email ID: akankshaatole117@gmail.com

Remark of Coordinator:.....

Date: 19-10-2023

Signature of Candidate

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

Lecture 1

Date: 20/10/2023

Attendance Time:- 2:30 pm to 3:30 pm.

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Kaspate Shubham Biru	7387565654	
2.	Jagtap Hrishikesh Sudam	7350472897	
3.	Jagtap Rutvik Anil	7385475754	
4.	Suyash Vikas Thorat	7741027177	
5.	Abhijeet Shivlal Choudhari	8010352498	
6.	Bharat Babulal Rathod	9373665009	
7.	Yogesh Kuparam Choudhari	8208191641	
8.	Dhale Rushikesh Krishna	9028896410	
9.	Yash Shegokar	9822663481	
10	Drushti Sonawane	7499381367	
11	Vidhate Rachna	9356035919	
12	Naikwade Deepali	9579063251	
13	Khushi Kharabe	9970459912	
14	Vaishnavi Puyari	7276114170	
15	Vasundhara Satishrao Raje	9172856707	
16	Esha Rajendra Kamble	8308513653	
17	Rohini Vijaykumar Mane	9579496344	
18	Vaibhavi Dattatray Ghule	9028187094	
19	Sonali Balasaheb Ghule	8180947491	
20	Donage Shreya Dattatray	9130636020	
21	Hambir Utkarsha Gulabrao	7807514672	
22	Sakshi Mane	9730445561	
23	Gitanjali Bhosale	7820817090	
24	Rutuja Gund	9156873942	
25	Gauri Kolhe	9322751972	
26	Raplaxmi Jugole	8010484478	
27	Lavkik Raskar	9284697778	
28	Siddhant Dhumal	9834184246	
29	Gaurav Jedhe	7756801971	
30	Saurabh Thopate	9146129940	
31	Mayur Mate	7769936068	
32	Pathrameeli Solanke	8010613845	
33	Rohan Thite	8087074224	
34	Jai Lagad	8605554809	
35	Atole Akanksha Shivaji	7620391153	
36	Bhakti Nilesh Todmal	8459046582	
37	Shewale pranali R	8010647675	
38	Sawant Aarti R	9404589927	

39	Shreya Salunke	9404266794	
40	Srushti .H. Rajpurohit	8999886969	
41	Ingole Rajlaxmi sanjay	8010484478	
42	Dolare Sakshi P.	8830408181	
43	Gaikwad Nikita .N.	7410154048	
44	Badhe Payal Santosh	9356792727	
45	Thokal Sakshi Bhaskar	8767094511	
46	Shubham Mahadev Hole	9112337128	
47	Subhash Santhash Gosavi	9373817095	
48	Tejas Khaladkar S.	9804419111	
49	Bavdhane Nilam H.	9822427911	
50	Holkar Nikita Rajaram	9604565728	
51	Dumbre Tejaswini Sandeep	8855895322	
52	Ghavate Siddhi Ashok	9822043042	
53	Vaibhav . V. Tambe.	9420000074	
54	Omkar Zalte	8421273619	
55	Doke Shubham Dadabhau	9689812515	
56	Tejas Santosh Khaladkar		
57	Jadhav Shivjeet. R	8805680531	
58	Vaibhav Kirtane.	7058240330	
59	Vinit Kale	8459004778	
60	Aditya Mohite	9803039798	
61	Pawar Vikas P.	7249564239	
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Total Present :- 60

Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Sharke... Bhosale College of Pharmaceutical
Sciences & Rese...
Khadki, Pune

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

Lecture 2 Date: 20/10/2023

Attendance Time:- 3:45 pm to 4:45 pm

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Jagtap Hrishikesh Sudam	7350472897	
2.	Jagtap Rutvik Anil	7385475754	
3.	Kaspate Shubham Biru	7387565654	
4.	Thorat Suyash Vikas	7741027177	
5.	Sourabh Santosh pabale	7447200032	
6.	Tejas Santosh Khadakkar	9804419111	
7.	Jadhav Shivjeet Ramesh	8805680531	
8.	Kirtane Vaibhav Vishwajeet	7058240330	
9.	Vinit Ganpat Kale	8459004778	
10	Aditya Rahul mohite	9803039798	
11	Bharat B. Rathod	9373665009	
12	pallab Vikas Bayakam	7249564239	
13	Abhijeet Shivlal Choudhari	8010352498	
14	Yogesh Kupasan Choudhary	8208191641	
15	Vaibhav patang	9067317578	
16	Siddhant Bhumal	9834184246	
17	Gaurav Jedhe	7756801471	
18	Raskar Laukik C.	9284697778	
19	Rohan Thite	8087074224	
20	Prathamesh Solanke	8010673845	
21	Omkar Zalte	8421273619	
22	Mayur Mate	7769936068	
23	Saurabh D. Thopate	9146129940	
24	Hole Shubham M	9112337128	
25	Gosavi Subhash S.	9373817095	
26	Dhale Rushikesh Krishna	9028896410	
27	Doke Shubham Dadabhau	9689812515	
28	Yash Shegolkar	9860234407	
29	Drushti. Sonawane	7499381367	
30	Jagruti. S. Dumbre	8855895322	
31	Ghavate Siddhi Ashok	9822043042	
32	Vidhate Rachna suresh	9356035919	
33	Naiknavare Deepali	9579063251	
34	Vaishnavi Pujari	7276114170	
35	Sonali Ghule	8180944191	
36	Vaibhavi Ghule	9028187094	
37	Nikita Gaikwad	7410154048	
38	Dolare Saksh	8830403181	

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39	Shreya Salunke	9404667 94	Shreya
40	Shruti Rajpurohit	8998869 69	Shruti
41	Thokal Sakshi Bhaskar	8767091145	Sakshi
42	Badhe Payal Santosh	9356792727	Payal
43	Bavdhane Nilam H.	9322427911	Nilam
44	Holkar Nikita Rajaram	9604565728	Nikita
45	Mane Sakshi Sayaji	9730445567	Mane.
46	Kolhe Gauri	9322751942	Gkolhe
47	Bhosale Gitanjali	7820817090	
48	Gund Rutuja	9156879942	Rutuja
49	Hambir Utkarsha	7507514672	U.Hambir
50	Rajaxmi Ingole	8010484478	Ingole
51	Dordge Shreya	9130636020	Shreya
52	Rohini. Vijaykumar Mane	9579496344	Rohini
53	Esha Rajendra Kamble	8308513653	Esha
54	Khushi Rohidas Khavabe	9970459912	KKhavabe
55	Vasundhara Satishrao Raje	9172856707	Raje
56	Atole Akanksha Shivaji	7620391153	Atole
57	Bhakti Nilesh Todmal	8459046582	Bhakti
58	Shewale Pranali	8010647675	Pranali
59	Sawant Aarti Ramdas	9404589927	Aarti
60	Vaibhavi Vikas Tambe	9420000074	
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Total Present : 60

Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Sha... Rural College of ...
... Sciences & Research ...
... Pune ...

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

Date: 30/10/2023
Time: 9:30 am to 10:30 am

Attendance Sheet

Lecture No.: 3

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Khushi Rohidas Kharabe	9970459912	Kharabe
2.	Mrudula Mahesh Thombare	9067613058	Mrudula
3.	Deepali Radhakisan Naiknavare	9579063251	Naik
4.	Rachna Suresh vidhate	9356035919	Rach
5.	Esha Rajendra Kamble	8308513653	Esha
6.	Rohini Vijaykumar mane	9579496344	Rohini.m
7.	Holkar Nikita R.	9604565728	Nikita
8.	Nilam H. Bardhane	9322427911	Nilam
9.	Pratiksha P. pawar	9860487164	Pratiksha
10	Payal santosh Badhe	9356792727	Payal
11	Srushti Harisingh Rajpurohit	8999886969	Sh
12	Pallavi Mahendra Girase	9370247242	Pallavi
13	Thokal Sakshi B.	8767091145	Sakshi
14	Bhosale Gitanjali P.	7820817090	Bhosale
15	Mane Sakshi S.	8378804990	Sakshi
16	Shrinath Rangnath Bachare	9503750297	Shrinath
17	Rutuja Gund	9156873942	Gund
18	Rajalaxmi Ingole.	8010484478	Rajalaxmi
19	Gajanan bohra	70 20587736	Gaj
20	Bharath Rathod	9373665009	Bha
21	Yogesh Choudhary	8208191641	Yo
22	Abhijeet Chaudhari	8010382498	Abhi
23	Dolare Sakshi	8880403131	Sakshi
24	Nilcita Gaikwad	7410154065	Nilcita
25	Dumbre Jagruti	8855895322	Jagruti
26	Ghule Vaibhavi	9028187094	Vaibhavi
27	Ghule Sonali	8180944191	Sonali
28	Ghavate Siddhi	9822043042	Siddhi
29	Sawant Aarti	9404589927	Aarti
30	Shewale Pranali	8010647675	Pranali
31	Mayur Kale	7769936068	Mayur
32	Vaibhav Tambe	9420000077	Vaibhav
33	Siddhant Dhurat	9834124246	Sidd
34	Bhakti Todmal	8459046582	Bhakti
35	Akanksha Atole	7620391153	Atole

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36	Snehal Sukhdev Narvekar	9503496135	Snehal
37	Rushikesh Dhale	9028896410	Dhale
38	Rutvik Jagtap	7385475754	Rutvik
39	Jagtap Hrishikesh	7350472877	HJagtap
40	Shubham Kaspate	9325656069	Shubham
41	Sumit Mohite	9356595859	Sumit
42	Vaishnavi Pujari	9276114170	
43	Laukik Raskar	9284697778	Raskar.
44	Utkarsha Kambir	7507514672	
45	Rajlakshmi Jugole	8010484478	Jugole
46	Rutuja Gund	9156873942	
47	Gauri Kolhe	9322751972	
48	Sakshi Mane	9730445561	Gital.
49	Gitanjali Bhosale	7820817090	
50	Shreyash.p.Salunke	9404266794	Salunke
51	Rohan Thite	8087074224	Pohan.
52	Vaibhav Jadhav	9764631329	Jadhav.
53	Aditya Mohite	9803039798	Aditya.
54	Vasundhara S. Raje	9172856707	
55	Akshada N. Dombe	7743980227	ADombe
56	Shubham M. Hole	9112337128	Shole
57	Subhash Gosavi	9373817095	
58	Sourabh Pabale	7447200032	
59	Amarnath munde	7709442121	
60	Saniya pandkar	9822984201	
61	Tejas Khadkar	9804419111	Tejas
62	Jadhav Shivjeet Ramesh	8805680531	
63	Vaibhav Kirtane	9422680531	
64	Manish Kadam	7667729251	
65	Sutkarsh Gaikwad	9022307626	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

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

Date: 30/10/2023
Time: 10:30 am to 11:30 am

Attendance Sheet

Lecture No.: 4

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Vasundhara, S. Raje	9172856707	
2.	Srushti Harisingh Rajpurohit	8999886969	
3.	Snehal Sukhdev Narvekar	9503496135	Snehal
4.	Khushi Rohidas Kharabe	9970459912	
5.	Mrudula Mahesh Thombare	9067613058	
5.	Pallavi Mahendra Girase	9370247027	
7.	Deepali Radhakisan Naiknavare	9579063251	
8.	Rachna suresh vidhate	9356035919	
9.	Esha Rajendrea Kamble	8308513653	
10	Rohini Vijaykumar mane	9579496344	
11	Nikita Rajaram Holkar	9604565728	
12	Prabiksha P. Pawar	9860487164	
13	Nilam H. Bavdhane	9322427911	
14	Payal Santosh Badhe	9356792727	
15	Sakshi Bhaskar Thokal	8767091145	
16	Sakshi P. Dolare	8830403137	
17	Nikita N. Gaikwad	7401540481	
18	Bhosale Gitanjali P.	7820817090	
19	Sakshi Sayaji mane	8378804990	
20	Bochare Shrinath R.	9503752097	
21	Nayur Rameshwar mate	7769936068	
22	Gund Rutuja Santosh	8156873942	
23	Ingole Rajlaxmi S.	8010484478	
24	Vaibhav Tambe	9420000074	
25	Bhakti Todmal	8459046582	
26	Shewale Pranali R.	8010647675	
27	Sawant Aarti R.	9404589927	
28	Atole Akanksha	7620391153	
29	Sayam Sonvane	7020597736	
30	Yogesh Choudhari	9209191641	
31	Bharath Ratnod	8010352498	
32	Abhijeet Choudhary	9637665091	
33	Vikas Pawar	7249564739	
34	Siddharth Dhumal	9834184246	
35	Vaibhav Jadhav	9764631329	

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36	Aditya Rahul Mahite	9503939798	
37	Jadhav Shivjeet Ramesh	8805680531	
38	Vaibhav Kirtane	9922680531	
39	Raj Vaibhav Patange	8994720002	
40	Pawar Vilas Rajaram	7264956230	
41	Vinit Kale	8459004778	
42	Utkarsh Gaikwad	9022507626	
43	Rohan Thite	8097074224	
44	Tejas Khalendkar	9809418911	
45	Jagtap Hrishikesh	7350472997	
46	Shreya. P. Salunke	9404266794	
47	Laukik Rasal	9284697778	
48	Amarnath Munde	7709442121	
49	Saurabh pabale	7447200037	
50	Prathamesh Salunke	8010673845	
51	Jagtap Hrishikesh	7350472997	
52	Saurabh Thopate	9146129940	
53	Vaishnavi Pujari	7276114170	
54	Shubham M. Hole	9112337128	
55	Subhash Gosavi	9373817045	
56	Akshada Dombe	7743980279	
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Krunal Kanase
Course Coordinator

Dr. Ashok 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

Date: 31/10/2023
Time: 9:30 am to 10:30 a

Attendance Sheet

Lecture No.: 5

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Snehal Sukhdev Nanvekar	9503496135	snehal
2.	Pallavi Mahendra Girase	9370247027	
3.	Mayur Mate	7769936068	Mayur
4.	Nikita Nana Gaikwad	7410154048	Gaikwad
5.	Sakshi Popat Dolare	8830403131	Dolare
6.	Ghavate Siddhi Ashok	9822043042	Ghate
7.	Vaibhavi Dattatray Ghule	9028187094	Ghule
8.	Ghule Sonali Balasaheb	8180944191	Ghule
9.	Sawant Aarti Ramdas	9404589927	Aarti
10	Srushti Harisingh Rajpurohit	8999886969	
11	Jai lagad	8605554809	Jai
12	Siddhant Dhumal	9834184240	Dhumal
13	Dumbre Jagruti	8855895322	Jagruti
14	Rushi Dhale	9028896410	Rushi
15	Gauri Kolhe	9322751992	Kolhe
16	Shrinath Ranganath Bochare	9503750237	Shrinath
17	Yogesh Kuparam Choudhary	8208191641	
18	Abhijeet Shivlal Choudhari	8010352498	
19	Sayam Sunil bahre	7020587736	
20	Bharath rathod	9373665009	
21	Holkar Nikita R.	9604965728	
22	Vasundhara S. Raje	9172856707	
23	Pratiksha P. Pawar.	9860487164	
24	Nilam H. Bavdhane	9322427911	
25	Sakshi B. Thokal	8767091145	
26	Payal S. Badhe	9856792727	Payal
27	Deepali Radhakisan Naiknavare	9579063251	
28	Esha Rajendra Kamble	8308513653	
29	Rohini Vijaykumar mane	9579496344	Rohini.M
30	Rachna S. vidhate	9356035919	
31	Vikas Pawar	7249562391	
32	Mirudula Mahesh Thombare	9067613058	Mirudula
33	Khushi Rohidas Kharabe	9970459912	Kharabe
34	Vaibhav Tambe	9420000074	vaibhav
35	Pranali Shewale	8010647675	Pranali

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36	Rajaxmi S. Ingole	8010484478	R.
37	Rutuja S. Gund.	9156873 94	Rutuja
38	Utkarsh G. Hambir	7507514 67	U
39	Laukik. C. Raskar	9284697778	L
40	Gaurav Kolhe	8010484478	G
41	Geetanjali P. Bhosale	9156873 94	Geeta.
42	Sakshi S. Mane	9156873 94	Sakshi
43	Vaibhav S Jadhav	9764631329	
44	Aditya R. Mohite	9803039798	Mohite
45	Shrijeet R. Jadhav	8805680531	Jadhav
46	Vaibhav Kirtane	9922680591	
47	Tejas Santosh Mahalokar	9840419111	
48	Rohan Thite	8087074224	
49	Rachna S. Vidhate	9356035919	Rvidhate
50	Bhakti Todmal	8459046582	Bhakti
51	Atole Akanksha	7620391153	Atole
52	Shreya Salunke	9404266794	Shreya
53	Vaishnavi Pujari	7276114170	Vaishnavi
54	Akshada Dombe	7743985027	Akshada
55	Shubham M. Hole	91F2331128	Shubham
56	Subhash S. Gosavi	9373817095	Subhash
57	Jagtap Rutvik. A	7385475754	Rutvik
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Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Date: 31/10/2023
Time: 10:30 am to 11:30

Attendance Sheet

Lecture No.: 6

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Snehal Sukhdev Narvekar	9503496135	Snehal
2.	Khushi Rohidas Kharabe	9970459912	Kharabe
3.	Mrudula Mahesh Thombare	9067613058	Mrudula
4.	Rachna Suresh vidhate	9356035919	Pude
5.	Deepali Radhakisan Naiknavare	9579063251	naval
6.	Esha Rajendera Kamble	8308513653	Esha
7.	Rohini Vijaykumar Mane	9579496394	Rohini.m
8.	NPlam Harishchandra Bardiare	9322427911	
9.	Holkar Nikita R.	9604565728	
10	Pratiksha P. Pawar	9860487164	
11	Payal santosh Badhe	9356792727	Payal
12	Thokal Satshi B.	8767091145	Satshi
13	Srushti Harisingh Rajpurohit	8999886969	Sh
14	Pallavi Mahendra Girase	9370247027	Pallavi
15	Shrikath Rangnath Bochare	9503750297	
16	Kailaxmi S. Ingole	8010484478	
17	Vaibhav V. Tambe	7420000074	
18	Mayur Mane	7767996606	
19	Jagruti Durgbar	8855982010	
20	Utkarsha G. Nambir	7507514672	Utkarsha
21	Rutuja S. Gund.	7820817090	
22	Gauri I. Kolhe	8010484478	
23	Gitanjali T. Bhosale	7820817090	Geeta
24	Satsshi S. Mane	8378804990	
25	Abhijeet S. Choudhari	8010352498	
26	Yogesh K. Choudhary	8208191641	
27	Satyam S. Bohra	7020587736	Satyam
28	Bharat. B Rathod	9373665009	Bharat
29	Jadhav Shrivjeet Ramesh	8805690531	
30	Jadhav Vaibhav	7768329	Vaibhav
31	Kirdane Vaibhav	9922680531	
32	Aditya Mohite	8087007422	
33	Rohan Thite	8087074224	
34	Teja Santosh khelaskar	9904619111	
35	Dhale Rushikesh Krishna	9028896410	

36	Gosavi Subhash Santosh	9373817095	Gosavi
37	Hole Shubham Mahadev	9112337128	Hole
38	Ghavate Siddhi Ashok.	9822043043	Siddhi.
39	Ghule Sonali.	8180944191	Sonali.
40	Ghule Vaibhavi	9028187094	Vaibhavi
41	Vinit. Kale	8459004778	Vinit
42	Utkarsh Gaikwad	9022507626	Utkarsh.
43	Sourabh pabale	7447200032	Sourabh.
44	Amarnath Munde	7709402121	Amarnath
45	Jagtap Hrishikesh	7350472897	Jagtap
46	Laukik raskar	9284097778	Laukik
47	Nilcita Gaikwad	7401540648	Gaikwad
48	Sakshi Dolare	8830408181	Sakshi.
49	~~Prachee~~ ~~Vishwate~~		
50	Akshada Nilkanth Dombe	7743980279	Dombe
51	Shreya P. Salunke	9404266794	Salunke
52	Sawant Aarti	9404589927	Aarti
53	Bhakti Todmal.	8459046582	Bhakti
54	Shewale Pranal.	8010647675	Pranal.
55	Atole AKanksha	7620391153	Atole
56	Vasundhara S. Raje	9172856707	~~Vasundhara~~ Raje
57	Bathamesh Solanke	8010673845	Solanke
58	Jagtap Rutvik	7385475754	Rutvik
59	Vaishnavi Pujari	7276114170	Vaishnavi
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal
PRINCIPAL
Pune District Education Association's
Shankarrao Urgal 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

Date: 6/11/2023
Time: 9:30 am to 10:30 am

Attendance Sheet

Lecture No.: 7

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Pawar Vikas Rajaram	7249564239	
2.	Patange Vaibhav Narayan	7249564119	
3.	Yogesh Choudhary	8208191641	
4.	Abhijeet Choudhari	8010352498	
5.	Sayam bohra	7020587736	
6.	Bharath ratna	9373665009	
7.	Vinit Kale	8459004778	
8.	Utkarsh Gaikwad	9022507626	
9.	Shrinath Rangnath Bochare	9503750297	
10	Tejas Santosh Khaladkar	9804419111	
11	Hole Shubham Mahadev	9112337128	
12	Jadhav Shivjeet Ramesh	8805680531	
13	Gosavi Subhash Santosh	9878817095	
14	Dhale Rushikesh Krishna	9028896410	
15	Pallavi Mahendra Girase	9370247027	
16	Srushti Harisingh Rajpurohit	8999286969	
17	Dumbre Jagruti	8855895227	
18	Aditya Mohite	9803039798	
19	Vaibhav Tambe	7420000074	
20	Jadhav Vaibhav	9764631329	
21	Ghorvate Siddhi	9822063042	
22	Mayur Mate	7769936068	
23	Sonali Ghule	8180944191	
24	Vaibhavi Ghule	9822043042	
25	Saurabh Thopate	9146129940	
26	Rushi Dhage		
27	Vaibhav Kirtane	7058240330	
28	Rohan Thite	8087074224	
29	Jagtap Hrishikesh Sudam	7350472897	
30	Suyash Vikas Thorat	7741027177	
31	Sumit Mohite	9356595859	
32	Laukik Raskar	9284697778	
33	Utkarsha Navibag	7507514672	
34	Gaud Rutuja	9156873942	
35	Sakshi Mane		

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36	Saurabh pabale	7447200022	
37	Aman munde	7709442121	
38	Snehal Sukhdev Narvekar	9503496135	Snehal
39	Nikita Gaikwad	7410156023	
40	Sakshi Dolare	8830403187	
41	Vasundhara S. Raje	9172856707	
42	Rohini mane	9579696944	Rohini
43	Esha kamble.	8308513653	Esha.K
44	Rachna S. Vidhate	9356035119	
45	Mrudula M. Thombare	9067613058	Mrudula
46	Khushi R. Kharabe	9970459912	
47	Pratiksha P. Pawar	9860487164	
48	Nilam H. Bavdhane	9322427911	
49	Nikita R. Holkar	9860565728	
50	Payal Badhe	9356792727	Payal
51	Sakshi Thokal	8767044145	
52	Deepali Radhakisan Naiknaware	9579663251	
53	Shreya P. Salunke	9404266794	
54	Dombe Akshada N.	7743980279	
55	Saurabh Thopate	9146129960	
56	Prathmesh colambe	8010673845	
57	Bhakti N. Todmal	8459046582	
58	Sawant Aarti. R	9404589927	
59	Shewale Pranali. R	8010647675	
60	Atole Arapanksha.	7620526153	
61	Vaishnavi Pujari	7276114170	
62	Sagtap Rutuja.	7385475754	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

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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

Date: 6/11/2023
Time: 10:30 am to 11:30 am

Attendance Sheet

Lecture No.: 8

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shrinath Ranganath Bochare	9503750297	
2.	Abhijeet Shivlal Choudhari	8010352498	
3.	Yogesh Kuparam Choudhary	8208191641	
4.	Bharat Babulal Rathod	9373665009	
5.	Rohan Nitin Thite.	8097074224	
6.	Sayram Bora	7020587736.	
7.	Mayur Male.	7769936068	
8.	Siddhant Bhujbal	9834184246	
9.	Vaibhav Jadhav	9764631329	
10	Jai Lagad	8605554809	
11	Sourabh pabale	7447200032	
12	Amar munde	7057900032	
13	Aditya Mohite	9803039798	
14	Ghule Sonali B.	8180944191	
15	Ghule Vaibhavi D.	9028187094	
16	Ghavate siddhi A.	9822043042	
17	Sourabh Thopate		
18	Dhale Rushikesh	9028896410	
19	Vaibhav Tambe	9420000774	
20	Jagruti Dumbare	8855895322	
21	Jadhav Shivjeet Ramesh	8805680531	
22	Vaibhav Tirdane	9922680531	
23	Pawar Vikas Rajaram	7249564234	
24	Patange vaibhav Ashok	7409830782	
25	Vinit Kale	8459004778	
26	Tejas Khaladkar	9804419111	
27	Utkarsh Gaikwad	9022507626	
28	Pipali Naikwade	9579063251	
29	Rahul Vidhate	9356035919	
30	Yasundhara S Raje	9172856707	
31	Nilam H. Bavdhane	9822427911	
32	Pawar pratiksha P.	9860487164	
33	Sakshi B. Thokal	8767091145	
34	Nikita R. Holkar	9804565728	
35	Payal S. Badhe	9356792727	

21/7/21

36	Deepali Rajthakisan Naikwadi	9579663251	Deepali
37	Gosha Rajendra Kamble	8308513653	
38	Rohini Vijaykumar mane	9579496344	Rohini
39	Rachna V Suresh Vidhat	9356035519	
40	vikas Pawar	7249654239	
41	Dolare Saiesshi	8830403131	
42	Gaikwad Nilcita	7410154048	Gaikwad
43	Mrudula .M. Thombare	9067613058	Mrudula
44	Khushi R. Kharabe	9970459912	Kharabe
45	Srushti Harisingh Rajpurohit	8999886969	Sh
46	Pallavi Mahendra Girase	9370247027	Pallavi
47	vaibhav N. Patange	8999720002	
48	Vaishnavi Pujari	7276114170	
49	Snehal Narvekar	9503496135	Snehal
50	Sawant Aarti	9404589907	Aarti
51	Rane Sakshi	8378809990	Sakshi
52	Rajalaxmi Ingole	8010686478	Ingole
53	Gitanjali bhosale	7820817090	Gitanjali
54	Rujuja Gore.	8378788.0990	Rujuja
55	Saukik Raskar	7820817090	Raskar
56	Gauri kalhe	9600589927	Kalhe
57	Utkarsha Wambir	8378806990	Wambir
58	Bhakti N. Todkar	8459046582	Bhakti
59	Shewale Pranali. R	8010617675	Pranali
60	Atole Akanksha.	7620391153	Akanksha
61	Jagtap Harishish	7350472897	Harishish
62	Saurabh Thopate	9146129940	Saurabh
63	Prathmesh Solankhe	8010673845	Prathmesh
64	Shweta. p. Salunke	9404266794	Shweta
65	Akshada N. Dombe	7249850279	Akshada
66	Jagtap Rutuik. A	7385425752	Rutuik
67	Shubham M. Hole	9112337128	Hole
68	subhash Wosavi	9373817095	Subhash
69	Tejas Khaddar	8804191911	Tejas
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Kruhal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Date: 7/11/2023
Time: 9:30 am to 10:30 am

Attendance Sheet

Lecture No.: 9

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Vasundhara S. Raje	9172856707	
2.	Snehal Sukhdev Narvekar	9503496135	
3.	Khushi Rohidas Kharabe	9970459912	
4.	Mrudula Mahesh Thombare	9067613058	
5.	Deepali Radhakisan Naiknavare	9579068251	
6.	Rachna suresh vidhate	9356035919	
7.	Esha Rajendra kamble	8308513653	
8.	Rohini Vijaykumar mane	9579496344	
9.	Srushti Harisingh Rajpurohit	8999886969	
10	Pallavi Mahendra Girase	9370247027	
11	Nikita R. Holkar	9604565728	
12	Pratiksha P. Pawar	9860487164	
13	Nilu H. Bavdhane	9822427911	
14	Payal santosh Badhe	9356792727	
15	Sakshi Bhaskar Thokal	8767091145	
16	Bhakti Nilesh Todmal	8459046582	
17	Shewale Pranali R.	8010647675	
18	Sawant Aath Kamdas	9404589927	
19	Gaikwad Nikita N.	7410154041	
20	Sakshi P. Dolare	8830403131	
21	Shrinath Rangnath Bochare	9503750297	
22	Gayam Bohra	7010567736	
23	Yogesh Choudhary	8208191641	
24	Abhijeet Chouchavi	8208191641	
25	Khanatn Rafiq	9373665009	
26	Mayur Mate	7769936068	
27	Vaibhav Tambe	9420000079	
28	Vikas pawar	9356942139	
29	Jagruti Dumbre	8855899801	
30	Akash Arankha	7620391153	
31	Bhosale Gitanjali	7820817090	
32	Sakshi S. Make	8378504990	
33	Rutuja S. Gund	9156873942	
34	Ingole Rajakarmi S.	8010484488	
35	Tejas Khairkar	9804419111	

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36	Siddhant Dhumal	9834184246	Sdy
37	Rohan Thite	8087074224	Rwy
38	Vaibhav Saurabh Thopate	9146529940	Sdy
39	Gauri Kolhe	9322751922	Gule
40	Jagtap Hrishikesh	7350472897	Hsy
41	Shreya P Salunke	9404266794	Salunke
42	Shubham Hole	9112337128	SHole
43	Subhash S. Gosavi	9373817095	Subhash
44	Shreya. P. Salunke	9404266794	Salunke
45	Dombe Akshada Nilkanth	7743980279	Akshada
46	Saurabh Thopate	9146129940	Thopate
47	prathmesh solanke	8010678845	Pratik
48	Amarnath Munde	7709442121	A
49	Saurabh pabale	7447200032	
50	Sagtap Rutuja. A	7385475754	Rutuja
51	Vaibhav Kirtane	7058240330	Vaibhav
52	Vaishnavi Pujari	7276114170	Vaishnavi
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
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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

Date: 8/11/2023
Time: 10:30 am to 11:30 am

Attendance Sheet

Lecture No.: 10

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Pawar Vikas Rajaram	7249564239	
2.	Yogesh Choudhary	8208191641	
3.	Abhijeet Choudhary	8010352498	
4.	Sayam Bohra	7020587736	
5.	Bharath rathod	9373663009	
6.	Vinit Kale	8459004778	
7.	utkarsh Gaikwad	9022507626	
8.	Shrinath Rangnath Bochare	9503750297	
9.	Tejas Santosh Ichalkaranji	9804419111	
10	Hole Shubham mahadev	9112337128	
11	Gosavi Subhash santosh	9112337118	
12	Jadhav shivjeet Ramesh	8805680531	
13	Dhale Rushikesh Krishna	9028896410	
14	Vaibhav Santosh Jadhav	9764631329	
15	Rohan Thite	8087074226	
16	Aditya Mohite	9802022725	
17	Rutuja Gund	9156873942	
18	Utkarsha hambir	7507514672	
19	Lavkik Rokar	9284697778	
20	Sakshi mane	8378804990	
21	Gitanjali Bhosale	7820817090	
22	Gauri Kolhe	9322751972	
23	Rajlaxmi Ingole	8010484478	
24	Siddhi ahavale	9822043042	
25	Sonali Ghule	8180944191	
26	Vaibhavi Ghule	9028187094	
27	mayur mate	7769936068	
28	Vaibhav Tambe	9420000074	
29	Saurabh Thopate	9146129960	
30	pallavi Gitte	9370247027	
31	Shrushti Rajpurohit	8999886969	
32	Rushikesh Dhale	9028896410	
33	Tejas Ichalkaranji	9804419118	
34	Vaibhav Kirtane	7058240320	
35	Atole Akanksha	7620 391153	

36	Bhakti. N. Todmal	8459046582	Bhakti
37	Shewale Pranali. K	8010647675	pranali
38	Sawant Aarti. R.	9404589927	Aarti
39	Gsha Rajendra Kamble	8308513653	Gsha.
40	Rohini V. mane	9579496344	Rohini
41	Snehal Sukhdev Nanekar	9503496135	Snehal
42	Siddhant Dhumal	9834184246	Dhumal
43	Nikita N. Gaikwad.	7410154048	Gaikwad
44	Dolare Sakshi. Popat	8830403131	Sakshi
45	Vasundhara S. Raje	9172856707	Raje
46	Shreyas Salunke.	9404266794	Salunke
47	Khushi R. Kharabe	9970459912	Kharabe
48	Mrudula. M. Thombare.	9067613058	Mrudula
49	Vaishnavi Pujari	7276114170	
50	Vaibhav Patange.	8999720002	
51	Rachna Suresh vidhate	9356035919	Rachna
52	Naiknavare Deepali Radhakisan	9579063255	Deepali
53	Nilam H. Bavdhane	9322427411	Nilam
54	Payal Badhe	9356792727	Payal
55	Nikita. Holkar	9604565728	Nikita
56	Saloni Thokal	8767041145	Saloni
57	Prathisha Pawar	9860487164	Prathisha
58	Akshada Dombe	7743980279	Akshada
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Krunal Kanase
Course Coordinator

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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

Date: 20/11/2023
Time: 9:30 am to 11:30 am

Attendance Sheet

Lecture No.: 11

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Abhijeet Shivlal Choudhari	8010352498	
2.	Shrinath Rangnath Bochare	9503750297	
3.	Yogesh Kuberam Chaudhari	8208191641	
4.	Bharat Babulal Chaur Rathod	9373665009	
5.	Jai Anil Lagad	8605554809	
6.	Sumit Santosh Mohite	9356595859	
7.	Vaibhav Vishnu Tambe	9420000074	
8.	pawar Vikas Rajaram	7249456423 9	
9.	Saurabh Dattatray Thopate	9146129940	
10	Vaibhav Santosh Jadhav	9764631329	
11	Aditya Rahul Mohite	9803039798	
12	Sayam Bohra	7020587736	
13	Siddhant Vikas Dhumal	9834184246	
14	Vaibhav Narayanrao Patenge	8999720002	
15	Suyash Vikas Thorat	7771027177	
16	Mayur Rameshwar Mate	7769936068	
17	Tejas Santosh Khaladkar	9804141111	
18	Jadhav Shivjeet Ramesh	8805680531	
19	vaibhav Nistane	9928680531	
20	Sumit Santosh mohite.	9356595859	
21	Rohan thite.	8087074224	
22	Sourabh pabale	7447200032	
23	Amar Munde	7057900032	
24	Jagruti Dumbre	8855895322	
25	Vinit Lale	6459004778	
26	Utkarsh Gaikwad	9022507076	
27	Holeshubham M	9112337118	
28	Gosavi Subhash S	7447200032	
29	Bhale Rushikesh Krishna	9028896410	
30	Pallavi Mahendra Girase	9370247027	
31	Srushti Harisingh Rajpurohit	8999986969	
32	Chavare Siddhi	9822003042	
33	Ghule Sonali	8180944019	
34	Ghule vaibhavi	9028187090	
35	Holkar Nikita R.	9604565728	

36	Vinit Kale	8459004778	
37	utkarsh Gaikwad	9022507626	
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39	Nilam H. Bavdhane	9322427911	
40	Payal Badhe	9356792727	
41	Prathksha P. Pawar	9860487164	
42	Sakshi Thokal	8767041145	
43	Naiknavare Deepali R	9579063251	
44	Esha Rajendra Kamble	8308513653	
45	Rohini .V. mane	9579496344	
46	Dolare Sakshi	8830408181	
47	Gaikwad Nilcika	7401554048	
48	Rachna Vidhate	9357035919	
49	Snehal Narvekar	9503496135	
50	Vaishnavi Pujari	7276114170	
51	Rutuja Gurle	9156873942	
52	Utkarsha Hambir	7507551672	
53	Vaibhik Raskar	9284697778	
54	Gitanjali Bhosale	7820817096	
55	Sakshi mane	8378810490	
56	Gauri Kolhe	9322751972	
57	Rajlaxmi Ingole	8010484478	
58	Aarti Sawant	9404589927	
59	Bharti N. Todmal	8459046582	
60	Shewale Pranali. R	8010647675	
61	Sawant Aarti. R.	9040589927	
62	Atole Akanksha.	7620391753	
63	Jagtap Hrishikesh	9350472897	
64	Khushi R. Kharabe	9970459912	
65	Salunke Shreya	9404266794	
66	Mrudula. M. Thombre	9067613098	
67	Akshada W. Dombe	7743980299	
68	Vasundhara S. Raje	9172856707	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
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PRINCIPAL
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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

Date: 20/11/2023
Time: 10:30 am to 11:30

Attendance Sheet

Lecture No.: 12

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Sawant Aarti Ramdas	9404589927	
2.	Bhakti Nilesh Todmal	8459046582	
3.	Shewale Pranali Ramesh	8010647675	
4.	Atole Akanksha.s	7620391533	
5.	Jagtap Rutvik R.	7385475754	
6.	Jagtap Hrishikesh	7350472897	
7.	Shubham Kaspate	7387565654	
8.	Suyash Thorat	7741027777	
9.	Sumit Mohite	9356595889	Sumit
10	Ingole Rajalaxmi	8010484478	
11	Gauri Kolhe	9322751972	
12	Bhosale Geetanjali	7820817090	
13	Srushti Rajpurohit	8999886969	
14	Uttaisha Nambir	7507514612	
15	Pallavi Mahendra Girase	9370247027	
16	Shreya Salunke	9404266779	
17	Khushi Kharabe	9970459912	
18	Laki Rastar	9284697778	
19	Nikita Gaikwad	7410154048	
20	Thopate saurabh	9146129940	
21	Sakshi Dolas	8830403131	
22	Esha Kamble	8308513653	
23	Sakshi Mane	8378804990	
24	Vaishnavi Pujari	7276114170	
25	Mrudula Thombre	9067613058	
26	Rutuja santosh gurd	9156873942	
27	Sourabh papale	7447200032	
28	Mane Rohini	9579496344	
29	Snehal Narvekar	9503496138	
30	Shrinath Rangnath Bochare	9503750297	
31	Rachna vidhate	9356035919	
32	Pawar Vikas R	7249564239	
33	Thokal Sakshi B.	8767091145	
34	Payal Badhe	9356792727	
35	Nilcita Holkar	9604565728	

36	Nilam Bavdhane	9322427911	Nilam
37	Tejas Khadkar	9804418111	Tejas
38	Shubham Hole	9112237128	Hshole
39	Subhash Gosavi	9373817095	Subhash
40	Vaibhav Kirtane	7058240330	Pratiksha
41	Pratiksha pawar	9860487164	
42	Naiknavare Deepali	9579063251	
43	Vaibhav pantage	89997200	
44	Vasundhara Raje	9172856707	
45	Rohan Thite	8087074224	
46	Vinit Kale	8459004978	
47	Aditya Mohite	9803099798	
48	Vaibhav Jadhav	9766631329	
49	Yash Shegolkar	9822663481	
50	Drushti Sonawane	7499381367	
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Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Date: 21/11/2023
Time: 9:30 am to 10:30 am

Attendance Sheet

Lecture No.: 13

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shewale Pranali Ramkrushn	8010647675	
2.	Atole Akanksha shivaji	7320391153	
3.	Sawant Aarti Ramdas	9404589927	
4.	Todmal Bhakti Nilesh	8459046582	
5.	Jagtap Hrishikesh	7350473897	
6.	Jagtap Rutvik	7385475758	
7.	Kaspate Shubham	7387565654	
8.	Thorat Suyash	7741027177	
9.	Mohite Shruti	9356595859	
10	Ingole Rajlaxmi S.	8010484478	
11	Laukik Raskar	9284897778	
12	Utkarsha Hambir	7507514672	
13	Shreya Salunke	9404266796	
14	Kolhe Gauri Ishwar	9322751972	
15	Sakshi Mane	8378804990	
16	Gund Rutuja G.	9284897778	
17	Srushti Harisingh Rajpurohit	8999886969	
18	Pallavi Mahendra Girase	9370247027	
19	Mrudula Thombre	9067613058	
20	Nikita Gaikwad	7401547048	
21	Sakshi Dolare	8830403131	
22	Khushi Khasabe	9970459912	
23	Rohan Thite	9087074224	
24	Vaishnavi Pujari	7276114170	
25	Esha Kamble	8308513653	
26	Mane Rohini	9579496344	
27	Sourabh pabale	7447200032	
28	Snehal Narvekar	9503496135	
29	Shrinath Ramnath Bakare	9503750297	
30	Rachna vidhate	9356075919	
31	Pawar Vikas R.	7249564239	
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36	Thokal Sakshi	8767091145	Sakshi
37	Badhe Payal	9356792727	Payal
38	Holkar Nikita	9604562728	Nikita
39	Bavdhane Nilam	9322427911	Nilam
40	Pawar Pratiksha	9860487164	
41	Gosavi Shbhash	9373817095	Subhash
42	Hole Shubham	9112337128	Hole
43	Khalad kar Tejas	9804419111	Tejas
44	Kirtane Vaibhav	7058240330	Vaibhav
45	Naiknavare Deepali	9579063251	
46	Vaibhav pantage	9999720000	
47	vasundhara Raje	9172856707	Raje.
48	Vinit Kale	8459004778	
49	Aditya Mohite	9803039798	
50	Vaibhav Jadhav	9766631329	
51	Yash Shegolkar	9822663481	Shegolkar
52	Drushti Sonawane	7499 381367	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

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Sciences & Research Centre,
Kharadi, Pune-411014.

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

Date: 21/11/2023
Time: 10:30 am To 11:30 am

Attendance Sheet

Lecture No.: 14

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Bhakti Todmal	8459046582	Bhakti
2.	Atole Akanksha	7620391153	Atole
3.	Sumit Mohite	9356595859	Sumit
4.	Suyash Thorat	7741027177	Thorat
5.	Hrishikesh Jagtap	7350472897	H.Jagtap
6.	Shewale Pranali	8010647675	Pranali
7.	Rutvik Jagtap	7385475754	RJagtap
8.	Kaspate Shubham	7387565654	Shubham
9.	Sawant Aarti	9404589927	Aarti
10	Ingole Rajlaxmi Sanjay	8010484478	Raj
11	Bhosale Greeanjali	7820817090	Greeta
12	Sakshi S. Mane	8378804990	SM
13	Saurabh Thopate	9146129950	Saur
14	Kolhe Gauri	9322751972	Gauri
15	Utkarsha Hambir	7507514672	Utka
16	Kund Rutuja S.	9156873942	Rutu
17	Jaukik Raskar	9284697778	Jaukik
18	Shreya Salunke	9404266794	Salunke
19	Srushti Rajpurohit	8999886969	Srushti
20	Pallavi Mahendra Girase	9370247027	Pmgirase
21	Esha Kamble	8308513653	Esha
22	Mrudula Thombre	9067613058	Mrudula
23	Khushi Kharabe	9970459912	KKharabe
24	Mane Rohini	9579496344	Rohini
25	Nikita Gaikwad	7410154048	Nikita
26	Sakshi Dolare.	8830409131	Dolare
27	Shrinath Bachare	9503750297	Shrinath B
28	Vaishnavi Pujari	7276114170	Vaishnavi
29	Sourabh Pawale	7447200032	Sourabh
30	Snehal Narvekar	9503496135	Snehal
31	Rachna vidhate	9356035919	Rachna
32	pawar Vikas R.	7249564239	Vikas
33	Thokal Sakshi B.	8767091145	Sakshi
34	Payal Badhe	9356792727	Payal
35	Nilam Bavdhane	9322427911	NilamB

36	Pratiksha pawar	9864877164	
37	Nikita Hollcar	9604565728	
38	Shubham Hole	9112337128	
39	Subhash Gosavi	9373817095	
40	Tejas Khaladkar	9804419111	
41	Vaibhav Kirtane	7058240330	
42	Naikwadi Deepali	9579063251	
43	Vaibhav pantage	8999972000	
44	Vasundhara Raje	9172856707	
45	Rohan Thite	8087074229	
46	Vinit Kale	8459004778	
47	Aditya Mohite	9803039798	
48	Vaibhav Jadhav	9764631329	
49	Yash Shegokar	9822663481	
50	Drushti Sonawane	7499381367	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal
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Kharadi, Pune-411014.

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

Date: 10/02/2023
Time: 9:30 am to 10:30 am

Attendance Sheet

Lecture No.: 15

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shewale Pranali	8010647675	Pranali
2.	Sawant Aarti	9404589927	Aarti
3.	Bhaki Jodmal	9459045582	Bhakti
4.	Atole Akanksha	7620391153	A. Atole
5.	Jagtap Rutvik	7385475754	Jagtap
6.	Kaspate Shubham	7387565654	Shubham
7.	Sumit Mohite	9359595859	Sumit
8.	Thorat Suyash	7741027177	Suyash
9.	Jagtap Hrishikesh	7350472597	Hrishikesh
10	Shreeja Salunke	9404266799	Salunke
11	Srushti Harisingh Rajpurohit	8999886969	
12	Khushi Kharabe	9970459912	Kharabe
13	Nikita Gaikwad	9011540488	Gaikwad
14	Sakshi Dolare	8830403191	Dolare
15	Utkarsha G. Hambir	7507514672	Utkarsha
16	Mrudula Thombre	9067613058	Mrudula
17	Saurabh pobare	7447200032	Saurabh
18	Mane Rohini	9579496344	Rohini
19	Esha Kambe	8308513653	Esha
20	Pallavi Mahendra Girase	9370247027	Pmgirase
21	Snehal Narvekar	9503496135	Snehal
22	Ingole Rajlaxmi S.	8010484478	Ingole
23	Rohan Nitin Thite	8087074224	
24	Shrinath Rangnath Bachare	9503250297	Shrinath
25	Sakshi Mane	8378804990	S.M
26			
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28	Vaishnavi Pujari	7276114170	Vaishnavi
29	Gund Rutuja S.	9284897778	Gund
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32	Gaikwad Raskar	9284897778	Gaikwad
33	Pawar Vikas Rajaram	7249566279	
34	Rachna Vidhate	9356035994	
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36	Thokal Sakshi	8767091145	
37	Badhe Payal	9356792727	
38	Holkar Nikita	9604562728	
39	Bavdhane Nilam	9322427911	
40	Pawar Pratiksha	9860457164	
41	Hole Shubham	9112337128	
42	Gosavi Subhash	9373817095	
43	Khatadkar Tejas	9804419111	
44	kirtane vaibhav	7058240330	
45	Naiknavare Deepali	9579063251	
46	Vaibhav pantage	8999T200	
47	vasundhara Raje	9172856707	
48	Vinit kale	8459004978	
49	Aditya Mohite	9803029798	
50	vaibhav Jadhav	9764631229	
51	Yash Shegokar	9822663481	
52	Drushti Sonawane	7499381367	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
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Kharadi, Pune-411014.

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

Date: 10/02/2025
Time: 2:00 pm to 3:00 pm

Attendance Sheet

Lecture No.: 17

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shrinath Rangnath Babare	9503750297	
2.	Abhijeet Shivlal Choudhari	8010352498	
3.	Bharat Babulal Rathod	9373665009	
4.	Naiknavare Deepali R	9579068851	
5.	Patenge Vaibhav N	8446726002	
6.	Pawar Vikas Rajaram	7219564239	
7.	Saurabh D Thopate	9146129940	
8.	Sayam Sunil bohra	7020587736	
9.	Yogesh Kupcham Chavdhari	8208191641	
10	Shi Lagad	8605554809	
11	Manish Ramdas Kadam	7588729921	
12	Rachna Vidhate	9356035919	
13	Dumbre Tejasri	8855895322	
14	Vinit Kale	8459004778	
15	Vaibhav Jadhav	9764631329	
16	Nilesh Gaikwad	7020587732	
17	Nikita Gaikwad	7410154048	
18	Sakshi Dolare	8830403131	
19	Ghavate Siddhi	9822063042	
20	Ghule Sonali	8180994191	
21	Ghule Vaibhavi	9028187099	
22	Dhale Rushikesh	9028896410	
23	Aditya MOBILE	9803033795	
24	Gosavi Subhash	9373817095	
25	Hole Shubham	9112337128	
26	Onkar Zalke	9423475019	
27	Vaibhav Tambe	9420000074	
28	Payal badhe	9356792727	
29	Thokal Sakshi	8767091145	
30	Holkar Nikita	9604565728	
31	Tejas khaladkar	9804419111	
32	Nilam Bavdhane	9322477911	
33	Pawar Pratiksha	9860487164	
34	Rohan Thite	8087074224	
35	Sumit Mokite	9350595859	

36	Mayur Mate	7769936068	Mayur
37	Suyesh Thorat	7711047711	Thorat
38	Raskar Lavkik	9284697778	Lavkik
39	hambir utkarsha	7507514672	
40	Vaibhav Kirtane	7059240330	
41	Prathamesh salunke	8010673845	
42	Siddhant V. Dhumal	9834184246	
43	Shivject Jadhav	8805680531	Shiva
44	Yash Shevalkar	9822663481	Shevalkar
45	Drushti Sonawane		
46	Vaishnavi Pujari	7276114170	Vaish
47	Jagtap Hrishikesh	7350472891	Jagtap
48	Sawant Aarti	9404589927	Aarti
49	Shewale Pranali	8010647675	Pranali
50	Bhakti Todmal	8459046582	Bakti
51	Rutvik Jagtap	7385475754	RJagtap
52	Atole Akshay	7620391152	Atole
53	Shubham Kaspate	7387565654	Shubham
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Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Date: 18/2/2024
Time: 10:30am to 11:30 a

Attendance Sheet

Lecture No.: 16

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shrinath Bachare	9503750297	
2.	Abhijeet Shivlal Choudhari	8010352498	
3.	Bharat Babulal Rathod	9373665009	
4.	Patange Vaibhav N	8999720002	
5.	Deepali Radhakisan Naiknavare	9579063251	
6.	Pawar Vikas Rajaram	7249564239	
7.	Yogesh Choudhary	8208191641	
8.	Sayam bohra	7020587736	
9.	Jai Lagad	7057549094	
10	Saurabh Dattatray Thopate	9146129940	
11	Manish Ramdas Kadam	7777729921	
12	Vinit Kale	8459604778	
13	Vaibhav Jadhav	9764631329	
14	Nichate Rachna	9356035919	
15	Nikita Khaskaud	7410154048	
16	Sakshi dolare	8830403131	
17	Dumbre Jagruti	8855995322	
18	Thokal Sakshi	8767091145	
19	Badhe Payal	9356792727	
20	Kolkar Nikita	9604565728	
21	Nilam Bavdhane	9322427911	
22	Pratiksha Pawar	9866487164	
23	Shubham Hole	9112837128	
24	Subhash Gosavi	9373817095	
25	Vaibhav Tambe	9420000074	
26	Khaladkar Tejas	9804419111	
27	Ghule Sonali	8180947191	
28	Ghavate Siddhi	9822063042	
29	Ghule Vaibhavi	9028187094	
30	Dhole Rushikesh	9028896410	
31	Omkar Zalte	8421273619	
32	Vaibhav Tambe	9420000074	
33	Aditya Mohite	9803039198	
34	Gaikwad Uttara	9022506226	
35	Rohan Thite	8087074224	

36	Sumit Rohite	9356595859	
37	Suyash Thorat	7177047177	Thorat.
38	Mate Mayur	8788477699366887	Mayur
39	Raskar Laukik.	9284697778	Laukik.
40	Hambir Utkarsha.	7507514672	
41	Vaibhav Kistare	7058240330	VK.
42	Prathamesh salunke	8010673845	
43	Siddhant V. Dhumal	9834184246	
44	Shivject Jadhav	8805680531	
45	Dnyneshi Sonawane	7499381367	
46	Yash Anil Shegokar	9822663481	
47	Vaishnavi Pujari	7276114170	Vaishnavi
48	Jagtap Hrishikesh	8350472897	
49	Sawant Aarti	9404589927	Aarti
50	Jagtap Rutvik	7385475754	R.Jagtap
51	Prabali Shewale	8106476 75	Prabali
52	Bhakti Todmal	8459046582	Bhakti
53	Atole Akaksha	7620891153	Atole
54	Kaspate Shubham	7387565654	Shubham
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

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

Date: 17/02/2024
Time: 9:30 am to 10:30 am

Attendance Sheet

Lecture No.: 1-8

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Abhijeet Shivlal Choudhari	8010352498	
2.	Bharat Babulal Rathod	93 73665009	Bharat
3.	Shrinath Rangnath Bachare	9503750297	
4.	Pawar Vikas Rajaram	7249564239	
5.	Deepali Radhakisan Naiknavare	9579063251	
6.	Patange Vaibhav N	8999720002	
7.	Sayam Soni bohra	7040587736	
8.	yogesh Chaudhari	8208191641	
9.	Jai Lagad	8605554809	
10	Manish Kamdal kadam	7887299215	
11	Amit Kale	8459908778	
12	Rachna vidhate	9356035919	
13	Vaibhav Jadhav	9764631329	
14	Gosavi Subhash S.	9373817095	
15	Hole Shubham H.	8080267232	
16	Holkar Ankita R.	9604565728	
17	Thokal Sakshi B.	8767091145	
18	Dumbre Tejasri	8855825222	
19	Tambe Vaibhav	9420000074	
20	Nikita Gaikwad	7401540418	
21	Sakshi Dolare	8830403131	
22	Owkar Palte	9421273614	
23	Badhe Payal	9356742727	
24	Nilam Bavdhane	9322427911	
25	Pratiksha Pawar	9860487164	
26	Tejas Khaladkar	9804419111	
27	Gaikwad Utkarsh	9022507626	
28	Ghule Sonali	8180974191	
29	Ghule Vaibhavi	9028787099	
30	Chavate Siddhi	9822063062	
31	Dhale Rushikesh	9028896610	
32	Aditya Mohite	9503039798	
33	Rohan Thite	8087074224	
34	Sumit Mohite	9356958859	
35	Mayur Mate	7709936068	

36	Vaibhav Kintare	7058240330	Vk.
37	Raskar Lokgile	9284697778	Lokgile
38	hambir utkarsha.	7507514672	
39	Saurabh Thopate	9146129940	
40	Pramanesh Jawale	8010673845	
41	Siddhant V. Dhumal	9834184246	
42	Shivjeet Jadhav	8805680531	
43	Yash Shegokar	9822663481	
44	Drushti Sonawane	7499381367	
45	Vaishnavi Pujari	7276114170	Vaish
46	Jagtap Hrishikesh	7350472897	Jagtap
47	Shubham Kalpate	7387565654	Shubham
48	Sawant Aarti	9404589927	Aarti
49	Rutvik Jagtap	7385475754	R. Jagtap
50	Pranali Shelke	8010647675	Pranali
51	Bhakti Todmal	8459046582	B. Todmal
52	Atole Akanksha	7620391153	Atole
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(Dr. Mahendra Gaikwad)

Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Date: 17/02/2024
Time: 10:30 am to 11:30 am

Attendance Sheet

Lecture No.: 19

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shrinath Ranganath Bachare	9503750297	
2.	Abhijeet Shivlal Choudhari	8010352498	
3.	Bharat Babulal Rathod	9373665009	Bharat
4.	Pawar Vikas Rajaram	7249564239	
5.	Patange Vaibhav N.	8999720002	
6.	Naiknavale Deepali R	9579063251	
7.	Saurabh Dattatray Thopate	9156129940	
8.	Thokal Sakshi B.	8767091145	
9.	Payal Badhe S.	9356792727	
10	Nikita Holkar R.	9604565788	
11	Sayam Sunil bohra	7020537736	
12	Yogesh Kuparam Chaudhary	8208191641	
13	Mahish Ramdas Kadam	7887729926	
14	Jai Lagad	8605554809	
15	Prathksha pawar	9860487164	
16	vidhate Ruchna	9356035919	
17	Nilam Bavdhane	9322427911	
18	Subhash Gosavi	9373817095	
19	Shubham Hole	9112337128	
20	Rutvik Jagtap	738547 5754	
21	Tejas Khalkar	9804419111	
22	Dumbre Jagruti	8855895322	
23	Ghavate Siddhi	9822043042	
24	Ghule Sonali	8180614419	
25	Ghule vaibhavi	9028182791	
26	Dhole Rushikesh	9028896410	
27	Nikita Gaikwad	7410154018	
28	Sakshi Dolare	8830403131	
29	Vinit Kale	8459004779	
30	Utkarsh Gaikwad	9022507629	
31	Vaibhav Jadhav	9764631329	
32	Vaibhav Tambe	9420000074	
33	Aditya Mohite	9803039798	
34	Omkar Salve	8421295619	
35	Rohan Thite	9087074224	

36	Vaibhav kirtane	7058240330	
37	Mayur Mate	7769936068	
38	Suyash Thorat	7711047771	
39	Sumit Mohite	9356595859	
40	Paskar Lavkale.	9284697778	
41	Hambir utkarsha	7507514672	
42	Prathamesh N. Solanke	8010673845	
43	Siddhant V. Dhumal	9834184246	
44	Shivjeet Jadhav	8805680531	
45	Drushti Sonawane	7499381367	
46	Yash Anil Shegokar	9822663481	
47	Vaishnavi Pujari	7276114170	
48	Jagtap Harshikesh	7350472897	
49	Sawant Aarti	9404589927	Aarti
50	Shewale Pranali	8010647675	Pranali
51	Bhakti Todmal	8459046582	B. Todmal
52	Atole Akanksha	7620891153	Atole
53	Shubham Kaspate	7387565854	Shubham
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Dr. Mahendra Gaikwad

Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal
PRINCIPAL
Pune District Educational 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

Date: 17/02/2024
Time: 2:00 pm to 2:00 pm.

Attendance Sheet

Lecture No.: 20

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shrinath Ranganath Babare	9503750297	
2.	Abhijeet Shivlal Choudhari	8010352498	
3.	Bharat Babulal Rathod	9373665009	
4.	Pawar Vikas Rajaram	7249564239	
5.	Yogesh Kupalan Choudhary	8208191641	
6.	Sayam Sunil Bafna	7020587736	
7.	Nalkhande Deepali R	9579063254	
8.	Vaibhav Narayanrao Patange	8999720002	
9.	Saurabh Dattatray Thopate	9146529940	
10	Jai Lagad	8605554709	
11	Manik Ramdas Kadam	7667199926	
12	Rachna vidhate	P 9356035917	
13	Dumbre Jagruti	8855895322	
14	Ghevate siddhi	9822045042	
15	Ghule Sonali	8180944191	
16	Ghule vaibhavi	9028870414	
17	Dhole Rushikesh	9020896410	
18	Payal Badhe	9356792727	
19	Sakshi Thokal	8767091145	
20	Pratiksha Pawar	9860487169	
21	Nilam Bavdhane	9322427911	
22	Omkar Zate	8421273619	
23	Holkar Nikita	9604565728	
24	Vaibhav Jadhav	9769631329	
25	Vinit Kale	8459004778	
26	Tambe Vaibhav	94200074	
27	subhash Gosavi	9373817095	
28	Shubham hole	9812337128	
29	Tejas Khandekar	9804419111	
30	Nikita Gaikwad	7410154048	
31	Rakshi Dolare	8830403131	
32	Ghevate Siddhi	9822045042	
33	Ghule Sonali	8180944191	
34	Ghule vaibhavi	9028870414	
35	Dhole Rushikesh	9020896410	

36	Aditya Rahu Mobile	9803039798	Mobile
37	Gaikwad Utkarsh	9022507628	
38	Rohan Thite	8087074224	
39	Vaibhav Kintane	7058240330	
40	Suyash Thorat	7710477711	Thorat
41	Sumit Mobile	9356595829	
42	Mayur Mate	7769976068	Mayur
43	Rajkar Lawkile.	9284697778	Lawkile
44	Hambir Utkarsha	7507514672	
45	Siddhant V. Dhumal	9834184246	
46	Shivject Jadhav	8105680531	
47	Prajakta Sonawane	7499381367	
48	Yash Anil Shegokar	9822663481	
49	Vaishnavi Pujari	7276114170	Vaish.
50	Jagtap Hrishikesh	8350472887	Jagtap
51	Shewale pranali	8010647675	Pshewale
52	Todmal Bhakti	8459046582	Bhakti
53	Atole Akanksha	7620351153	Atole
54	Jagtap Rutvik	7385475754	Rutvik
55	Kashyapi Shubham	7387565654	Shubham
56	Sawant Aarti	9404589927	SAarti
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Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Date: 26/02/2024
Time: 9:30 am to 10:30 am

Attendance Sheet

Lecture No.: 21

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Abhijeet Shivlal Chouchhari	8010352498	
2.	Bharat Babulal Rathod	9373665009	Bharat
3.	Shrinath Rangnath Babare	9503750297	Shrinath.B
4.	Deepali Radhekisan Naiknavare	9519063251	
5.	Pawar Vikas Rajaram	7249864234	
6.	Patange Vaibhav Narayan	8999720002	Patange
7.	Sayam Sunil Bonra	7020597736	
8.	Yogesh Choudhari	8209141641	
9.	Jai Lagad	8605554904	
10	saurabh Dattatray Thopate	9146129940	
11	Manish Ramdal Kadam	7777729925	
12	Rachna Vidhate	9356035919	
13	Vaibhav Jadhav	9764031329	
14	Vinit Kale	8459004778	
15	Utkarsh Gaikwad	9356035918	
16	Thokal Sakshi B.	8767091145	
17	Nikita Holkar	9604565728	
18	Bavdhane Nilam	9322427911	
19	Jagruti Dumbre	8855895322	
20	Payal Badhe	9356797727	
21	Pratiksha pawar	9860487164	
22	Gosavi subhash	9373817095	
23	Hole shubham	9112837128	
24	Vaibhav Jambe	9420000074	
25	Nikita Gaikwad	7401540648	
26	Sakshi Polare	8830403131	
27	Ghavate Siddhi	9822043042	
28	Ghule Sonali	8180949191	
29	Ghule Vaibhavi	9028187494	
30	Bhave Rushikesh	9028894610	
31	Tejas Khaldkar	9804419111	
32	Omkar Zalte	8421273619	
33	Aditya Mohite	9803039798	
34	Rohan Thite	8087074224	
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36	Mote Mayur	7769936068	Mayur
37	Sumit Mohite	9356595859	
38	Suyash Thorat	7771047711	
39	Rajkar Laukik.	9284697778	Laukik
40	Nambir Utkarsha	7507514672	
41	Vaibhav Kirtane	7058240330	
42	Prathamesh Kalunke	8010673845	
43	Siddhant V. Dhumal	9834184246	
44	Shivjeet Pathare	8805680531	
45	Vaish Shegokar	9822663481	
46	Drushti Sonawane	7499381367	
47	Vaishnavi Pujari	7276114170	Vaish
48	Jagtap Hrishikesh	7350472891	
49	Shewale pranali	8010647675	
50	Todmal Bhakti	8459046582	Bhakti
51	Jagtap Rutik	7385475154	Rutik
52	Sawant Aarti	9404589927	Aarti
53	Atole Akanksha	7620391153	
54	Kaspate Shubham	7387565654	Shubham
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

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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

Date: 26/02/2024
Time: 10:30 am to 11:30 am

Attendance Sheet

Lecture No.: 22

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Shrinath Rangnath Bahare	9503750297	
2.	Abhijeet Shivlal Choudhari	8010352498	
3.	Bharat Babulal Rathod	9373665009	Bharat
4.	Pawar vikas Rajaram	7249564239	
5.	Patange Vaibhav N.	8999720002	
6.	Naiknavare Deepali R.	9579063251	
7.	Saurabh Dattatray Thopate	9146129940	
8.	Yogesh Kupasar Choudhary	8208191641	
9.	Sayam Sunil Bohra	7020587736	
10	Jai Lagad	8605554804	
11	Thorat Sakshi B.	8767091145	
12	Payal Badhe S.	9356792727	
13	Nikita Holkar	9604456728	
14	Pratiksha pawar	9860487164	
15	Nilam Bavdhane	9322427911	
16	Shubham Mole	9112337128	
17	Subhash Gosavi	9373817095	
18	Rachna vidhate	9356035319	
19	Tejas khadkar	9804919111	
20	Dumbre Tejswi	8855895322	
21	Ghavate Siddhi	9822043042	
22	Ghule sonali	8180947191	
23	Ghule vaibhavi	9028187094	
24	Ghole Rushikesh	9018896410	
25	Nikita Gaikwad	7401540418	
26	Sakshi Dolare	8830403131	
27	Manish kadam	7666729926	
28	Vinit Kale	8459004477	
29	Vaibhav Jadhav	9764631329	
30	Utkarsh Gaikwad	9022507626	
31	Vaibhav Tambe	9420000074	
32	Aditya Mohite	9503039798	
33	Omkar Zalte	8421173619	
34	Vaibhav Kittanne	7058240330	
35	Rohan Thite	8087074224	

36	Sumit Mohite	9356595859	
37	Mayur Mate	7769936068	
38	Suyash Thorat	7771047771	
39	Raskar Laukik	9284697778	
40	hambir Utkarsha	7507514672	
41	Prathamesh salunke	8010673845	
42	Siddhant V. Dhumal	9834184246	
43	Shivject Jadhav	8805680531	
44	Pruthi Sonawane	7499381367	
45	Yash Anil Shegokar	9822663481	
46	Vaishnavi Pujari	7276114170	
47	Jagtap Hrishikesh	8350472997	
48	Shewale pranali	8010647675	
49	Sawant Aarti	9404589927	
50	Todmal Bharti	8459046582	
51	Atole Akanksha	7620391153	
52	Jagtap Rutvik	7385475754	
53	Kaspate Shubham	7387565654	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

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Kharadi, Pune-411014

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

Lecture No:- 23 Date: 26/04/2024

Attendance

Time:- 1:00 pm to 2:00 pm

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Abhijeet S. Choudhari	8010352498	
2.	Bharat B. Rathod	9373665009	Bharat
3.	Manish R. Kadam	7666729926	
4.	Jagtap Hrishikesh Sudam	7350472997	
5.	Sayam Sunil Bohra	7020587736	
6.	Yogesh Kuparam Choudhary	8208191641	
7.	Yash Shegokar	8822663481	
8.	Drushti Sonawane	7499381367	
9.	Pallavi Girase	9370247024	
10	Srushti Rajpurohit	8999886969	
11	Shreya Salunkhe	9023716794	
12	Sawant Aarti	9404589967	
13	Shewale Pranali	8010647675	
14	Bhakti Todmal	8459046582	
15	Rutvik Jagtap	7385475	
16	Suyash Thorat	7741627177	
17	Rohini Mane	9579496344	
18	Esha Kamble	8308519653	
19	Mrudula Thombre	9067613058	
20	Khushi Kharade	9970459912	
21	Prathamesh Salunke	8010673845	
22	Atole Akanksha	7620391153	
23	Rajlaxmi Ingole	8010484478	
24	Gaikwad Siddhi	9822043042	
25	Ghule Vaibhavi	9028187094	
26	Ghule Sonali	8180944191	
27	Dhole Rushikesh	9028896410	
28	Vinit Kale	RG5004778	
29	Shivjeet Jadhav	R0568053	
30	Saurabh Thopate	9146129990	
31	Jagruti Dumbre	8855895322	
32	Aditya Mohite	9803039798	
33	Mayur Mate	7769936068	
34	Utkarsh Gaikwad	9022507626	
35	Vaibhav Idhate	9822680537	
36	Vaibhav Patange	8999720002	
37	Rachna Vidhate	9356035919	
38	Vikas Pawar	7249564329	

39	Shrinath Bochare	9503750297	Shrinat
40	Vaibhav Jadhav	9764631329	
41	Omkar Zakte	9421273619	Omkar
42	Vasundhara Raje	9172856707	Raje
43	Gosavi Subhash	-9373817095	
44	Khaladkar Tejas.	9804419111	Khaladkar
45	Hole shubham	9112337128	Hole.
46	Kirtane Vaibhav	7058240330	Kirtane.
47	Thokal sakshi	8767091145	Thokal.
48	Badhe Payal	9356792727	Payal.
49	Holkar Nikita	9604565728	Nikita.
50	Bavdhane Nilam	9322427911	Nilam.
51	Pawar Pratiksha	9860487164	Pawar.
52	Kaspate shubham	7387565654	
53	Atole Akanksha	7620391153	
54	Rohan Thite	9087074224	
55	Siddhant Dhumal	9834184246	
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Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Lecture No:- 24 Date: 27/02/2024

Attendance

Time:- 9:30 am to 10:30 am

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Abhijeet S. Choudhari	8010352498	
2.	Bharat B. Rathod	9373665009	Bharat
3.	Manish K. Kadam	7666729926	
4.	Jagtap Hrishikesh sudam	7350472897	
5.	Sayam S. Bohra	7020587736	
6.	Yogesh Kuparam Choudhary	8208191641	
7.	Yash Shevalkar	9822663181	
8.	Drushti Sonawane	7499381367	
9.	Srushti H. Rajpurohit	8999886969	
10	Aarti Sawant	9404589927	Aarti
11	Shreya Salunke	9623716794	Shreya
12	Pranali Shewale	8010647675	Pranali
13	Pallavi Girase	9370247027	
14	Sanali Ghule	8180974191	Ghule
15	Siddhi Ghavate	9822063062	Siddhi
16	Dhale Rushikesh	9028896610	Rushi
17	Vaibhavi Ghule	9028187099	Vaibhavi
18	Saurabh Thapate	9146129940	Saurabh
19	Prathamesh Kolapke	8010673845	
20	Atole Akaksha	7620391153	Atole
21	Rutvik Jagtap	7385475754	R. Jagtap
22	Suyash Thorat	7741027171	Suyash
23	Shubham Kaspate	7387565654	
24	Rohini mane	9579496314	Rohini
25	mrudula thombre	9067613058	mrudula
26	Khushi kharabe	9970459912	Khushi K.
27	Esha Kamble	8308513653	Esha K.
28	Jagruti Durmbre	8855895322	Jagruti
29	Vinit Kale	8459004778	
30	Aditya Mohite	9803039798	
31	Mayur Mate	7769936068	
32	Jadhav Shivjeet	8805680531	
33	Vaibhav Mitkare	9922680532	
34	Bhosale Gitanjali P.	7820817090	
35	Sakshi Sayaji Mane	8378804990	
36	Gauri ishwar kolhe	9322751972	
37	Ingole Rajlaxmi S.	8010484478	
38	Gund Rutuja	9156876942	

39	Jai Anil Lagad	8605554809	Jai
40	Utkarsha Hambir	7507514672	Hambir
41	Sumit Mohite	9356595859	
42	Vaibhav Patange	8999720002	Vaibhav
43	Rachna Vidhate	9356035919	Rachna
44	Vikas Pawar	7249564329	Vikas
45	Vaibhav Tambe	9420000079	
46	Shrinath Bochare	9503750297	
47	Bhakti Todmal	8459046582	B Todmal
48	Omkar Zarte	9421273619	Omkar
49	Tejas Ichaladkar	9904419111	
50	Shubham Hole	9112333129	Shubham
51	Laukik Raikar	8378804990	Raikar
52	Vaibhav S. Jadhav	9764031329	
53	Subhash Gosavi	9373817095	Gosavi
54	Sakshi Thakal	8767091145	Thakal
55	Jagruti dumbre	8855895822	Dumbre
56	Parsal Badhe	9356792727	Parsal
57	Nikita Holkar	9604565729	Nikita
58	Nilam Boudhare	9322427911	Nilam
59	Prabhacha pawar	9860487164	Pawar
60	Rohan Thite	8087074224	
61	Siddhant Dhumal	9834184246	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
Shankarrao Bora 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

Lecture No:- 25 Date: 27/02/2024

Attendance

Time:- 10:30 am to 11:30 am

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Abhijeet S. Choudhari	8010352498	
2.	Bharat B. Rathod	9373665009	Bharat
3.	Manish R. kadam	7666729926	
4.	Jagtap Hrishikesh Sudam	F3502728897	
5.	Sayam. S. Bohra	7020587736	
6.	Yogesh Kupalam Choudhary	8208191641	
7.	Yash Shevalkar	98 2266 3581	
8.	Pushti Sonawane	7499381367	
9.	Srushti Rajpurohit	8999886969	Srushti
10	Pallavi Girase	9370247027	
11	shreya salunkhe	9623716794	shreya
12	Ghavate siddhi	9822043042	
13	Ghule vaibhavi	9028187014	
14	Ghule Sonali	8180940462	
15	Rushikesh Dhale	9028896410	
16	Prathamesh Kolarkar	8010673845	
17	esha kamble	8308513653	esha,
18	Rohini Mane	9579496344	Rohini
19	Mrudula Thombare	9067613058	
20	khushi khavale	9970459912	khushi
21	Jagruti Dumbre	8855895322	Jagruti
22	Sarvabh Thapate	9146129990	
23	Suyash. V. Thorat	7741027177	
24	Pranali Shewale	8010647675	Pranali
25	Bhakti Todmal	8459046582	Bhakti
26	Rutvik Jagtap	7385475754	RJagtap
27	Aarti Sawant	9404989927	Aarti
28	Shubham Kaspate	7387565654	Skaspate
29	Vijit Kale	8459004778	
30	Aditya Mohite	9803039798	
31	Mayur Mate	7769936068	
32	Bhosale Gitanjali P.	7820817090	
33	Jadhav Shivjeet	9881568053	
34	Vaibhav Kirtane.	9922680531	
35	Gaud. I. Kolhe	9822751975	
36	Jai. Anil. Layat	8605574869	Jai
37	mane Sakshi Gayatri	8347806350	Smane
38	Rutuja Gund	9156873942	

39	Laukik Raskar	8010 9846478	Raskar
40	Utkarsha Hambir	83-188-09-90	Hambir
41	Sumit Mohite	9356595859	
42	Jagruti dumbre	8855895322	Dumbre
43	Utkarsha Hambir		
44	Vaibhavi patange	8999 720007	Vaibhavi
45	Vikas Pawar	+2 49 564329	Vikas
46	Shrinath Bochare	9503730297	Shrinath
47	Rachna Vidhate	9356075919	Rachna
48	Vaibhav Jadhav	9764631329	Vaibhav
49	Omkar Zalte	8421273619	Omkar
50	Vasundhara Raje	9172855707	Raje
51	Gosavi Subhash	9373817095	Gosavi
52	Tejas Khatladkar	9804419111	Tejas
53	Hole Shubham	9112337128	Shubham
54	Payal Badhe	9356792727	Payal
55	Halkar Nikita	9604565728	Nikita
56	Bavdhane Nilam	9322427911	Nilam
57	Pawar Pratiksha	9860487164	Pawar
58	Vaibhav Tambe	9420000076	Vaibhav
59	Thokal Sakshi	8767091145	Sakshi
60	Rohan Thite	8087074224	Rohan
61	Siddhant Dhumal	983418 4248	Siddhant
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(Dr. Mahendra Gaikwad)

Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education'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

Lecture 26 Date: 27/02/2024

Attendance

Time:- 1:00 pm to 2:00 pm

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Abhijeet · S· Choudhari	8010352498	
2.	Bharat · B · Rathod	9.373665009	Bharat
3.	Manish R. Kadam	7666729926	
4.	Jagtap Hrishikesh Sadam	7350472897	
5.	Sayam · S· Bohra	7020587736	
6.	Yogesh Kupalal Choudhary	8208191641	
7.	Yash Shevalkar	9822663681	
8.	Drushti Sonawane	7499381367	
9.	Pallavi Girase	9370247027	
10	Shreya salunkhe	9628716794	Shreya
11	Srushti Raipurohit	8999888909	raipurohi
12	Rohini· mane	9579493644	Rohini·m
13	Esha kamble	8308513653	Esha·kam
14	khushi kharabie	9970459912	Khushi·K
15	mrudula Thombre	9067613058	mrudula Th
16	Ghanate siddhi	9822043042	
17	Rushikesh bhale	9028896410	
18	Ghule sonali	8180944191	
19	Ghule vaibhavi	9028187094	
20	Prathamesh Solanke	8010673845	
21	Sayaash Thopate	9146129940	sayaash
22	Mrudula Thombre	9067613058	Mrudula
23	Esha Kamble	9579496344	Esha.
24	Khushi Kharabe	9970459912	Khushi.
25	Rohini Mane	8308513653	Rohini
26	Sawant Aarti	9404589927	Aarti
27	Pranali Shewale	8010647675	Pranali
28	Jagruti Dumbre	8855895322	Jagruti
29	Suyash. V. Thorat	7741027177	
30	Pranali shewale	8010647675	Pranali
31	Rutvik Jagtap	7385475454	R.Jagtap
32	Aarti sawant	9404589927	Aarti
33	Bhakti todmal	8459046582	B.Todmal
34	Mayur Mate	7769936068	Mate
35	Aditya Mohite	9803039798	Mohite
36	Vinit· Kale	8459004978	Kale
37	Ingole Rajlaxmi S.	8010484478	
38	Gayatri T. Kolhe	9322751972	

39	Rutuja Santosh Gund	9156873942	RSGund.
40	mane Sakshi Sayaji	8378849490	Smane.
41	Jyi lagad	8605554809	Jyi
42	Jadhav Shivjeet	8805680531	
43	Vaibhav Mane	9922680531	
44	Sumit Mohite	9356595859	
45	Vaibhav Tambe	9420000074	VT
46	Vaibhav Palange	9875678910	
47	Vaibhav Jadhav	9764631329	
48	Vikal Pawar	9657632140	
49	Kashna Vidhate	7596798231	
50	Chinmay Bachate	9876532140	
51	Vasundhara Raje	9172856707	Raje
52	Onkar Zade	8421273619	Onkar
53	Shubham Kaspate	7387565654	
54	Tejas Khaladkar	9804419111	
55	Jagruti dumne.	8858895322	Dumne
56	Subhash Gosavi	9373817095	Gosavi
57	Shubham Holc	9112337128	
58	Sakshi Thokal	8767091145	
59	Payal Badhe	9356792727	
60	Nikita Holkar	9604565728	Nikita
61	Nilam Baudhani	9322427911	Baudh
62	Prakiksha Pawar	9860487164	
63	Rohan Thite	9087074224	
64	Siddhant Dhumal	9834184246	
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Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Lecture No:- 27 Date: 2/03/2024

Attendance

Time:- 9:30 am to 10:30 am

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Sayam Sunil Bohra	7020587736	
2.	Yogesh Kuparam Choudhary	8208191641	
3.	Abhijeet Shivlal Choudhari	8010352488	
4.	Bharat Babulal Rathod	9373665009	
5.	Jagtap Hrishikesh Sudam	F3504728897	
6.	Manish R. Kadam	7666729926	
7.	Yash Shegokar	9822663681	
8.	Drushti Sonawane	7499381367	
9.	Srushti H. Rajpurohit	8999886969	
10	Shreya Salunke	9623716794	
11	Pallavi. M. Girase	9370247027	
12	Ghavat Siddhi	9822043042	
13	Ghule Vaibhavi	9028187094	
14	Ghule Sonali	8180944191	
15	Rushikesh Dhale	9028896410	
16	Mukadam M. Thombre	9067613058	
17	Khushi. Kharabe	99704 59912	
18	Rohini. Mane	9579496344	
19	Esha. Kamble	8308513653	
20	Prathamesh Solanke	8010673845	
21	Saurabh Thopate	9146129990	
22	Suyash V. Thorat	7741027177	
23	Rutvik. Tagtap	738554 75754	
24	Bhakti Todmal	8459046582	
25	Aarti Sawant	9404589927	
26	Pranali Shewale	8010647675	
27	Jagruti Dumbre	8855895322	
28	Aditya Mobile	9823039798	
29	Vinit Kale	8459004778	
30	Jadhav Shivjeet	8805680531	
31	Vaibhav Kinage	9922680531	
32	Mayur Mate	7769936068	
33	Ghosale Gitanjali P.	7820817090	
34	Ingole Rajaxmi. S.	8010484478	
35	Gauri Kathe	9322751972	
36	Sakshi Mane	8378804990	
37	Rutuja Gund	9156874942	
38	Gaikwad C. Kashkar	8378804990	

39	Utkarsha Hambir	8904844978	
40	Jai. Anil Jagad	8932275197	
41	Sumit Mohite	9356595859	
42	Vaibhav Tambe	9420000074	
43	Vaibhav Patange	8999720002	
44	Rachna Vidhate	9356035919	
45	Vikas Pawar	7249564339	
46	Shrinath Bochare	9503750297	
47	Vaibhav Jadhav	9764631929	
48	Vasundhara Raje	9172856707	
49	Omkar Zalte	9421973619	
50	Vijay Khaladkar	9804419111	
51	Vaibhav Kshirsagar	7058240330	
52	Shubham Kolte	9112337129	
53	Subhash Gosavi	9373817095	
54	Jagruti Dumbre	8855895322	
55	Parpal Badhe	9356792727	
56	Sakshi Thokal	8767091145	
57	Nikita Holkar	9604565728	
58	Nilam Bandhare	9322427911	
59	Pratiksha Pawar	9860487164	
60	Kaspete Shubham	7387565654	
61	Atole Akanksha	7620391153	
62	Rohan Thite	9097074224	
63	Siddhant Dhumal	9834184246	
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Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

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Sciences & Research Centre,
Kharadi, Pune-411014.

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

Lecture No:- 28 Date: 2/03/2024

Attendance

Time:- 10:30 am to 11:30

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Sayam Sunil Bohra	7020587736	
2.	Yogesh Kuparam Choudhary	8208191641	
3.	Abhijeet Shivlal Chowdhari	8010352498	
4.	Bhaglat Babulal Rathod	9373665009	Bharat
5.	Jagtap Hrishikesh	7350422897	
6.	Manish R. Kadam	7666729926	
7.	Mayuraja M. Thombare	9067613058	
8.	Khushi Khamade	9970459912	
9.	Ghavate siddhi	9822043042	
10	Ghule Sonali	8180944191	
11	Ghule Vaibhavi	9028187094	
12	Rushikesh Dhale	9028896418	
13	Rohini mane	7579496344	
14	Esha Kamble	8308513653	
15	Yash Shegokar	9822663481	
16	Drushti Sonawane	7499381367	
17	Sawant Aarti	9404589927	
18	Poanali Shewale	8010047675	
19	Suyash Thorat	7620027877	
20	Shubham Kaspate	7387565654	
21	Bhakti Todmal	8459040582	
22	Rutvik Jagtap	7385475754	
23	Rajlaxmi Hogalle	8010464478	
24	Akanksha Atole	7620391113	
25	Prathamesh Salunke	8010673845	
26	Pallavi Girase	9370247027	
27	Shreya Salunkhe	9623716794	
28	Srushti Rajpurohit	8999886969	
29	Amit Kale	8459004778	
30	Shivjeet Jadhav	8805680531	
31	Saurabh Thapate	9146129990	
32	Jagruti Dambre	8855895322	
33	Aditya Mohite	9803039798	
34	Utkarsh Gaikwad	9022250762 6	
35	Mayur Mate	7769936058	
36	Vaibhav Kirtane	9922680531	
37	Vaibhav Patange		
38	Rachna Vidhate		

39	Vikas Pawal		Vikas
40	Sumit Mallik	9356595859	
41	mane Sakshi Sayaji	8378809990	Mane.
42	Utkarsha Hombir	7567514672	Hanbir
43	Rutuja Gund.	9156873942	
44	Saulik Raskar.	8378804990	Raskar
45	Gitanjali Bhusale	7820817090	Bhosale
46	Vaibhav Tambe	9420082000 14	
47	Jagruti Dumbre	7563674320	Dumbre
48	Vaibhav Jadhav	9764631329	VJ
49	Vasundhara Raje	9172856707	Raje
50	Oulkar Sarika	8421173619	Oulkar
51	Gosavi Subhash	9373817095	
52	Hole Shubham	9112337128	Hole
53	Tejas Khaladkar	9804419111	Tejas
54	Holkar Nikita	9604565728	Nikita.
55	Badhe Payal	9356792727	Payal
56	Pawar Prathisha	9860487164	Pawar
57	Bavdhane Nilam	9322627911	Nilam
58	Thokal Sakshi.	8767091145	Sakshi.
59	Rohan Thite	8087074224	
60	Siddhant Ohumal	9834184246	
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(Dr. Mahendra Gaikwad)

Krunal Kanase
Course Coordinator

Dr. Ashok Bhosale
Principal

PRINCIPAL
Pune District Education Association's
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Sciences & Research Centre,
Kharadi, Pune-411014.

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

Lecture No:- 29 Date: 4/03/2023

Attendance

Time:- 9:30 am To 10:30 am

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Sayam Sunil Bohra	7020587736	Sam
2.	Yogesh Kuparam Choudhary	8208191641	Yogesh
3.	Abhijeet Shivlal Choudhari	8010352498	
4.	Bharat B. Rathod	9373665009	Bharat
5.	Jagtap Hrishikesh Sudam	7350472497	
6.	Manish. R. Kadam	7666729926	
7.	Rohini v. mane	9579496344	Rohini
8.	Siddhi. A. Ghavate	9822043042	
9.	Ghule Sonali	8180014419	
10	Ghule vaibhavi	9028187094	
11	Rushikesh Dhale	9028896410	Rushi
12	Esha kamble	8308513653	Esha K.
13	Mrudula. M. Thombare	9067613058	Mrudula
14	Khushi. Khadade	9970459912	Khushi
15	Sujash. V. Thorat	7741027177	
16	Yash Shegokar	9822653481	
17	Drushti Sonawane	7499381367	
18	Prathamesh Nalanke	8010673845	
19	Aarti Sawant	9404589927	Aarti
20	Pallavi Girase	9370247027	Pooja
21	Srushti Rajpurohit	8999886969	Srushti
22	Shreya Salunkhe	9623716794	Shre
23	Vinit Kale.	8459004778	Vinit
24	Shivject Jadhav	8805680531	
25	Aditya Mohite	9830397995	
26	Saurabh Thopate	9146129970	Saurabh
27	Jagruti Durgude	8855895322	Jagruti
28	Mayur Mate	7699360668	
29	Uthvesh Gaikwad	9022507626	
30	vaibhav Hivrale	9922680531	
31	Sumit Mohite	9356595859	
32	Bhosale Gitanjali P.	7820817090	
33	Mane Sakshi Sajaji	9352177012	
34	Gund Rutuja S.	9156873942	
35	Ingole Rajlaxmi S.	8010485342	
36	Kolhe Gauri Ishwar	9957181404	
37	Jadhav Vaibhav Santosh	9764631329	
38	Saykik Raskar	9156873942	Raskar

39	Vaibhav Jadhav	9769631329	Jadhav.
40	Utkarsha Hambir.	8378809990	Hambir.
41	Vasundhara Raje.	9172856707	VRaje
42	Omkar Zaute	8421273619	Omkar
43	Kaspate Shubham Bim	7387565654	
44	Atole Akanksha	7620791153	Atole
45	Pranali Shewale	8010647675	Pranali
46	Bhakti Todmal	8459046582	B. Todmal
47	Thakal Sakshi	8767091165	
48	Bavdhane Nilam	9322627911	Nilam.
49	Pawar Pratiksha	9860487164	Pawar.
50	Radhe Payal	9356792727	Payal.
51	Hollar Nikita	9604565728	Nikita.
52	Khaladkar Tejas	9804619111	Tejas.
53	Hole Shubham	9112337128	Hole.
54	Gavari Subhash	9373817095	
55	Rohan Thite	8087074224	
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Dr. Mahendra Gaikwad

Krunal Kanase
Course Coordinator

Dr. Ashok 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 Centre, Kharadi, Pune

Lecture No.- 30 Date: 4/03/2024

Attendance

Time:- 10:30 am to 11:30 a

Certificate Course in Clinical Research & Pharmacovigilance

Sr. No.	Name of Students	Mob. No.	Signature
1.	Sayam Sunil bohra	7020587736	
2.	Yogesh Kupalan Choudhary	8208191641	
3.	Abhijeet Shivlal Choudhari	8010352498	
4.	Bhagrat Babulal Rathod	9373665009	Bharat
5.	Jagtap Hrishikesh Sadam	₹3504172997	
6.	Manish Ramdas Kadam	7666729926	
7.	Yash Shegokar	9822063181	
8.	Rushti Sonawane	7499381367	
9.	Shreya Salunkhe	9623716794	
10	Pallavi Girase	9370247027	
11	Srushti H. Raipurohit	8999886969	Srushti
12	Ghule Vaibhavi D.	9028187094	
13	Ghavate Siddhi	9822043042	
14	Ghule Sonali	8180944191	
15	Dhale Rushikesh	9028896410	
16	Prathamesh Salunke	8010673845	
17	Rohini mane.	9579496344	
18	Esha kamble	8308513653	
19	khushi kharabe	9970459912	
20	mrudula Thorambe	9067613058	
21	Saurabh Thopate	9146129940	
22	Jagruti dumbare	8855895322	
23	Sudarsh. V. Thorat	7741027177	
24	Vinit kale	8459004778	
25	Aditya Mobile	9803039798	
26	Shivjeet Jadhav	8805680531	
27	Vaibhav Kitare.	9922680531	
28	Gund Rutuja Santosh	9156873942	
29	mane Sakshi Sarjii	8348804990	
30	Aarti Sawant	9404589967	
31	Rutvik Jagtap	7385475754	
32	Raylaxmi Ingole	8010484478	
33	Prathali Shewale	8010647675	
34	Mayur Mate	7769936068	
35	Bhakti Todmal	8459046582	
36	Shubham Kalpate	7387565654	
37	Atole Akanksha	7620391152	
38	~~Mane Sakshi Sarjii~~	~~8348804990~~	

39	Gauri. I. Wath.	9322757972	
40	Jai. Anil Jagdh	8010484478	
41	Utkarsha Hambir	7507514672	Uhambir
42	Sumit Mohite	9356595859	
43	Vaibhav Jadhav	9764631329	
44	Vaibhav Patange	8999720002	
45	Rachna Vidhate	9356035919	
46	Vikas Pawar	7249564329	
47	Vaibhav Tambe	9420000079	
48	shrinath Bochale	9503750277	
49	Balkar Zalte	8421173619	
50	Vasundhara Raje	9172856707	
51	Tejas Khaladkar	9804469111	
52	Shubham Hole	9112337129	
53	Subhash Gosavi	9373817095	
54	Laukik Raskar	8978804990	
55	Nikita Hollkar	9604565728	
56	Payal Badhe	9356792727	
57	Sakshi Thokal	8767091145	
58	Nilam Bandhane	9322427911	
59	Pratiksha Pawar	9860487164	
60	Rohan Thite	8087079224	
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Krunal Kanase
Course Coordinator

Dr. Ashok 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 CENTRE,

KHARADI, PUNE

Certificate of Course

"CLINICAL RESEARCH AND PHARMACOVIGILANCE"

This is certify that Mr./Ms. Puri Ravi . K

of class Final Year B. Pharm. has successfully completed Savitraibai Phule Pune University approved certificate course in Clinical Research & Pharmacovigilance, conducted in the Academic Year 2023-24.

Mr. Krunal Kanase
Co-ordinator

Dr. Ashok Bhosale
Principal

Pune District Education Association's

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

REPORT ON CERTIFICATE COURSE ON "LEADERSHIP DEVELOPMENT PROGRAM"
(Duration : 30 Hrs)

IN ASSOCIATION WITH SOULOMKAR , PUNE.

[Academic Year : 2023-2024]

Title : Certificate course on "Leadership Development Program"

Aim : The certificate course was aimed at the promotion of leadership skills of participants. It is also aimed to equip the participants with understanding of Group behaviors and how a cohesive team could be build. The rationale behind this endeavor is the development of effective leaders and participative teams.

Objectives : Leadership is an important function in every small and large business. Leadership is establishing a clear vision, communicating the vision to others and resolving the conflicts between various individuals who are responsible for completing the mission and vision of organization. Generally, organizations use leadership program as a tool to improve organization's performance.

Hence, the objective behind conduct of this certificate course was to enable the participants understand how good teams can be build and how to be a natural leader.

Description : The institute conducted 30 Hrs duration Certificate course on "Leadership Development Program" in collaboration and under the guidance of Dr. Amit Deokule (Director-Soulomkar, Pune) for Second Year B. Pharm (2019 Pattern) students. Classes were conducted by Dr. Amit Deokule (Director- Soulomkar, Pune) on every Saturday for 5 Hrs in the month April / May 2024 (as mentioned in below given timetable) for the academic year 2023-2024. Selected 55 students of Second Year B.Pharm (2019 Pattern) class successfully completed this 30 Hrs duration Certificate course on "Leadership Development Program" and awarded with certificates.

Participants details : Selected 55 students of Second Year B.Pharm (2019 Pattern) class were enrolled for this program and had successfully completed this 30 Hrs duration program

Modules taught:

Sr. No.	Module No.	Name of the Module	Duration (Hrs)
1	I	Self Development / Work Life Balance	5
2	II	Calculated Risk	5
3	III	Leadership Without title	5
4	IV	Nomadic Mindset	5
5	V	Emotional Intelligence	5
6	VI	Attitude Building	5
		Total Hours	**30 Hrs**

Mr. Vikram Veer
Co-ordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14

1/12

TIME TABLE

CERTIFICATE COURSE ON "LEADERSHIP DEVELOPMENT PROGRAM"

(30 Hrs Duration)

IN ASSOCIATION WITH SOULOMKAR , PUNE.
(ACADEMIC YEAR: 2023-2024)

Sr. No.	Day & Date	Timing
1.	Saturday, 06/04/2024	9.30 am to 12.30 pm (Recess : 12.30 pm to 1.00 pm) 1.00 pm to 3.00 pm
2.	Saturday, 13/04/2024	9.30 am to 12.30 pm (Recess : 12.30 pm to 1.00 pm) 1.00 pm to 3.00 pm
3.	Saturday, 20/04/2024	9.30 am to 12.30 pm (Recess : 12.30 pm to 1.00 pm) 1.00 pm to 3.00 pm
4.	Saturday, 27/04/2024	9.30 am to 12.30 pm (Recess : 12.30 pm to 1.00 pm) 1.00 pm to 3.00 pm
5.	Saturday, 03/05/2024	9.30 am to 12.30 pm (Recess : 12.30 pm to 1.00 pm) 1.00 pm to 3.00 pm
	Total Duration	**30 Hrs**

Mr. Vikram Veer
Co-ordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi Pune-14

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

ATTENDANCE REPORT

SEMINAR ON "LEADERSHIP DEVELOPMENT PROGRAMMEE"

Saturday: 04/05/2024

STUDENT ATTENDANCE

Sr.No.	Name of the Student	Class	Mobile No.	Sign
1	Shubham N Chavan	S.Y.B.Pharm	9356907377	
2	Manthan Gaikwad	S.Y.B.Pharm	8329205547	
3	[illegible] Pawar	S.Y.B.Pharm	7620117457	
4	Mayuri Ranjane	S.Y.B.Pharm	7709931761	
5	Pruthviraj Vagale	S.Y.B.Pharm	9322852374	
6	Tanmay Kunjir	S.Y.B.Pharm	9921575700	
7	Ajit Rathwale	S.Y.B.Pharm	8319541082	
8	Akash Kayate	S.Y.B.Pharm	7499644658	
9	Vashi Kadam	S.Y.B.Pharm	7722097414	
10	Sujit Hage	S.Y.B.Pharm	7385493809	
11	Tushar Zole	S.Y.B.Pharm	9096917142	
12	Dheeraj Sonkamble	S.Y.B.Pharm	9021433316	
13	Pawar Aniket	S.Y.B.Pharm	9529[illegible]8132	
14	Pravin [illegible] Yadav	S.Y.B.Pharm	7[illegible]	
15	Rohit S Bhusare	S.Y.B.Pharm	9890951310	
16	Akash P Chavhan	S.Y.B.Pharm	8793367413	
17	Jeevan P Gawai	S.Y.B.Pharm	9021978028	
18	Vaishnavi Shelke	S.Y.B.Pharm	9922900500	
19	Gauri Shivale	S.Y.B.Pharm	8[illegible]	
20	Sarala Tamor	S.Y.B.Pharm	9146153102	
21	Neha Hinge	S.Y.B.Pharm	7276065115	
22	Ritika Choudhary	S.Y.B.Pharm	9764929377	
23	Vaishnavi Gaikwad	S.Y.B.Pharm	9112331576	
24	Sanskruti Kumbhar	S.Y.B.Pharm	8208619019	
25	Shreya Narke	S.Y.B.Pharm	8010826798	
26	Poornima Bage	S.Y.B.Pharm	9168896171	
27	Aishwarya Pawalkar	S.Y.B.Pharm	9359884769	
28	Vrushti Gowda	S.Y.B.Pharm	9028372871	
29	Sakshi Gaware	S.Y.B.Pharm	9854207842	
30	Neha Giramkar	S.Y.B.Pharm	9561754161	
31	Payal Chavan	S.Y.B.Pharm	9322179363	
32	Sarika Salvi	S.Y.B.Pharm	8799806562	

Mr. Veer V.S.
Coordinator

Dr. Ashok Bhosale
Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

A P Deokule
Dr. Amit Deokule
04/05/24

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Student Attendance Report

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

ATTENDANCE REPORT
SEMINAR ON "LEADERSHIP DEVELOPMENT PROGRAMMEE"

Date: 13/04/2024

STUDENT ATTENDANCE

Sr.No.	Name of the Student	Class	Mobile No.	Sign
1	Sonad Khushi	S.Y.B.Pharm	9356891502	
2	Vrudh. Gowda	SY B Pharm	9028313871	
3	Neha Giramkar	S.Y.B.Pharm	9890521449	
4	Payal Chavan	S Y B Pharm	9322172363	
5	Bhoomi Dawane	S.Y.B.Pharm	7498014085	
6	Snehal Kumbhar	S Y B Pharm	9175969898	
7	Tanuja Jadhav	S.Y.B.pharm	9146011745	
8	Sarika Salvi	SYB pharm	8799806562	
9	Sneha Kushwaha	S.Y.B.Pharm	8668791843	
10	Kadre Saksh	S.Y.B Pharm	9067276406	
11	More Nikita	S.Y.B Pharm	9307400474	
12	Tina Pangi	S.Y.B Pharm	9359799383	
13	Sumruddhi Dhekan	S.Y.B Pharm	7767080047	
14	Neha Tamdade	S.Y.B pharm	5446117536	
15	Ashwini Nanaware	S.Y.B pharm	9021563216	
16	Bhagyashree Sonawane	S.Y.B Pharm	8087914842	
17	Snehal Kanhajan	S.Y.B pharm	8421285466	
18	Neha Choudhary	S.Y.B pharm	9730437410	
19.	Shreya Narke	S.Y.B pharm	8010326998	
20	Sakshi Tumbe	S.Y.B pharm	9146253122	
21.	Neha Hinge	S.Y.B pharm	7276065179	
22	Aishwarya Punalkar	S.Y.B Pharm	9359188476	
23	Kiran Nirmal	S.Y.B Pharm	8421638664	
24	Choudhary Rubina	S.Y.B Pharm	9764929277	
25	Vaishnavi Ghadge	S.Y.B Pharm	9112331576	
26	Ghipale Gauri	S.Y.B Pharm	8530327111	
27	Vaishnavi Shelke	S.Y.B Pharm	9922900520	
28	Tushar Pishale zole	S.Y.B Pharm	9096917142	
29	Parth Sachin Kadam	S.Y.B Pharm	7822097414	
30	Kunji Tanmay	S.Y.B Pharm	9921575100	
31	Prathviraj Ugale	S.Y.B Pharm	9822852354	

Mr. Veer V.S.
Coordinator

Dr. Ashok Bhosale
Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

A R Deokule
Dr. Amit Deokule
13/04/2024

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

ATTENDANCE REPORT

SEMINAR ON "LEADERSHIP DEVELOPMENT PROGRAMMEE"

Date: 13/01/22

STUDENT ATTENDANCE

Sr.No.	Name of the Student	Class	Mobile No.	Sign
32	Mayur Baraing	S.Y.B Pharm	7709935161	
33	Vaijiraj B. Radi	S Y.B Pharm	9284851008	
34	Shubham Chavan	S.Y.B Pharm	7666107277	
35	Manthan Gaikwad	S.Y.B.Pharm	8329285418	
36	Akash Kagati	S.Y.B.Pharm	7498611123	
37	Shraddha Kamble	S.Y.B.Pharm	9322394195	
38	Sanika Kale	S.Y.B.Pharm	9175093501	
39	Shrutika Jagtap	S.Y.Bpharm	8605111998	
40	Shravani Jagtap	S.Y.B.Pharm	9284470666	
41	Ankita Padam	S.Y.B.Pharm	9322394195	
42	Dhiraj Sonkamble	S.Y.B.Pharm	9021439316	
43	Tejas Jawal	S.Y.B.Pharm	9322394195	
44	Khushi Sonnad	"	9356891502	

Mr. Veer V.S.
Coordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

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

ATTENDANCE REPORT

SEMINAR ON "LEADERSHIP DEVELOPMENT PROGRAMMEE"

Date : 20th April 2024

STUDENT ATTENDANCE

Sr.No.	Name of the Student	Class	Mobile No.	Sign
1.	Gauri Shivale	S.Y.B pharm	8530327111	
2.	Yashnavi Shelke	S.Y.B pharm	9922900500	Yashnavi
3.	Aishwarya Punalkar	S.Y.B Pharm	9359884769	
4	Kiran Nirmal	S.Y.B.Pharm	8446382664	
5.	Neha Hingl	S.Y.B.pharm	7276065115	
6	Sakshi Tanke	S.Y.Bpharm	9146153122	
7	Shreya Narke	S.Y.Bpharm	9010326798	
8	Shubham Chavan	S.Y.B pharm	9356407377	
9	Manthan Gaikwad	S.Y.B.Pharm	8329208548	
10	Akash Kajale	S.Y.B.pharm	7498644208	
11	Tushar Zole	S.Y.Bpharm	9096913422	
12	Sejal Hage	S.Y.BPharm	7264927890	
13	Pooja Kadam	S.Y.B.Pharm	7823000400	
14	Taheer Shaik	S.Y.B.pharm	7558697285	
15	More Nikita	S.Y.B.pharm	9307400774	
16	Tanuja Jadhav	S.Y.B.pharm	9146011745	
17	Snehal Kumbhar	S.Y.B.pharm	9923959898	
18	Shravani T. Jagtap	S.Y.B.Pharm	9284470606	
19	Sabale Priyanka	S.Y.B.pharm	8010200989	
20	Saima Tamboli	S.Y.B.Pharm	9156303240	
21)	Shraddha Kamble	S.Y.B.Pharm	922-2334175	

Mr. Veer V.S.
Coordinator

Dr. Ashok Bhosale
Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

A R Deokule

Dr. Amit Deokule
20/04/24

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

ATTENDANCE REPORT

SEMINAR ON "LEADERSHIP DEVELOPMENT PROGRAMMEE"

04/05/2024

STUDENT ATTENDANCE

Sr.No.	Name of the Student	Class	Mobile No.	Sign
33	Chaudhary Neha	S.Y.B.Pharm	9373643440	Neha
34	Kodre Sakshi	S.Y.B.Pharm	9067216406	Sakshi
35	More Nikita	S.Y.B.pharm	9881400174	Nikita
36	Bhoomi Jamane	S.Y.B.Pharm	7498014085	Jamane
37	Sneha Kushwaha	S.Y.B.Pharm	8668181343	Sneha
38	Ashish Sarle	S.Y.B.pharm	7620612467	Ashish
39	Rahul Sarkar	S.Y.B.Pharm	9158295668	Rahul
40	Akansha Jambhalkar	S.Y.B.Pharm	9321266574	Akansha
41	Dnyaneshwari Dhole	S.Y.B.Pharm	8169353141	Dhole
42	Tanuja Jadhav	S.Y.B.pharm	7146011745	Tanuja
43	Snehal Kumbhar	S.Y.B.pharm	9975969398	Snehal
44	Sahale Priyanka Sandip	S.Y.B.pharm	8830209189	Priyanka
45	Nanaware Aishwini Anil	S.Y.B.Pharm	9822132216	Aishwini
46	Samaddhan Darekar	S.Y.B.pharm	7767080947	Darekar
47	Neha B. Jamdade	S.Y.B.Pharm	8446117530	Neha
48	Shravani T. Saptap	S.Y.B.Pharm	9284478606	Shravani
49	Sonnad Khushi	S.Y.B.Pharm	9356891502	Khushi
50	Komal Dharmshire	S.Y.B.pharm	8177957345	Komal
51	Bhagyashree Jondhare	S.Y.B.Pharm	8087914849	Bhagyashree
52	Snehal mahajan	S.Y.B.pharm	8421239646	Snehal
53	Nikita pawara	S.Y.B.Pharm	9921026197	Nikita
54	Apeksha Pottule	S.Y.B.pharm	9209149701	Apeksha
55	Tina Dangi	S.Y.B.Pharm	9354799383	Tina
56	Aduli Kumbhalkar	S.Y.B.pharm	9130891932	Aduli

Mr. Veer V.S.
Coordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14

A R Deokule

Dr. Amit Deokule
04/05/24

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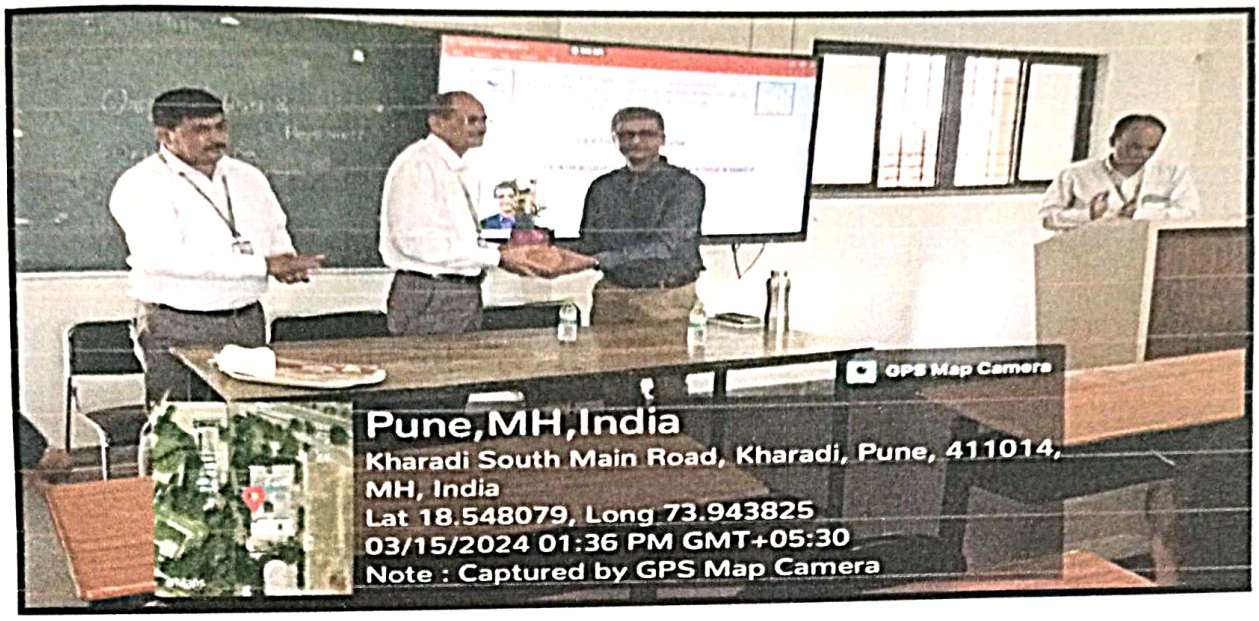
Glimpses of Certificate course on "Leadership Development Program"



Principal Dr. Ashok Bhosale Sir welcoming and felicitating Dr. Amit Deokule (Director- Soulomkar, Pune) on the occasion of commencement of Certificate course on Leadership Development Program.

Principal Dr. Ashok Bhosale addressing the students of S.Y. B.Pharm (2019 Pattern) class on the occasion of commencement of Certificate course on Leadership Development Program.

Mr. Vikram Veer
(Coordinator – Add On Course)

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14

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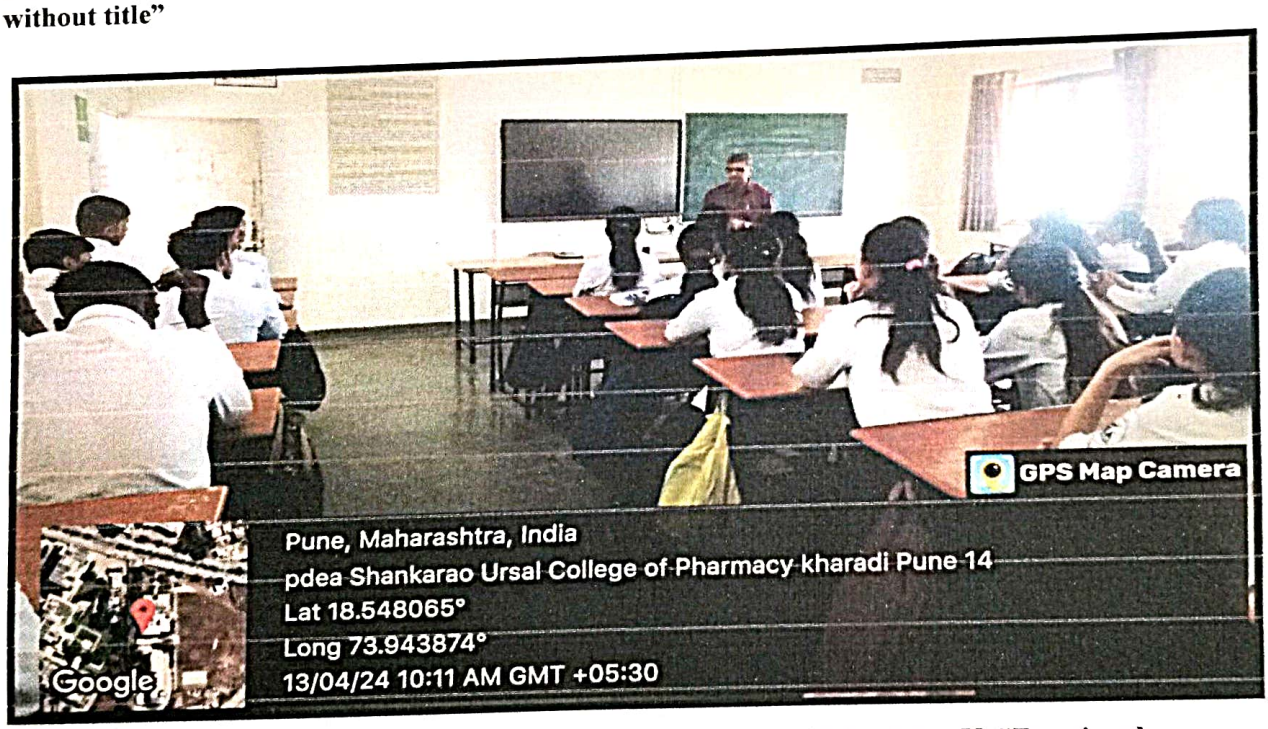
Dr. Amit Deokule (Director- Soulomkar, Pune) addressing students with **Module –III "Leadership without title"**



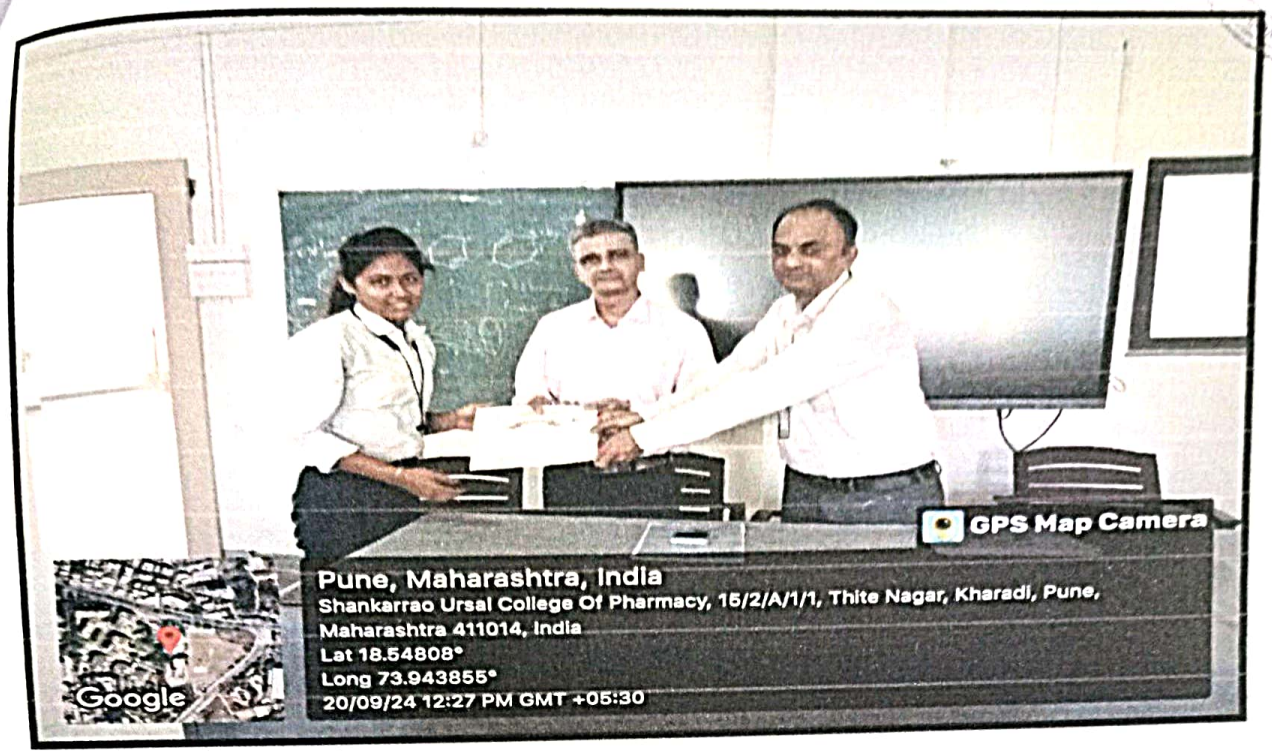
Dr. Amit Deokule (Director- Soulomkar, Pune) addressing students with **Module –V "Emotional Intelligence"**

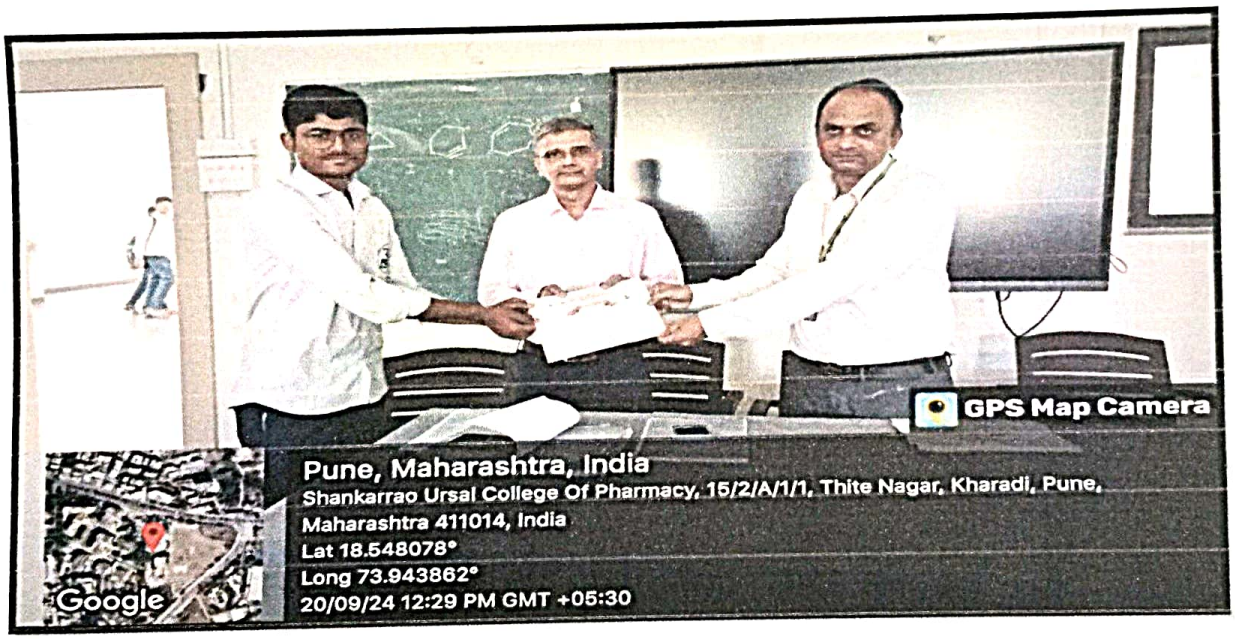
Mr. Vikram Veer
(Coordinator – Add On Course)

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre Kharadi Pune 14

9/12





Dr. Amit Deokule (Director- Soulomkar, Pune) and Prof. Vikram S. Veer (Coordinator- Add On Course) distributing certificates to S.Y.B.Pharm students after successful completion of the Certificate course on Leadership Development Program.

Mr. Vikram Veer
(Coordinator – Add On Course)

Dr. Ashok Bhosale
Principal
Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14

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Specimen copies of Student Feedback forms

Pune District Education Association's

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

FEEDBACK FORM

CERTIFICATE COURSE ON "LEADERSHIP DEVELOPMENT PROGRAM"

IN ASSOCIATION WITH SOULOMKAR , PUNE.

(ACADEMIC YEAR: 2023-2024)

Name of the Student : Shradha kamble.

Class & Roll No.: 36, S.Y. B.Pharm Mobile: 9284470606

1. How did you find the whole leadership development program?
   The program was engaging & informative. Excellent
2. What is your opinion about the coach?
   The coach were knowledgeble & supportive
3. Did the program cover important things as expected? How did you find the module "Calculated Risk" since it was introduced for the first time?
   Yes! they cover essensial leader topics like Risk analysis, risk management
4. Do you think this kind of program would help you in the longer run and if yes then "How"?
   Yes! I do belive it will benefit me, it has equipped me with communication, problem solving, decision making
5. What benefits did you derive out of this program?
   I gained confidence in my leadership ability, improved communication skills & better understandin
6. What is the rating for this program as per your opinion? (out of 10)
   9/10

Date : 4/5/2024 Sign of the Student: Shradha.

Mr. Vikram Veer
(Coordinator – Add On Course)

Dr. Ashok Bhosale
Principal

Principal
PDEA'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-14.

FEEDBACK FORM

CERTIFICATE COURSE ON "LEADERSHIP DEVELOPMENT PROGRAM"

IN ASSOCIATION WITH SOULOMKAR , PUNE.

(ACADEMIC YEAR: 2023-2024)

Name of the Student : Neha Jamdade

Class & Roll No.: 31 S.Y.B.Pharm Mobile: —

1. How did you find the whole leadership development program?
The Program is engaging & informative/Excellent
2. What is your opinion about the coach?
The Coach was supportive & Provided Feedbacks
3. Did the program cover important things as expected? How did you find the module "Calculated Risk" since it was introduced for the first time?
Yes! It helped me understand the importance of taking Calculated Risk like Risk Analysis, Management etc
4. Do you think this kind of program would help you in the longer run and if yes then "How"?
Yes! I believe this Program will benefit me in long Run. It has equipped me with Communication, Problem Solving
5. What benefits did you derive out of this program?
I gained confidence in my leadership ability improved my communication skills
6. What is the rating for this program as per your opinion? (out of 10)
10/10

Date : 4/5/2024 Sign of the Student: Neha

Mr. Vikram Veer
(Coordinator – Add On Course)

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi Pune-14

12/12

A Report on Certificate course on "Medical Writing"

Academic Year 2023-2024

Course Title: Certificate Course in Medical Writing
Duration: 30 hours
Objective: The course aims to equip participants with essential skills and knowledge for medical writing, focusing on both technical and regulatory writing, and understanding scientific communication standards.

Description- The institute conducted 30 Hrs. duration Certificate course on " Medical Writing" under the guidance of Mrs. Smita Thube (Clinitech support, Pune) for Final Year B. Pharm (2019 Pattern) students. Mrs. Smita Thube on every Saturday and Sunday online for two Hrs. in the month Dec / Jan 2024 (as mentioned in below given timetable) for the academic year 2023-2024 conducted classes. Selected 33 students of FinalYear B.Pharm (2019 Pattern) class successfully completed this 30 Hrs. duration Certificate course on "Medical Writing" and awarded with certificates.

Participants details : Selected 33 students of FinalYear B.Pharm (2019 Pattern) class were enrolled for this program and had successfully completed this 30 Hrs. duration program.

Modules:-

Sr. No.	Module no.	Name of the module	Duration (Hrs)
1	I	Introduction to Medical Writing	2
2	II	Research and Scientific Literature	2
3	III	Writing and Language Skills for Medical Writers	2
4	IV	Ethical and Legal Aspects of Medical Writing	2
5	V	Regulatory Writing	2
6	VI	Clinical Research and Medical Writing	2
7	VII	Manuscript Writing and Publication Process	2
8	VIII	Data Presentation and Statistics for Medical Writers	2
9	IX	Scientific and Medical Communication	2
10	X	Review, Editing, and Quality Control	2
11	XI	Project and Client Management	2
12	XII	Career and Professional Development in Medical Writing	2
13	XIII	Advanced Medical Writing Techniques	2
14	XIV	Health Economics and Outcomes Research (HEOR) Writing	2

15	XV	Writing for Regulatory Authorities in Different Regions	2
		Total Hours	**30 Hrs**

TIME TABLE

CERTIFICATE COURSE ON "Medical Writing"
(30 Hrs. Duration)
IN ASSOCIATION WITH Clinitechsupport , PUNE.
(ACADEMIC YEAR: 2023-2024)

Sr. No.	Day & Date	Timing
1.	Saturday, 09/12/2023 Sunday ,10/12/2023	1.30 am to 3.30 pm 10.00 am to 12:00 PM
2.	Saturday, 16/12/2023 Sunday , 17/12/23	1.30 am to 3.30 pm 10.00 am to 12:00 PM
3.	Saturday, 23/12/2024 Sunday, 24/12/2024	1.30 am to 3.30 pm 10.00 am to 12:00 PM
4.	Saturday, 30/12/2024	1.30 am to 3.30 pm
5.	Saturday, 6/01/2024 Sunday, 07/1/2024	1.30 am to 3.30 pm 10.00 am to 12:00 PM
6	Saturday, 13/01/2024 Sunday,14/01/2024	1.30 am to 3.30 pm 10.00 am to 12:00 PM
7	Saturday, 20/01/2024 Sunday , 21/01/2024	1.30 am to 3.30 pm 10.00 am to 12:00 PM
8	Saturday, 27/01/2024 Sunday, 28/01/2024	1.30 am to 3.30 pm 10.00 am to 12:00 PM
	Total Duration	**30 Hrs**

Mrs. Deepika Prajapati
TPC Coordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-1

Students Attendance of Medical writing course

Sr. No	Name of the Students	9 Dec 23	10 Dec 23	16 Dec 23	17 Dec 23	23 Dec 23	24 Dec 23	30 Dec 23	6 Jan 24	7 Jan 24	13 Jan 24	14 Jan 24	20 Jan 24	21 Jan 24	27 Jan 24	28 Jan 24
1.	Abhijeet Choudhary	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P
2.	Rushikesh Dhale	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3.	Sayam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4.	Shubham Kaspate	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5.	Aarti Sawant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6.	Anuradha daundkar	P	P	P	A	P	P	A	P	P	P	P	P	P	P	A
7.	Rajlaxmi ingole	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8.	Pranali Shewale-	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P
9.	Yogesh Choudhary	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P
10.	Shrinath Bochare	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P
11.	Bharat Rathod	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12.	Rushali Koli	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13.	Pawar Rajeshwari	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P
14.	Bhakti Todmal	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P
15.	Chaitali Galam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
16.	Gitanjali Bhosale	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
17.	simran prajapati -	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18.	Sakshi Mane	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P
19.	Gauri Kolhe-	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20.	Holkar Nikita	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21.	Tejas Khaladkar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22.	Khushi Kharabe	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P
23.	Mrudula Thombre	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P
24.	Nikita Gaikwad	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P
25.	Deepali Naiknavare	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P
26.	Laukik Raskar	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P
27.	Rutuja Gund-	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

3/6

28.	Rohan Thite	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
29.	Akshada Dombe	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P
30.	Siddhant Dhumal	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
31.	Manish Kadam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
32.	Siddhi Ghavate	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
33.	Utkarsh Gaikwad	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Mrs. Deepika Prajapati
TPC Coordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-1

Mrs. Smita Thube addressing students with Module-XV "Writing for Regulatory Authorities in Different Regions"

Mrs. Smita Thube addressing students with Module-V "Data Presentation and Statistics for Medical Writers"

Mrs. Deepika Prajapati
TPC Coordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-1

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

Certificate Course on

"Medical Writing"

Academic Year-2023-24

FEEDBACK FORM

Name of Student: Bohra Sayam Sunil

Class: Final Year B. Pharm VIIIth Sem

Sr. no	Particulars	Excellent	Good	Average	Satisfactory	Poor
1.	How would you rate the overall quality of the course content?	✓				
2.	Was the course material relevant to your needs and expectations?	✓				
3.	How would you rate the instructor(s) on the following? Clarity of explanations	✓				
4.	Overall effectiveness of the Course for your career	✓				
5.	Would you like to participate in such type of Course in the future?	✓				

Note: Strike ✓ wherever necessary

Comment if any NO Comments

Signature of student: Sayam

Date: 03/02/24

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

Certificate Course on

"Medical Writing"

Academic Year-2023-24

FEEDBACK FORM

Name of Student: Nikita Holkar

Class: Final Year B. Pharm VIIIth Sem

Sr. no	Particulars	Excellent	Good	Average	Satisfactory	Poor
1.	How would you rate the overall quality of the course content?					
2.	Was the course material relevant to your needs and expectations?					
3.	How would you rate the instructor(s) on the following? Clarity of explanations					
4.	Overall effectiveness of the Course for your career					
5.	Would you like to participate in such type of Course in the future?					

Note: Strike ✓ wherever necessary

Comment if any The Course should be more Descriptive but overall Course was good.

Signature of student: Nikita.

Date: 14/03/24

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PDEA

Pune District Education Association

CERTIFICATE OF COMPLETION

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This is to certify that Dr./Mr./Mrs./Ms.

Laukik Chandrakanth Rasker, PDEA's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune.

has actively participated in and completed the

The Certificate course in Medical Writing with

CliniTechsupport from Dec 2023 to April 2024

conducted at

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

277 / 521

DR ASMITA SAKORE
TPC COORDINATOR

DR. ASHOK BHOSALE
PRINCIPAL

बहुजन हिताय, बहुजन सुखाय।
PDEA
Pune District Education Association

CERTIFICATE OF COMPLETION

CliniTechsupport
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This is to certify that Dr./Mr./Mrs./Ms.

Padmal Bhakti Nilesh, PDEA's Shankarrao Ursal College of Pharmaceutical sciences & Research centre, Kharadi, Pune

has actively participated in and completed the

The Certificate course in Medical Writing with CliniTechsupport from Dec 2023 to April 2024

conducted at

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

278 / 521

DR ASMITA SAKORE
TPC COORDINATOR

DR. ASHOK BHOSALE
PRINCIPAL

A Report on Certificate Course on "Learning Interview Skills Course"

Academic Year- 2023-2024

Tittle- Learning Interview Skills Course
Duration- 30 Hours

Aim- This comprehensive "Learning the Interview Skills" course is designed to equip with the essential tools and techniques needed to succeed in interviews, whether it is for college admissions, job opportunities, or competitive exams. With a focus on practical skills development and personalized guidance, this course will empower you to showcase your strengths, articulate your achievements, and leave a lasting impression on interview panels.

Description- The institute conducted 30 Hrs duration course on **"Learning Interview Skills Course"** under the guidance of Mr. Abhay S Thube (Director of Clinitech support, Pune) for Final Year B. Pharm (2019 Pattern) and M Pharm final Year students. Mrs. Abhay Thube conducted classes on every Saturday for 2 Hrs. in the month Dec / March 2024 (as mentioned in below given timetable) for the academic year 2023-2024. Selected 36 students of Final-year B.Pharm (2019 Pattern) and M Pharm classes successfully completed this 30 Hrs duration course on **"Learning Interview Skills Course"**.

Participants details : Selected 36 students of Final Year B.Pharm (2019 Pattern) and M Pharm classes were enrolled for this program and had successfully completed this 30 Hrs. duration program.

Modules:-

Sr. No.	Module no.	Name of the module	Duration (Hrs)
1	I	Introduction to Interview Skills	4
2	II	Preparing for Interviews	6
3	III	Verbal and non- verbal communication skills	8
4	IV	Handling Different Interview Formats	8
5	V	Mock Interviews and Feedback	4
		Total Hours	**30**

TIME TABLE

CERTIFICATE COURSE ON "Learning Interview Skills Course"

(30 Hrs Duration)

IN ASSOCIATION WITH ClinITechsupport , PUNE.

(ACADEMIC YEAR: 2023-2024)

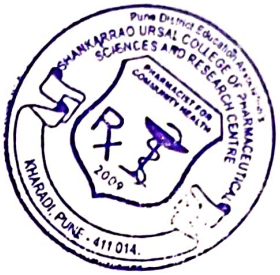
Sr. No.	Day & Date	Timing
1.	Saturday, 09/12/2023	8:30 AM to 10:30 AM
2	Saturday, 16/12/2023	8:30 AM to 10:30 AM
3	Saturday, 23/12/2023	8:30 AM to 10:30 AM
4	Saturday, 30/12/2024	8:30 AM to 10:30 AM
5	Saturday, 06/01/2024	8:30 AM to 10:30 AM
6	Saturday, 13/01/2024	8:30 AM to 10:30 AM
7	Saturday, 27/01/2024	8:30 AM to 10:30 AM
8	Saturday, 03/02/2023	8:30 AM to 10:30 AM
9	Saturday, 10/02/2024	8:30 AM to 10:30 AM
10	Saturday, 17/02/2024	8:30 AM to 10:30 AM
11	Saturday, 24/02/2024	8:30 AM to 10:30 AM
12	Saturday, 02/03/2024	8:30 AM to 10:30 AM
13	Saturday, 09/03/2023	8:30 AM to 10:30 AM
14	Saturday, 16/03/2023	8:30 AM to 10:30 AM
15	Saturday, 23/03/2024	8:30 AM to 10:30 AM

Mrs. Deepika Prajapati
Coordinator

Dr. Ashok Bhosale
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-1

Attendence of Learning Interview Skills Course



Sr. No	Name of the Students	9 Dec 23	16 Dec 23	23 Dec 23	30 Dec 23	06 Jan 23	13 Jan 23	27 Jan 23	03 Feb 24	10 Feb 24	17 Feb 24	24 Feb 24	02 Mar 24	09 Mar 24	16 Mar 24	23 Mar 24
1.	Abhijeet Choudhary	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P
2.	Rushikesh Dhale	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3.	Sayam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4.	Shubham Kaspate	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5.	Aarti Sawant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6.	Anuradha daundkar	P	P	P	A	P	P	A	P	P	P	P	P	P	P	A
7.	Rajlaxmi ingole	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8.	Pranali Shewale-	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P
9.	Yogesh Choudhary	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P
10.	Shrinath Bochare	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P
11.	Bharat Rathod	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12.	Rushali Koli	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13.	Pawar Rajeshwari	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P
14.	Bhakti Todmal	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P
15.	Chaitali Galam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
16.	Gitanjali Bhosale	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
17.	simran prajapati	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18.	Sakshi Mane	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P
19.	Gauri Kolhe-	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20.	Holkar Nikita	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21.	Tejas Khaladkar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22.	Khushi Kharabe	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P
23.	Mrudula Thombre	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P
24.	Nikita Gaikwad	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P
25.	Deepali Naiknavare	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P
26.	Laukik Raskar	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P

27.	Rutuja Gund-	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
28.	Rohan Thite	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
29.	Akshada Dombe	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P
30.	Siddhant Dhumal	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
31.	Manish Kadam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
32.	Siddhi Ghavate	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
33.	Utkarsh Gaikwad	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
34.	Shubham Doke	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P
35.	Srushti Rajpurihit	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P
36.	Trupti Shinde	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Deepikax

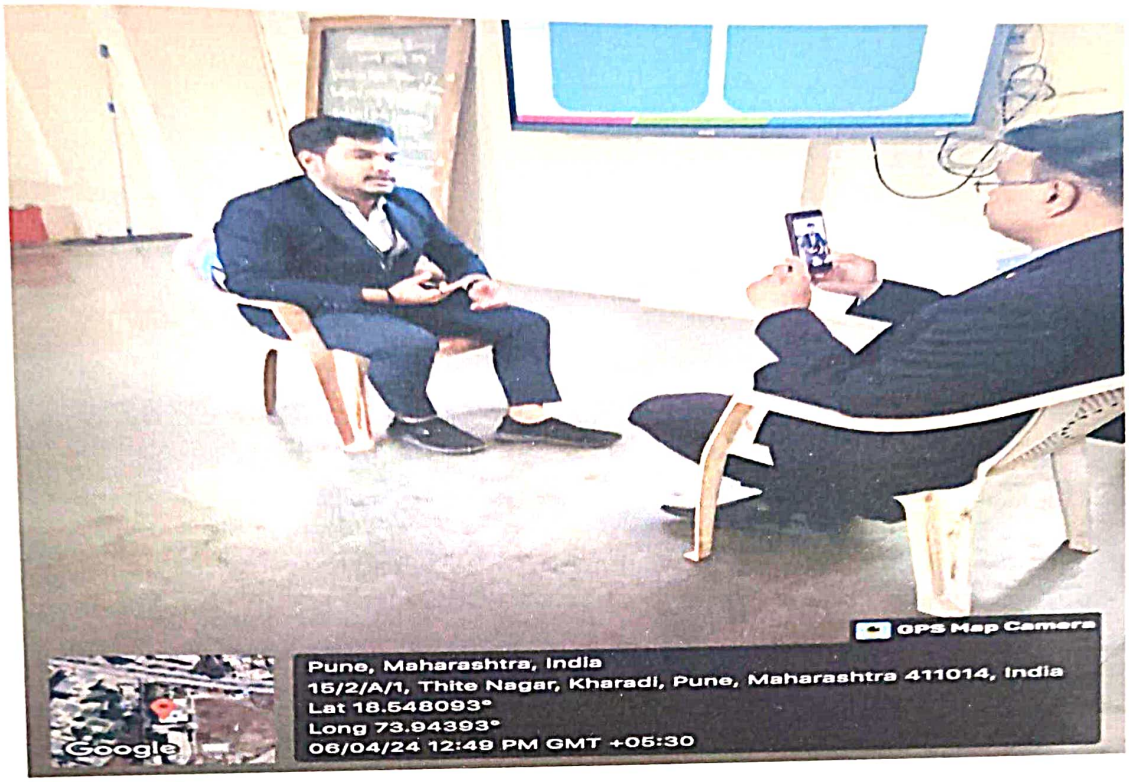
Mrs. Deepika Prajapati
Coordinator

Dr. Ashok Bhosal
Principal

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-1

Mr. Abhay Thube addressing students with Module - I
"Introduction to Interview Skills"

Mr. Abhay Thube addressing students with Module -V "Mock Interview and feedback"



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Kharadi, Pune-411014

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

Certificate Course on

"Learning Interview Skills Course"

Academic Year- 2023-24

FEEDBACK FORM

Name of Student: Badhye Payal Santosh

Class: Final Year B. Pharm VIIIth Sem

Sr no	Particulars	Excellent	Good	Average	Satisfactory	Poor
1.	How would you rate the overall quality of the course content?	✓				
2.	Was the course material relevant to your needs and expectations?	✓				
3.	How would you rate the instructor(s) on the following? Clarity of explanations	✓				
4.	Overall effectiveness of the Course for your career	✓				
5.	Would you like to participate in such type of Course in the future?	✓				

Note: Strike ✓ wherever necessary

Comment if any The Course time should be more.

Signature of student: Payal

Date: 24/03/24

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

Certificate Course on

"Learning Interview Skills Course"

Academic Year- 2023-24

FEEDBACK FORM

Name of Student: Dolare Sakshi Popat

Class: Final Year B. Pharm VIII th sem

Sr no	Particulars	Excellent	Good	Average	Satisfactory	Poor
1.	How would you rate the overall quality of the course content?	✓				
2.	Was the course material relevant to your needs and expectations?	✓				
3.	How would you rate the instructor(s) on the following? Clarity of explanations	✓				
4.	Overall effectiveness of the Course for your career	✓				
5.	Would you like to participate in such type of Course in the future?	✓				

Note: Strike ✓ wherever necessary

Comment if any This Course is amazing. It was good learning interview techniques.

Signature of student: Sakshi

Date: 26/03/24

CERTIFICATE OF COMPLETION

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An ISO 9001 : 2015 Certified Institute

This is to certify that Mr. / Ms. /Mrs.

Utkarsh Ramesh Gaikwad, PDEA's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Pune

Has actively participated in and completed the

The Certificate course in "Learning Interview skills Course" With CliniTechsupport from Dec 2023 to March 2024

Conducted at

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

Deepika

Mrs. Deepika Prajapati
TPC Coordinator

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

CERTIFICATE OF COMPLETION

This is to certify that Mr. / Ms. /Mrs.

Shivjeet Ramesh Jadhav, PDEA's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Pune

Has actively participated in and completed the

The Certificate course in "Learning Interview skills Course" With CliniTechsupport from Dec 2023 to March 2024

Conducted at

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

Deepikas

Mrs. Deepika Prajapati

TPC Coordinator

Dr. Ashok Bhosale

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

CERTIFICATE OF COMPLETION

CliniTechsupport
An ISO 9001 : 2015 Certified Institute

This is to certify that Mr. / Ms. /Mrs.

Akshada Nilkanth Dombe, PDEA's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Pune

Has actively participated in and completed the

The Certificate course in "Learning Interview skills Course" With CliniTechsupport from Dec 2023 to March 2024

Conducted at

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

Mrs. Deepika Prajapati
TPC 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.

Participation of students in NSS Activities

Pune District Education Association's

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

Participation of students in NSS Activities

(A.Y. 2023-24)

Please visit this link for more information:

https://pdeasubpharm.s3.us-east-2.amazonaws.com/NAACSSR/552/NSS%20Activity%20Reprts%202023-24.pdf

Pune District Education Association's

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

Participation of students in NPW Activities

Pune District Education Association's

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

NOTICE NO.: -99 **Date 23.09.2023**

(Academic Year- 2023-2024)

All the faculty members are hereby informed that a Seminar on **"Pharmaceutical Industry Today and Tomorrow"** is organized on **Monday, 25th September 2023 at 10:30 am** on the occasion of celebration of **"World Pharmacist Day 2023"** All are informed that attend the same in Lecture Hall No. 308.

for

Mrs. Ketki Lakhane
NPW Co-ordinator

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Vijaya Barge
VICE - PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
Sciences & 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.

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

World Pharmacist Day Programme

25th September 2023

Theme: "Pharmacist Strengthening Health System"

PROTOCOL

Sr. No.	Name of Event	Responsible Person	Time
1.	Welcome guest and Preamble	Prof. Vipul Dhasade	11.00 am to 11.05 am
2.	Felicitation of Guest	Principal	11.05 am to 11.10 am
3.	Address by Principal	Dr. Ashok Bhosale	11.10 am to 11.20 am
4.	Pharmacist Oath	Prof. Shrikant Gaikwad	11.20 am to 11.25 am
5.	Address by Speaker/ Chief guest	**Shri. Nitin Deo.** Director, DEO Sales Surgicals and Pharmaceuticals Pune., Pune Topic: "Pharmaceutical Industry Today and Tomorrow".	11.25 am to 12.10 pm
6.	Vote of Thanks	Prof. Ketki Lahane	12.10 pm to 12.15 pm

Ms. Ketki Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
Principal

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

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PDEA
Pune District Education Association

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 : 20/09/2023 Ref. No.: SUCOPSRC/ 274 /2023-2024

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. Nitin Deo.
Director, DEO Sales
Surgicals and Pharmaceuticals
Pune.

Subject: Invitation as Chief guest and Resource Person for Pharmacist Day 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. The college is ISO 9001:2015 certified.

Every year our college organized curricular and social activity for overall development of students as well as social awareness. As like every year, we are celebrating **World Pharmacist Day 2023.** 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 **"Pharmaceutical Industry Today and Tomorrow".** The programme is scheduled on **25th September 2023 at 11:00 am.**

We look forward to your presence and guidance.

Thanking You,

Yours Faithfully,

Recived 1/9

Dr. Ashok Bhosale
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical

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

A Report on "World Pharmacist Day"

25th September 2023

The Seminar on **"Pharmaceutical Industry Today and Tomorrow"** is organized on the occasion of celebration of **"World Pharmacist Day 2023".** The programme organized in institute with the main objective to promote and advocate the role of pharmacist in improving health of each corner of the world. To know about updates of career opportunities in Pharmaceutical industries. To showcase the pharmacist in their positive role on health, this year **"Pharmacist Strengthening Health System"** is the theme of World Pharmacists Day. The chief guest and main resource person for programme Shri. Nitin Deo. Director, DEO Sales Surgicals and Pharmaceuticals, Pune, expressed in his motivative talk to students emphasized on Pharmaceutical industries current scenario and future perspective toward healthcare system. The capacities of pharmacy professionals towards the welfare of society and Ensure Patients' Safety.

Principal of institute 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. Prof. Shrikant Gaikwad administered the Pharmacist Oath to all S. Y. D. Pharm, Final Year B. Pharm and S. Y. M. Pharm students.

Programme anchoring and preamble expressed by Prof. Vipul Dhasade. At the end of programme Vote of thank expressed by Prof. Ketki Lakhane. All students, staff attended programme.

In afternoon session, Indian Pharmaceutical Association Pune branch in association with all pharmacy colleges of Pune region has planned to celebrate World Pharmacist Day by organizing a mass campaign of **"Let's Honour our Pharmacists".** In this activity, we are arranged 12 team of students/faculty to reach maximum Community and Hospital Pharmacists in Kharadi, Chandannagar, Hadapsar areas and falicited them with a Rose flower and Appreciation Certificate. Total 100 Pharmacist in above region were falicited under this activity. Total 150 students and faculty members are actively involved in Let's Honour our Pharmacists activity. Overall World Pharmacists Day programme coordinated by Prof. Vipul Dhasade and Prof. Ketki Lakhane.

Ms. Ketki Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
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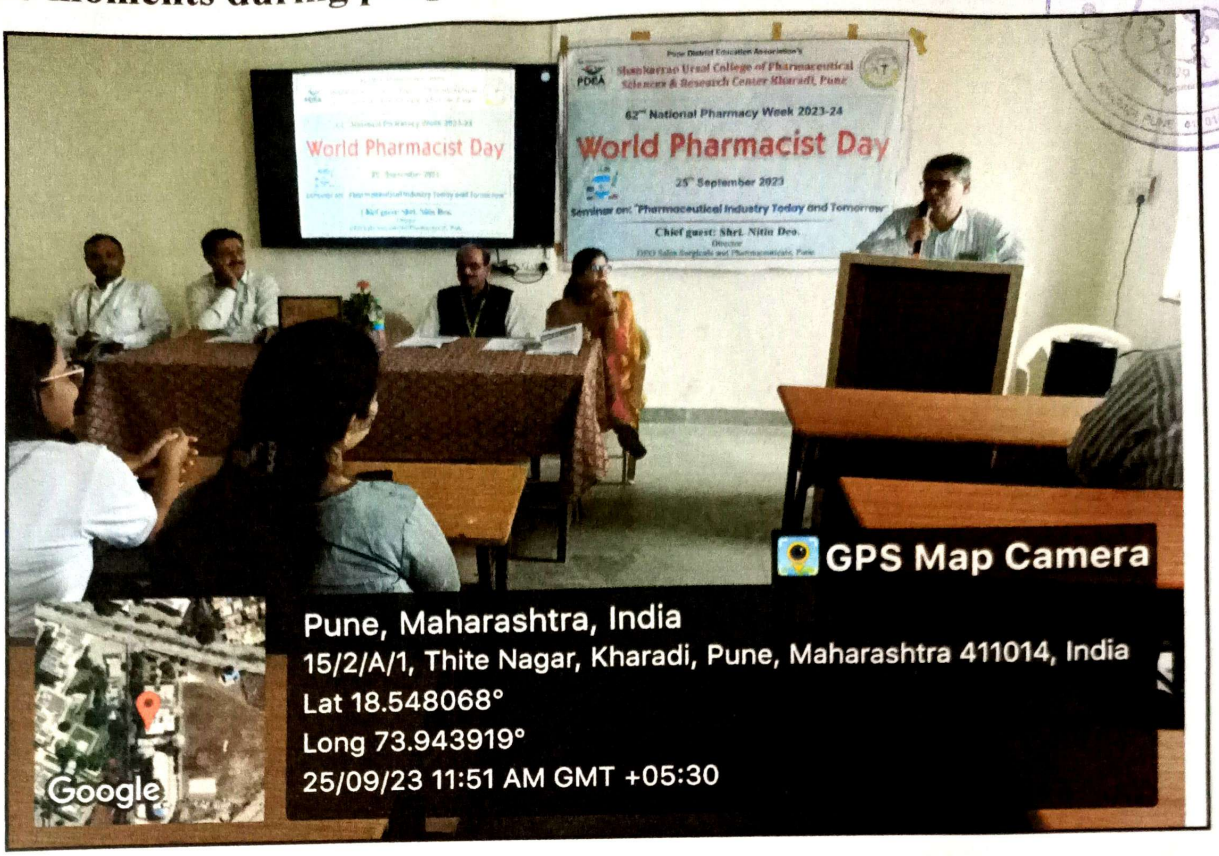
Some moments during programme..



Chief guest Shri. Nitin Deo. during his motivational, talk to students

Pharmacist Oath given to all budding Pharmacist

Ms. Ketki Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
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Principal Dr. Ashok Bhosale address to students during Programme

All Students and staff during Seminar

Ms. Ketki Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
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Our students and faculty members are actively involved in **Let's Honour our Pharmacists** activity

Ms. Ketki Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
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Our students and faculty members are actively involved in **Let's Honour our Pharmacists** activity

Ms. Ketki Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
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Pune-411014

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Our students and faculty members are actively involved in **Let's Honour our Pharmacists** activity

Ms. Ketki Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
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Pune District Education Association's

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

"World Pharmacist Day - 2023"

Seminar on "Pharmaceutical Industry Today and Tomorrow"

Monday, 25th September 2023

Participant List

Sr. No.	Name of Student	Class	Sign
1.	Ashlesha Raju Natekar	S.Y.D Pharm	ARNatekar
2.	Seema Bhagvan kalbande	S.Y.D Pharm	Skalbande
3.	Aishwaraya Dilip Patil	S.Y.D.Pharm	Aishwarya
4.	Payal Akash Garad	S.Y.D.Pharm	Payal.G.
5.	Anarase Bhagyashri sambhaji	S.Y.D.pharm	
6.	Sanika Sopan Bhukan	S.Y.D.Pharm	Bhukan
7.	Snehal Machindra Badade	S.Y.D.Pharm	Snehal
8.	Shravani kishor Deokar	S.Y.D Pharm	Shravani
9.	Nandini Maruti Bange.	S.Y.D Pharm	Nandini
10.	Shweta Rajendra Gavade	S.Y.D.pharm	Shweta
11.	Amruta Sanjay Gujale	S.Y.D.Pharm	A.Gujale
12.	Disha Dipak Chavan	S.Y.D.Pharm	Disha
13.	Priya Popat Gaikwad	S.Y.D.Pharm	Priya
14.	Mrunali Mohan Shinde	S.Y.D Pharm	Mshinde
15.	Swati Vijaykumar Shinde	S.Y.D.Pharm	Swati
16.	Thorat Pranjal Ramdas	S.Y.D.Pharm	Thorat P.R.
17.	Pooja Shivraj Rathod	S.Y.D.Pharm	Pooja
18.	Ragini Sar Ramesh Sardar	S.Y.D.Pharm	Ragini
19.	Pravin Narayan Varpa	S.Y.D.Pharm	Pravin
20.	Sanju Mallappa Badager	S.Y.D.pharm	Sbadager
21.	Chiraj Choudhary	S.Y.D.Pharm	Chiraj
22.	Arvind Choudhary	S.Y.D.Pharm	Arvind
23.	Arun Dilpak	S.Y.D.Pharm	

Mr. Vipul Dhasade
Staff Coordinator

Dr. Ashok Bhosale
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Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune

Sr. No.	Name of Student	Class	Sign
24.	Kunal Amrale	S.Y. D Pharm	Kunal Amrale
25.	Kasve Dinesh	S.Y. D Pharm	
26.	Dnyaneshwari mengade	S.Y. M.pharm	Mengade
27.	Komal [illegible]	-11-	
28.	Nirmala [illegible]	-11-	
29.	Jagdale Mayuri Madhukar	S.Y. D pharm	Mayuri.
30.	Jatti Aishwarya Nandalal	S.Y. D. Pharm	
31.	Sayam - S. Bohra	Final year B Pharm	
32.	Yogesh K Choudhary	Final Year B. Pharm	
33.	Gaikwad Utkarsh R.	Final Y. B Pharm	
34.	Vinit Kale	Final Y. B Pharm	Vkale
35.	Vaibhav Tambe	Final Y. B Pharm	
36.	Rohan Thite	Final Yr. B Ph	
37.	Jadhav Shivjeet	" "	
38.	vaibhav Kirtane	" "	
39.	tejas more	S.Y. B. Phar	
40.	Khanvilkar Yashraj. V.	S.Y. B pharm	
41.	chavan shubham N	SY B pharm	
42.	Tushar Ashok Zole	SY B Pharm	T.A Zole
43.	Harshad R. Pathare	SY B Pharm	
44.	Yogiraj B. Raul	S.Y. B. Pharm	Raul
45.	Aklesh B. chauhan	S.Y. B. Pharm	
46.	Rohit R. Bhusare	S.Y. B. Pharm	
47.	Tanmay Ajay kunjir	SY B Pharm	
48.	prithviraj. Sanjay Ugale	SY B Pharm	
49.	Drushti Sonawane	Final 4-B	
50.	Payal santosh Badhe	Final Y. B. Ph	
51.	Bavdhane Nilam H	Final Y. B. P	Nilam

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

Sr. No.	Name of Student	Sign ~~Class~~	Class ~~Sign~~
52.	Thotal Sakshi Shaskal		Final year
53.	Holkar Nikita Rajaram		— 11 —
54.	Srushti Harisingh Rajpurohit		— 11 —
55.	Pallavi Girase		— 11 —
56.	Shreya Salunke		— 11 —
57.	Raskar Laukik.		— 11 —
58.	Utkarsha hambir		— 11 —
59.	Tejas Santosh Kholodkar		— 11 —
60.	Aditya Rahul Mohite		— 11 —
61.	Rohan Nitin Thite		— 11 —
62.	Vaibhav Santosh Jadhav		— 11 —
63.	Sonali B. Ghule		— 11 —
64.	Vaibhavi D. Ghule		— 11 —
65.	Vinit Kale		— 11 —
66.	Gaikwad Mustafa R.		— 11 —
67.	Shreya Darage		— 11 —
68.	Siddhi Ghorpade		— 11 —
69.	Pawar pratiksha		— 11 —
70.	Gosavi Subhash		— 11 —
71.	Doke shubham		— 11 —
72.	Hole shubham		— 11 —
73.	Dhale Rushikesh		— 11 —
74.	Sawant Aarti Ramdas		— 11 —
75.	Shewale pranali Ramkrishna		— 11 —

Mr. Vipul Dhasade
Staff Coordinator

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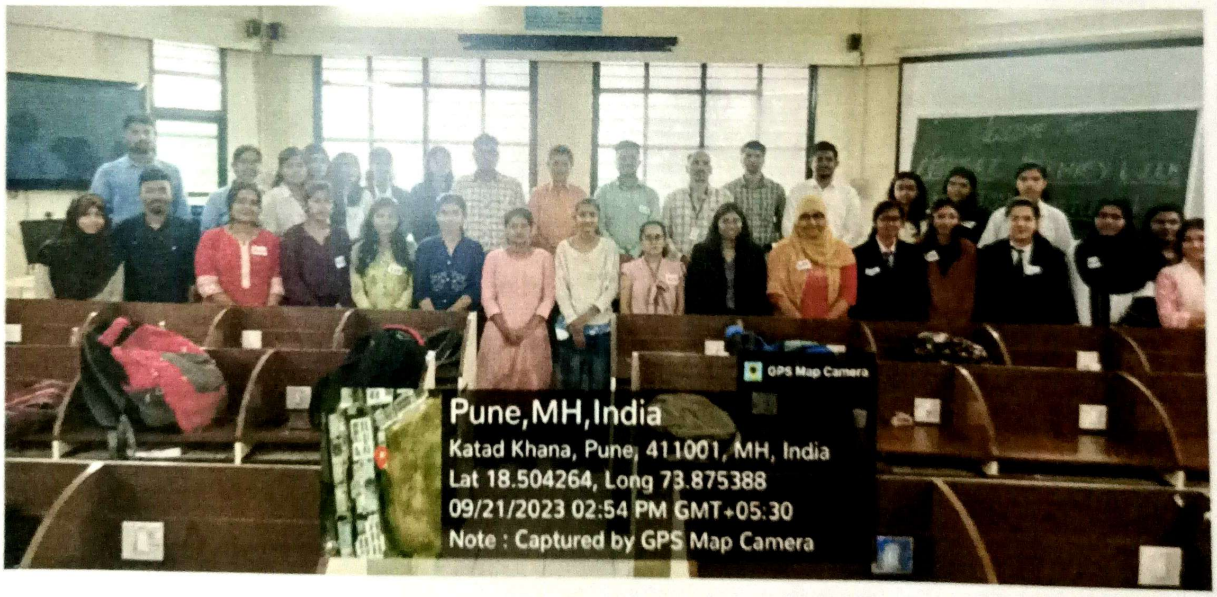
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

A Report on "62nd National Pharmacy Week (NPW) -2023"

20th to 26th September 2023

Indian Pharmaceutical Association, Pune Branch and Pharmacy colleges from Pune city area was celebrated **"62nd National Pharmacy Week (NPW) -2023"** from **20th to 26th September 2023.** The various events was organized with the aim to motivate the young budding pharmacists to develop their confidence, knowledge, leadership qualities, organizational capacity and make them understand about the importance of the profession thus to excel in the field.

The theme for current year is **"Pharmacist Strengthening Health System".** Our college B. Pharm and M. Pharm 28 students were participated in all competitions follows,



On 21st September 2023 (Thursday), our Final Year B. Pharm student Sawant Aarti Ramdas and T. Y. B. Pharm student Ghorad Sheetal Rajesh participated in Elocution Competition at Allana College of Pharmacy (Degree).

Prof. Vipul Dhasade
(NPW Co-ordinator)

Dr. Ashok Bhosale
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On 20th September 2023 (Wednesday) our T. Y. B. Pharm student Jadhav Ananya V. participated in Poster Presentation at TMV's Lokmanya Tilak Institute of Pharmaceutical Sciences, Pune.

Prof. Vipul Dhasade
(NPW Co-ordinator)

Dr. Ashok Bhosale
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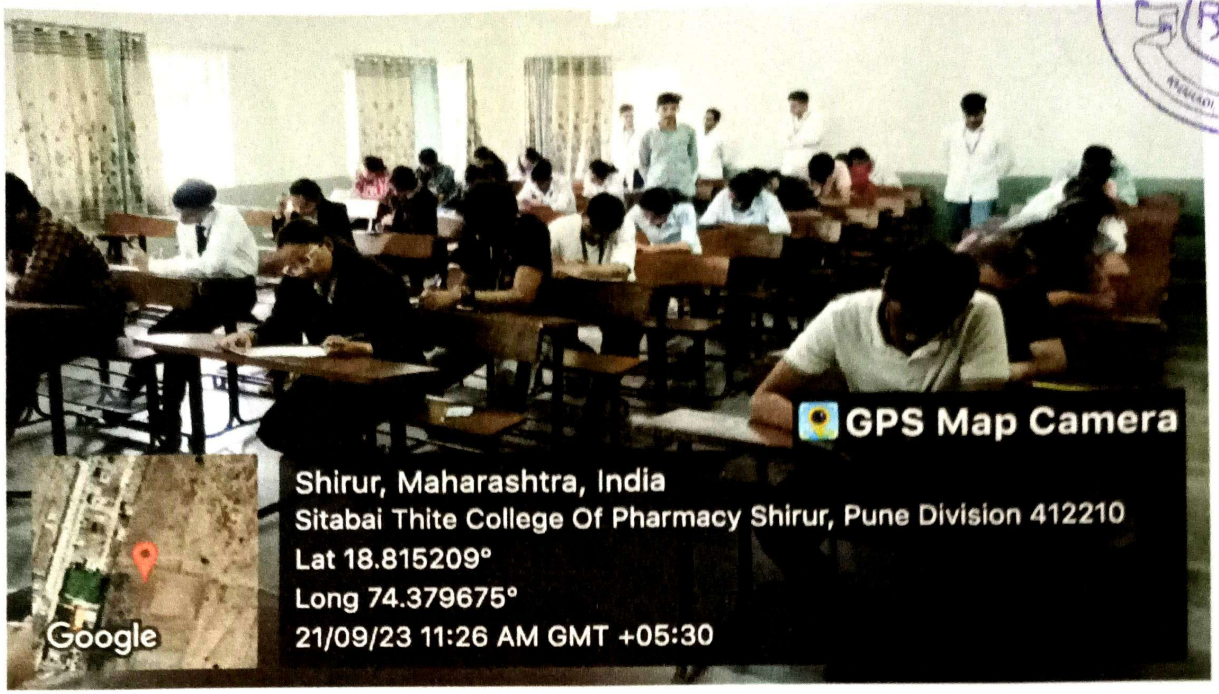

On 21st September 2023 (Thursday), our Final Year B. Pharm student Choudhari Abhijeet Shivlal and Rathod Bharat Babulal participated in General Aptitude at SCSSS's Sitabai Thite College of Pharmacy, Shirur.

Prof. Vipul Dhasade
(NPW Co-ordinator)

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On 22nd September 2023 (Friday), our Final Year B. Pharm student Bohra Sayam Sunil and Choudhary Yogesh Kuparam participated in Quiz Competition at Alard College of Pharmacy, Pune.

Prof. Vipul Dhasade
(NPW Co-ordinator)

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On 23rd September 2023 (Saturday), our Final Year B. Pharm student Tambe Vaibhav Vishnu, Vidhate Rachna Suresh, Patange Vaibhav Narayanrao, Sonawane Drushti Hemant, Raje Vasundhara Satishrao and Choudhary Yogesh Kuparam participated in Patient Counselling Competition at SCES's, Indira College of Pharmacy, Tathawade, Pune.

On 25th September 2023 (Monday), our Final Year B. Pharm Student Choudhari Abhijeet Shivlal and Rathod Bharat Babulal participated in Debate Competition at BVDU Poona College of Pharmacy, Pune.

Prof. Vipul Dhasade
(NPW Co-ordinator)

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On 26th September 2023 (Tuesday), our Final Year B. Pharm Student Ghule Sonali Balasaheb, Holkar Nikita Rajaram, Bavdhane Nilam Harishchandra, Gaikwad Nikita Nana, Badhe Payal Santosh, Ghule Vaibhavi Dattatray and Dolare Sakshi Popat participated in Pharma Ad Mad at Sinhagad Institute of Pharmacy, Narhe.

Prof. Vipul Dhasade
(NPW Co-ordinator)

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On 26th September 2023 (Tuesday), our Final Year B. Pharm Student Kirtane Vaibhav Vishwajeet and Jadhav Shivjeet Ramesh participated in Group Discussion at Modern College of Pharmacy, Nigdi.

On 26th September 2023 (Tuesday), our S. Y. M. Pharm Student Mengade Dnyaneshwari S. and Shinde Trupti participated in Oral Paper Presentation at PDEA'S Shankarrao Ursal College of Pharmaceutical Science and Research Centre Kharadi, Pune.

Prof. Vipul Dhasade
(NPW Co-ordinator)

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Report on 62nd National pharmacy week 2023

Theme: "Pharmacist Strengthening Health System"

62nd National pharmacy week 2023-2024 was organized by IPA, Pune branch from **20th September to 26th September 2023** based on the **Theme: "Pharmacist Strengthening Health System"**

The celebrations of National Pharmacy Week in India are held every year. 62nd National pharmacy week 2023-2024 was organized by IPA, Pune branch. Almost all the colleges in and around Pune from D. Pharm, B. Pharm and M. Pharm categories participated in NPW celebration. Events were organised in various pharmacy colleges across Pune during this period. Various Competitions were organised namely, Debate, Pharma ad mad, Interview skills, Group discussion, Quiz competition, Patient counselling, Elocution, General aptitude and Pharma detailing, Oral paper presentation. PDEA's Shankarrao Ursal Pharmaceutical Sciences and Research Center Kharadi, Pune students has participated in all the events organised by different colleges. Oral paper presentation competition was held at PDEA's Shankarrao Ursal Pharmaceutical Sciences and Research Center Kharadi, Pune. All the participated Students displayed creative ideas in various competitions and demonstrated their scientific enthusiasm in different competitions.

Overall event was arranged and coordinated by Mr. Vipul Dhasade and Ms. Ketki Lakhane.

Sr.no	Name Of the Event	Date	Staff Coordinator	Name of Institute	Participants
1	Poster Presentation	20-09-2023	Prof. Shubhangi Karkhile	PES Modern College of Pharmacy, Moshi	Ms. Seema Choudhary, Ms. Bhakti Harpale, Ms. Payal Ranit
2	Pharma Detailing	20-09-2023	Prof. Poonam Khade	PES Modern College of Pharmacy, Moshi	Mr. Arvind Choudhary, Mr. Chirag Choudhary
3	General Aptitude	21-09-2023	Prof. Ruchita Bhalerao	MMCOP, Thergaon, Pune	Ms. Disha Chavhan, Ms. Saroj Boldara
4	Elocution Competition	22-09-2023	Prof. Ruchita Bhalerao	Sinhagad College of Pharmacy, Kondhwa	Ms. Payal Garad, Ms. Swati Shinde
5	Quiz competition	22-09-2023	Prof. Shrikant Gaikwad	Dr. D.Y. Patil University, school of pharmacy, Ambi, Pune	Ms. Sanka Bhukan, Mr. Mandar Daundkar
6	Interview Skills	25-09-2023	Prof. Poonam Khade	AISSMS College of Pharmacy, Pune	Mr. Mandar Daundkar

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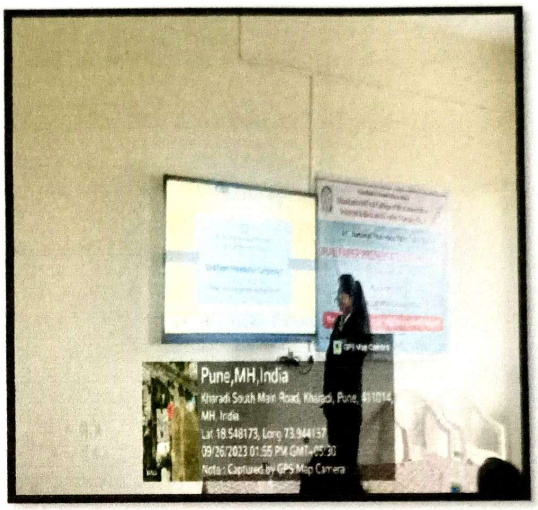
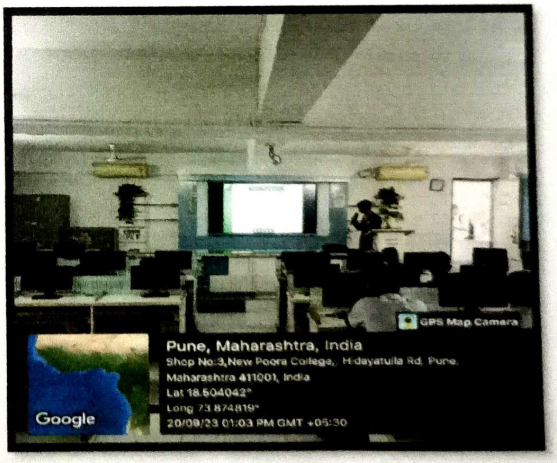
7	Group Discussion	26-09-2023	Prof. Ketki Lakhane	Modern College of Pharmacy, Nigdi	Ms. Shravani Deokar, Ms. Snehal Badade
8	Oral paper presentation	26-09-2023	Prof. Ketki Lakhane	PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune	Ms. Payal Garad

S. Y. D. Pharm students participated in Quiz competition.



S. Y. D. Pharm student participated in Oral paper presentation.

S. Y. D. Pharm students participated in Elocution competition.



S. Y. D. Pharm students participated in Pharma Detailing Competition.

Ms. Ketki G. Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
Principal

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

NOTICE NO.: - 93 **Date 09.09.2023**
(Academic Year- 2023-2024)

All the students of D. Pharm, B. Pharm. and M. Pharm are hereby informed that Indian Pharmaceutical Association, Pune Branch is celebrating **"62nd National Pharmacy Week (NPW) -2023"** from **20th to 26th September 2023.** The various events will be organized with the aim to motivate the young budding pharmacists to develop their confidence, knowledge, leadership qualities, organizational capacity and make them understand about the importance of the profession thus to excel in the field.

The theme for current year is **"Pharmacist Strengthening Health System".** Students should participate actively in all events as per schedule guidelines attached herewith. Students should contact to respective staff coordinators for registration and participation.

Mrs. Ketki Lakhane
NPW Co-ordinator

Mr. Vipul Dhasade
NPW Co-ordinator

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

Dr. Ashok Bhosale
PRINCIPAL
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Shankarrao Ursal College of Pharmaceutical
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Pune District Education Association's

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

NOTICE NO.: - 94 **Date 09.09.2023**

(Academic Year- 2023-2024)

All faculty members are hereby informed that Indian Pharmaceutical Association, Pune Branch is celebrating **"62nd National Pharmacy Week (NPW) -2023"** from **20th to 26th September 2023.** The various events will be organized with the aim to motivate the young budding pharmacists to develop their confidence, knowledge, leadership qualities, organizational capacity and make them understand about the importance of the profession thus to excel in the field.

The theme for current year is **"Pharmacist Strengthening Health System".** As per schedule, details of all events and guidelines are attached herewith. Students will contact to respective staff coordinators for registration and active participation.

Mrs. Ketki Lakhane
NPW Co-ordinator

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Vijaya Barge
VICE - PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical
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Kharadi, Pune - 411014

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Pune District Education Association's

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

Theme: "Pharmacist Strengthening Health System".

Sr. no.	Day and Date	Name of Event/Activity	Name of organizing college	Competition for Courses	Name of coordinator & phone no. Email ID for participation entries	Name of coordinator at College Level for participation entries
1.	20th September (Wednesday)	Ideathon	KJEI's Trinity College of Pharmacy, Pune	UG, PG	Dr. Dilnawaz Pathan 9422752786 dilnawazpathan.tcop@kjei.edu.in	Mr. Vikram Veer
		Pharma Detailing	JSPM Rajarshi Shahu College of Pharmacy, Tathawade	UG	Dr. Trupti Deshpande 7709184076 truptideshpande06@gmail.com	Mr. Krunal Kanse
			MCE's Institute of Pharmacy (Diploma)	PG, Diploma	Ms. Tasleem Kureshi 9890760118 info@instituteofpharmacy.org	Dr. Amit Kasabe Ms. Poonam Khade
		Poster Presentation	TMV's Lokmanya Tilak Institute of Pharmaceutical Sciences, Pune	UG	Ms. Rucha Pusegaonkar 9970181504 p.rucha04@gmail.com	Mrs. Bhagyashree Shelar
			PES Modern College of Pharmacy for Ladies, Moshi	PG, Diploma	Ms. Monali Waykar 9762919301 npwmcpl2023@gmail.com	Dr. Prashant Khade Ms. Shubhangi Karkhile
2.	21st September (Thursday)	General Aptitude	Marathwada Mitra Mandal's College of Pharmacy (MMCOP), Thergaon, Pune	PG, Diploma	Ms. Rakhi Awadhiya 7507569140 rakhi.awadhiya@mmcop.edu.in	Mrs. Bhagyashree Shelar Ms. Ruchita Bhalerao
			SCSSS's Sitabai Thite College of Pharmacy, Shirur	UG	Ms. Pradnya Vishwe 9623454833 pradnyavishwe@gmail.com	Mrs. Trusha Shangrapawar
		Patient Counselling	Abhinav Education Society's College of Pharmacy, Narhe, Pune	PG, Diploma	Ms. Sonali Wagh 9168792559 sonali.sangle.1393@gmail.com	Mrs. Tejaswini Kande Mrs. Pallavi Kharbas

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Pune District Education Association's

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

Theme: "Pharmacist Strengthening Health System".

Sr. no.	Day and Date	Name of Event/Activity	Name of organizing college	Competition for Courses	Name of coordinator & phone no. Email ID for participation entries	Name of coordinator at College Level for participation entries
	21st September (Thursday)	Elocution Competition	Allana College of Pharmacy (Degree)	UG	Mr. Mujeeb Shaikh 9890623891 shaikh.ms9890@gmail.com	Mr. Vipul Dhasade
3.	22nd September (Friday)	Quiz Competition	Alard College of Pharmacy, Pune	UG	Mr. Vaibhav Gawade 8830699204 gawadevaibhav6060@gmail.com	Mrs. Kiran Ghule
			DY Patil University School of Pharmacy, Ambi	PG, Diploma	Mr. Mahesh Khude 7758808279 khudesir1977@gmail.com	Mrs. Anjali Pande Mrs. Trupti Shaha
		Elocution Competition	Sinhgad College of Pharmacy, Kondhwa	PG, Diploma	Dr.Madhuri Deshmukh 8446320346 madhuripharmacistg@gmail.com	Mr. Nitin Neharkar Ms. Ruchita Bhalerao
4.	23rd September (Saturday)	Model Making	JSPM, Jayawants Institute of Pharmacy, Tathawade, Pune.	Diploma, UG, PG	Mr. Prashant Hambar 7057379709 pphambar@jspmjip.edu.in	Mrs. P.J. Bansod Mrs. Pallavi Kharbas
		Patient Counselling	SCES's, Indira College of Pharmacy, Tathawade, Pune	UG	Dr. Digambar Ambikar 9975683992 digambar.ambikar@indiraicp.edu.in	Mrs. Tejaswini Kande

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Pune District Education Association's

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

Theme: "Pharmacist Strengthening Health System".

Sr. no.	Day and Date	Name of Event/Activity	Name of organizing college	Competition for Courses	Name of coordinator & phone no. Email ID for participation entries	Name of coordinator at College Level for participation entries
5.	25th September (Monday)	Interview Skills	AISSMS College of Pharmacy, Pune	Diploma, UG, PG	Dr. Shashikant Bhandari, 9423574082 shashikantbhandari2011 @gmail.com	Mr. Vipul Dhasade Ms. Poonam Khade
		Debate Competition	BVDU Poona College of Pharmacy, Pune	UG	Dr. Sandeep Pathare, 8421310815 sandeep.pathare@ bharatividyapeeth.edu	Mrs. Trusha Shangrapawar
			RMP's Bhalchandra Institute of Pharmacy, Pune	PG, Diploma	Mrs.Vaidehi Suryawanshi, 9860106032 salunkherupali2@gmail.com	Ms. Shubhangi Kharkhile
		Extempore	MITWPU School of Health Science and Technology, Department of Pharmaceutical Sciences	UG, PG	Dr. Chandrashekar Bobade 9921596447 chandrashekhar.bobade @mippune.edu.in	Mr. Krunal Kanase Mr. Nitin Neharkar
6.	26th September (Tuesday)	Pharma Ad Mad	Sinhagad Institute of Pharmacy, Narhe	UG	Mr.Omkar Kolhe 7767958477 omkarhkolhe@gmail.com	Mr. Vipul Dhasade Mrs. Kiran Ghule
			SJVPM's Rasiklal M. Dhariwal College of Pharmacy (RMDCOP)	PG, Diploma	Ms.Suchita Khot, 9922902405 suchita.710@gmail.com	Mrs. Ketki Lakhane
		Paper Presentation	PDEA'S Shankarrao Ursal College of Pharmaceutical	PG, Diploma	Mr. Vipul Dhasade 9970526436 npwsupharmacy@gmail.com	Mr. Vipul Dhasade Mrs. Ketki Lakhane

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Pune District Education Association's

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

Theme: "Pharmacist Strengthening Health System".

Sr. no.	Day and Date	Name of Event/Activity	Name of organizing college	Competition for Courses	Name of coordinator & phone no. Email ID for participation entries	Name of coordinator at College Level for participation entries
	26th September (Tuesday)		Science and Research Centre Kharadi ,Pune			
			Sinhgad College of Pharmacy, Vadgaon	UG	Mrs. Suvarna Vakare 8554093390 npw.scop2023@gmail.com	Mr. Vipul Dhasade
		Group Discussion	Modern College of Pharmacy, Nigdi	Diploma, UG, PG	Mr.ShubhamKhade, 7745053415 srkmcop0027@gmail.com	Dr. Sujit Kakade Mrs. Ketki Lakhane

Mrs. Ketki Lakhane
NPW Co-ordinator

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Vijaya Barge
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Pune District Education Association's

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

62nd National Pharmacy Week - 2023

20/09/2023 to 26/09/2023

Student Participant Details

Sr.No.	Day and Date	Name of Event/Activity	Name of organizing college	Name of Student Participants	Class	Sign
1.	20th September (Wednesday)	Poster Presentation	TMV's Lokmanya Tilak Institute of Pharmaceutical Sciences, Pune	Jadhav Ananya V.	T. Y. B. Pharm	
2.	21st September (Thursday)	General Aptitude	SCSSS's Sitabai Thite College of Pharmacy, Shirur	Choudhari Abhijeet Shivlal	Final Year B. Pharm	
				Rathod Bharat Babulal		
		Elocution Competition	Allana College of Pharmacy (Degree)	Sawant Aarti Ramdas	Final Year B. Pharm	
				Ghorad Sheetal Rajesh	T. Y. B. Pharm	
3.	22nd September (Friday)	Quiz Competition	Alard College of Pharmacy, Pune	Bohra Sayam sunil	Final Year B. Pharm	
				Choudhary Yogesh Kuparam		
4.	23rd September (Saturday)	Patient Counselling	SCES's, Indira College of Pharmacy, Tathawade, Pune	Tambe Vaibhav Vishnu	Final Year B. Pharm	
				Vidhate Rachna Suresh		
				Patange Vaibhav Narayanrao		
				Sonawane Drushti Hemant		
				Raje Vasundhara Satishrao		

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Ashok Bhosale
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Pune District Education Association's

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

62nd National Pharmacy Week - 2023

20/09/2023 to 26/09/2023

Student Participant Details

Sr.No.	Day and Date	Name of Event/Activity	Name of organizing college	Name of Student Participants	Class	Sign
5.	25th September (Monday)	Debate Competition	BVDU Poona College of Pharmacy, Pune	Choudhari Abhijeet Shivlal	Final Year B. Pharm	
				Rathod Bharat Babulal		
6.	26th September (Tuesday)	Pharma Ad Mad	Sinhagad Institute of Pharmacy, Narhe	Ghule Sonali Balasaheb	Final Year B. Pharm	
				Holkar Nikita Rajaram		
				Bavdhane Nilam Harishchandra		
				Gaikwad Nikita Nana		
				Badhe Payal Santosh		
				Ghule Vaibhavi Dattatray		
				Dolare Sakshi popat		
7.	26th September (Tuesday)	Group Discussion	Modern College of Pharmacy, Nigdi	Kirtane Vaibhav Vishwajeet	Final Year B. Pharm	
				Jadhav Shivjeet Ramesh		
	26th September (Tuesday)	Paper Presentation	PDEA'S Shankarrao Ursal College of Pharmaceutical Science and Research Centre Kharadi ,Pune	Mengade Dnyaneshwari S.	S. Y. M. Pharm	
				Shinde Trupti		

Mr. Vipul Dhasade
NPW Co-ordinator

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

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Pune District Education Association's

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

62nd National Pharmacy Week - 2023

20/09/2023 to 26/09/2023

Student Participant Details

Sr.No.	Day and Date	Name of Event/Activity	Name of organizing college	Name of Student Participants	Class	Sign
1.	20th September (Wednesday)	Poster Presentation	TMV's Lokmanya Tilak Institute of Pharmaceutical Sciences, Pune	Jadhav Ananya V.	T. Y. B. Pharm	
2.	21st September (Thursday)	General Aptitude	SCSSS's Sitabai Thite College of Pharmacy, Shirur	Choudhari Abhijeet Shivlal	Final Year B. Pharm	
				Rathod Bharat Babulal		
		Elocution Competition	Allana College of Pharmacy (Degree)	Sawant Aarti Ramdas	Final Year B. Pharm	
				Ghorad Sheetal Rajesh	T. Y. B. Pharm	
3.	22nd September (Friday)	Quiz Competition	Alard College of Pharmacy, Pune	Bohra Sayam sunil	Final Year B. Pharm	
				Choudhary Yogesh Kuparam		
4.	23rd September (Saturday)	Patient Counselling	SCES's, Indira College of Pharmacy, Tathawade, Pune	Tambe Vaibhav Vishnu	Final Year B. Pharm	
				Vidhate Rachna Suresh		
				Patange Vaibhav Narayanrao		
				Sonawane Drushti Hemant		
				Raje Vasundhara Satishrao		

Mr. Vipul Dhasade
NPW Co-ordinator

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

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Pune District Education Association's

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

62nd National Pharmacy Week - 2023

20/09/2023 to 26/09/2023

Student Participant Details

Sr.No.	Day and Date	Name of Event/Activity	Name of organizing college	Name of Student Participants	Class	Sign
5.	25th September (Monday)	Debate Competition	BVDU Poona College of Pharmacy, Pune	Choudhari Abhijeet Shivlal	Final Year B. Pharm	
				Rathod Bharat Babulal		
6.	26th September (Tuesday)	Pharma Ad Mad	Sinhagad Institute of Pharmacy, Narhe	Ghule Sonali Balasaheb	Final Year B. Pharm	
				Holkar Nikita Rajaram		
				Bavdhane Nilam Harishchandra		
				Gaikwad Nikita Nana		
				Badhe Payal Santosh		
				Ghule Vaibhavi Dattatray		
				Dolare Sakshi popat		
7.	26th September (Tuesday)	Group Discussion	Modern College of Pharmacy, Nigdi	Kirtane Vaibhav Vishwajeet	Final Year B. Pharm	
				Jadhav Shivjeet Ramesh		
	26th September (Tuesday)	Paper Presentation	PDEA'S Shankarrao Ursal College of Pharmaceutical Science and Research Centre Kharadi ,Pune	Mengade Dnyaneshwari S.	S. Y. M. Pharm	
				Shinde Trupti		

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Ashok Bhosale
PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical
Sciences & Research Centre.

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THE INDIAN PHARMACEUTICAL ASSOCIATION PUNE

NATIONAL PHARMACY WEEK-2023-24

(20th September to 26th September 2023)

Theme: "Pharmacist Strengthening Health System"

Participant List (Diploma)

Sr. No.	Name of student	Event Organized by College	Name of Competition	Class	Date	Sign.
1	Ms. Seema Choudhary	PES Modern College of Pharmacy, Moshi	Poster Presentation	F.Y.D.Pharm	20-09-2023	Seema.
2	Ms. Bhakti Harpale					Bhakti.
3	Ms. Payal Ranit	PES Modern College of Pharmacy, Moshi	Poster Presentation	F.Y.D.Pharm	20-09-2023	Payal.
4	Mr. Arvind Choudhary	MCE's Institute of pharmacy	Pharma Detailing	S.Y.D.Pharm	20-09-2023	Arvind
5	Mr. Chirag Choudhary					Chirag.
6	Ms. Disha Chavhan	MMCOP, Thergaon, Pune	General Aptitude	S.Y.D.Pharm	21-09-2023	
7	Ms. Saroj Boldara					Saroj
8	Ms. Payal Garad	Sinhagad College of Pharmacy, Kondhwa	Elocution Competition	S.Y.D.Pharm	22-09-2023	Payal. G.
9	Ms. Swati Shinde					Swati.
10	Ms. Sanka Bhukan	Dr. D.Y. Patil University, school of pharmacy, Ambi, Pune	Quiz competition	S.Y.D.Pharm	22-09-2023	Sanika.
11	Mr. Mandar Daundkar					
12	Mr. Mandar Daundkar	AISSMS College of Pharmacy, Pune	Interview Skills	S.Y.D.Pharm	25-09-2023	
13	Ms. Shravani Deokar	Modern College of Pharmacy, Nigdi	Group Discussion	S.Y.D.Pharm	26-09-2023	Shravani
14	Ms. Snehal Badade					Snehal.
15	Ms. Payal Garad	PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and ResearchCentre, Kharadi, Pune	Oral paper presentation	S.Y.D.Pharm	26-09-2023	Payal.

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Pune District Education Association's

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

62nd National Pharmacy Week - 2023

20/09/2023 to 26/09/2023

Student Participant Details

Sr.No.	Day and Date	Name of Event/Activity	Name of Student Participants	Class	Registration Charges Paid (Rs.)	Sign
1.	20th September (Wednesday)	Poster Presentation	Jadhav Ananya V.	T. Y. B. Pharm	200/-	
2.	21st September (Thursday)	General Aptitude	Choudhari Abhijeet Shivlal	Final Year B. Pharm	100/-	
			Rathod Bharat Babulal		100/-	
		Elocution Competition	Sawant Aarti Ramdas	Final Year B. Pharm	200/-	
			Ghorad Sheetal Rajesh	T. Y. B. Pharm		
3.	22nd September (Friday)	Quiz Competition	Bohra Sayam sunil	Final Year B. Pharm	100/-	
			Choudhary Yogesh Kuparam		100/-	
4.	23rd September (Saturday)	Patient Counselling	Tambe Vaibhav Vishnu	Final Year B. Pharm	200/-	
			Vidhate Rachna Suresh			
			Patange Vaibhav Narayanrao			
			Sonawane Drushti Hemant			
			Raje Vasundhara Satishrao			

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Ashok Bhosale
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Pune District Education Association's

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Pune District Education Association's

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

62nd National Pharmacy Week - 2023

20/09/2023 to 26/09/2023

Student Participant Details

Sr.No.	Day and Date	Name of Event/Activity	Name of Student Participants	Class	Registration Charges Paid (Rs.)	Sign
5.	25th September (Monday)	Debate Competition	Choudhari Abhijeet Shivlal	Final Year B. Pharm	200/-	
			Rathod Bharat Babulal			
6.	26th September (Tuesday)	Pharma Ad Mad	Ghule Sonali Balasaheb	Final Year B. Pharm	200/-	
			Holkar Nikita Rajaram			
			Bavdhane Nilam Harishchandra			
			Gaikwad Nikita Nana			
			Badhe Payal Santosh			
			Ghule Vaibhavi Dattatray			
			Dolare Sakshi popat			
7.	26th September (Tuesday)	Group Discussion	Kirtane Vaibhav Vishwajeet	Final Year B. Pharm	100/-	
			Jadhav Shivjeet Ramesh		100/-	
	26th September (Tuesday)	Paper Presentation	Mengade Dnyaneshwari S.	S. Y. M. Pharm	100/-	
			Shinde Trupti		100/-	
				Total amount	1800/-	

Mr. Vipul Dhasade
NPW Co-ordinator

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

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NATIONAL PHARMACY WEEK 2023

WORLD PHARMACIST'S DAY

25 SEPTEMBER, 2023

(THEME: PHARMACISTS STRENGTHENING HEALTH SYSTEMS)

REGISTRATION FORM (UG)

Name of College: PDEA's Shankarrao Wagaj COP Pharmaceutical Sci. & Res. Centre

Address : Kharadi, Pune

E-mail ID of College: sacopssrc-2009@yahoo.co.in

Name of the competition : Interview Skill competition

Organized by: AISSMS COP. Pune.

Category	Sr. No.	Name of Participant	Mobile No.	Email ID
(B) UG (B. Pharm., ~~Pharm D. Post Baccalaureate & Ph.D.~~)	1	Jadhav Shivjeet	8805680531	jadhavshiv@gmail.com
	2	mohite Aditya	9803039798	mohitead@gmail.com
	3			
	4			
	5			
	6			
	7			
	8			

Participation Fee for all the competitions: For Individual Event ₹ 100/per entry & for Team Event ₹ 200/per entry

Name of coordinator/Faculty of college Mrs Vipul Dhurade

Mobile Number 9970526436 Email ID vipuldharade@gmail.com

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NATIONAL PHARMACY WEEK 2023

WORLD PHARMACIST'S DAY

25 SEPTEMBER, 2023

(THEME: PHARMACISTS STRENGTHENING HEALTH SYSTEMS)

REGISTRATION FORM (UG)

Name of College: PDEA's Shankarrao Ursal College of pharmacy, Kharadi,

Address : Kharadi, Pune

E-mail ID of College: sucops_2009@yahoo.co.in

Name of the competition : Elocution Competition

Organized by: Allana College of pharmacy (Degree)

Category	Sr. No.	Name of Participant	Mobile No.	Email ID
(B) UG (B. Pharm. & Pharm D.)	1	Sawant Aarti Ramdas	9404589927	sawantaarti279@gmail.com
	2	Ghorpad Sheetal Rajesh	8830905613	sheetalgpad22@gmail.com
	3			
	4			
	5			
	6			
	7			
	8			

Participation Fee for all the competitions: For Individual Event ₹ 100/per entry & for Team Event ₹ 200/per entry

Name of coordinator/Faculty of college Mr. Vipul Dheerede

Mobile Number 9970526436 **Email ID** vipuldheerede2009@gmail.com

Date 15.09.2023

Seal of College

Sign of Principal

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

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NATIONAL PHARMACY WEEK 2023

WORLD PHARMACIST'S DAY

25 SEPTEMBER, 2023

(THEME: PHARMACISTS STRENGTHENING HEALTH SYSTEMS)

REGISTRATION FORM (UG)

Name of College: PDEA's Shankarrao Ursal College of Pharmaceutical Science & Research Centre

Address : Kharadi, Pune - 411014

E-mail ID of College: sucopsrc-2009@yahoo.co.in

Name of the competition : General Aptitude

Organized by: SGSSS's Sitabai Thite College of Pharmacy, Shirur

Category	Sr. No.	Name of Participant	Mobile No.	Email ID
(B) UG (B. Pharm. & Pharm D.)	1	Abhijeet Choudhari	8010352498	abhikc2709@gmail.com
	2	Bharat Rathod	9373665009	bharatrathod6677@gmail.com
	3			
	4			
	5			
	6			
	7			
	8			

Participation Fee for all the competitions: For Individual Event ₹ 100/per entry & for Team Event ₹ 200/per entry

Name of coordinator/Faculty of college Mrs Trusha Shangrapawar

Mobile Number 9823620854 Email ID trusha.shan@gmail.com

Date 13/9/23

Seal of College

Sign of Principal

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

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NATIONAL PHARMACY WEEK 2023

WORLD PHARMACIST'S DAY

25 SEPTEMBER, 2023

(THEME: PHARMACISTS STRENGTHENING HEALTH SYSTEMS)

REGISTRATION FORM (UG)

Name of College: PDEA's Shankarrao Ursal College of Pharmaceutical Science and Reasearch Centre

Address : Kharadi, Pune - 411014

E-mail ID of College: sucopsrc-2009@yahoo.co.in

Name of the competition : Debate

Organized by: BVDU Poona College of Pharmacy, Pune

Category	Sr. No.	Name of Participant	Mobile No.	Email ID
(B) UG (B. Pharm. & Pharm D.)	1	Abhijeet Choudhari	8010352498	abhikc2709@gmail.com
	2	Bharat Rathod	9373665009	bharatrathod6677@gmail.com
	3			
	4			
	5			
	6			
	7			
	8			

Participation Fee for all the competitions: For Individual Event ₹ 100/per entry & for Team Event ₹ 200/per entry

Name of coordinator/Faculty of college Mrs Trusha Shangrapawar

Mobile Number 9823620854 **Email ID** trusha-shan@gmail.com

Date 13/9/23

Seal of College

Pune District Education Association's Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi Pune 411014. 2009

Sign of Principal

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

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NATIONAL PHARMACY WEEK 2023

WORLD PHARMACIST'S DAY

25 SEPTEMBER, 2023

(THEME: PHARMACISTS STRENGTHENING HEALTH SYSTEMS)

REGISTRATION FORM (UG)

Name of College: PDEA's Shankarrao Ursal College of P·ceutical Science & Research centre

Address : Kharadi, Pune

E-mail ID of College: socopsrc-2009@yahoo.com

Name of the competition : Pharma AD-MAD

Organized by: Sinhgad Institute of Pharmacy, Narhe.

Category	Sr. No.	Name of Participant	Mobile No.	Email ID
(B) UG (B. Pharm. & Pharm D.)	1	Ghule Sonali Balasaheb	8180944191	sonalighule205@gmail.com
	2	Holkar Nikita Rajaram	9604565728	nikitaholkar001@gmail.com
	3	Bavdhane Nilam Harishchandra	9322427911	nilambavdhane@gmail.com
	4	Gaikwad Nikita Nana	7410154048	nikitagaikwad769@gmail.com
	5	Badhe Payal santosh	9356792727	payalbadhe33@gmail.com
	6	Ghule vaibhavi dattatray	9028187094	vaibhavighule9@gmail.com
	7	Dolare Sakshi Popat	8830403131	sakshidolare01@gmail.com
	8	Raje Vasundhara Satishrao	9172856707	vasundhararaje161@gmail.com

Participation Fee for all the competitions: For Individual Event ₹ 100/per entry & for Team Event ₹ 200/per entry

Name of coordinator/Faculty of college Mr. Vipul Dheerde

Mobile Number 9970516436 **Email ID** vipuldheerde2009@gmail.com

Date 15/09/2023

Seal of College

Sign of Principal

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

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NATIONAL PHARMACY WEEK 2023

WORLD PHARMACIST'S DAY

25 SEPTEMBER, 2023

(THEME: PHARMACISTS STRENGTHENING HEALTH SYSTEMS)

REGISTRATION FORM (UG)

Name of College: PDEA's Shankarrao Ursal College of P.ceutical science & Research centre

Address : Kharadi, Pune - 28

E-mail ID of College: SUCOPSEC-2009@gmail.com

Name of the competition : Patient Counselling

Organized by: SCES's, Indira College of pharmacy, Talhawade, Pune

Category	Sr. No.	Name of Participant	Mobile No.	Email ID
(B) UG (B. Pharm. & Pharm D.)	1	SOlanke ~~Prathame~~ Prathamesh N.	8010673845	Prathamesh1419@gmail.com
	2	Lagad Jai ~~Anil~~	8605554809	jailagad3701@gmail.com
	3	Dhumal Siddhant Vikas	9834184246	siddhantdhumal28@gmail.com.
	4	Thopate saurabh D	9146129940	saurabhthopate36@gmail.com
	5	Raskar laukik C.	9284697778	laukikraskar27@gmail.com
	6			
	7			
	8			

Participation Fee for all the competitions: For Individual Event ₹ 100/per entry & for Team Event ₹ 200/per entry

Name of coordinator/Faculty of college Mr. Vipul Dhekade

Mobile Number 9970526436 **Email ID** vipuldhekade2009@gmail.com

Date 15-09-2023

Seal of College

Sign of Principal

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

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Report on Oral Paper Presentation Competition

Theme: "Pharmacist Strengthening Health System"

62nd National pharmacy week 2023-2024 was organized by IPA, Pune branch from **20th September to 26th September 2023** based on the **Theme: "Pharmacist Strengthening Health System"**. The celebrations of National Pharmacy Week in India are held every year. Almost all the colleges in and around Pune from D. Pharm, B. Pharm and M. Pharm categories participated in NPW celebration. Events were organised in various pharmacy colleges across Pune during this period. Various Competitions were organised namely, Debate, Pharma ad mad, Interview skills, Group discussion, Quiz competition, Patient counselling, Elocution, General aptitude and Pharma detailing, Oral paper presentation. Among all these competitions, Oral paper presentation competition for Diploma and Post Graduate category was held at PDEA's Shankarrao Ursal Pharmaceutical Sciences and Research Centre Kharadi, Pune. Program was started with felicitation of Chief guests by Hon. Principal Dr. Ashok Bhosale sir, followed by addressing the students on the significance of the day and the central theme by Hon. Principal Dr. Ashok Bhosale sir, Chief guests Prof. Trushal Chorage sir and Prof. Sandhya Lanke madam. This was followed by an oral presentation competition. A total of 47 papers were presented by the students out of which 27 are from Diploma category and 20 from PG category All the participated Students demonstrated their scientific enthusiasm in this competition. The program concluded with declaration of winners. Ms. Khadeeja Khan and Ms. Dhanashree Shinde are winner and runner up from Diploma category respectively. Ms. Simran Shrivastava and Mr. Rushikesh Shinde are winner and runner up from PG Category.

Overall event was arranged and coordinated by Mr. Vipul Dhasade and Ms. Ketki Lakhane.

Address by the Hon. Principal Dr. Ashok Bhosale, Chief guest Prof. Trushal Chorage and

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Prof. Sandhya Lanke on inauguration of Oral Paper Presentation Competition.

Declaration of result and Felicitation of winners of Oral Paper Presentation Competition.

Ms. Ketki G. Lakhane
Coordinator

Mr. Vipul Dhasade
Coordinator

Dr. Ashok Bhosale
Principal

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

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

62nd National Pharmacy Week - 2023

Theme: "Pharmacist Strengthening Health System"

Oral Paper Presentation Programme

26-09-2023 (Tuesday)

PROTOCOL

Sr. No.	Events	Responsible Person	Time
1.	All Participants and Guest	Registration and Refreshment	09.00am-10.00am
Inaugural Programme			
2.	Welcome Guest and Preamble	Prof. Vipul Dhasade	10:00am-10:05am
3.	Welcome to Guest and Felicitation	Dr. Ashok Bhosale (Principal)	10:05-10:10am
4.	Address by Chief Guest / Evaluators	**Prof. Trushal Chorage** JSPM's Charak College of Pharmacy & Research Wagholi, Pune	10:10-10:15 am
		Prof. Sandhya Lanke Shri. Jain Vidya Prasarak Mandal's Rasiklal M. Dhariwal College of Pharmacy, Chinchwad, Pune	10:15-10:20 am
5.	Principal Address	Dr. Ashok Bhosale (Principal)	10:20-10:30 am
6.	Vote of Thanks	Ms. Ketki Lakhane	10:30-10:35 am
Oral Paper Presentation Competition Evaluation			
7.	Oral Paper Presentation Competition	All registered participants	10:35-am onward
		1. Course: D. Pharm- Block No. 302 (2nd Floor) 2. Course: Post Graduate - Block No. 308 (2nd Floor)	

Ms. Ketki Lakhane
NPW Coordinator

Mr. Vipul Dhasade
NPW Coordinator

Dr. Ashok Bhosale
Principal

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Shankarrao Ursal College of

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

62nd National Pharmacy Week - 2023

Theme: "Pharmacist Strengthening Health System"

Oral Paper Presentation Inauguration Programme

26-09-2023 (Tuesday) at 10:00 am

PROTOCOL

Sr. No.	Events	Responsible Person	Time
1.	Welcome Guest and Preamble	Prof. Vipul Dhasade	10:00am-10:05am
2.	Welcome to Guest and Felicitation	Dr. Ashok Bhosale (Principal)	10:05-10:10am
3.	Address by Chief Guest / Evaluators	**Prof. Trushal Chorage** JSPM's Charak College of Pharmacy & Research Wagholi, Pune	10:10-10:15 am
		Prof. Sandhya Lanke Shri. Jain Vidya Prasarak Mandal's Rasiklal M. Dhariwal College of Pharmacy, Chinchwad, Pune	10:15-10:20 am
4.	Principal Address	Dr. Ashok Bhosale (Principal)	10:20-10:30 am
5.	Vote of Thanks	Ms. Ketki Lakhane	10:30-10:35 am

Ms. Ketki Lakhane
NPW Coordinator

Mr. Vipul Dhasade
NPW Coordinator

Dr. Ashok Bhosale
Principal

PRINCIPAL
P.D.E.A's
Shankarrao Ursal College of

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बहुजन हिताय, बहुजन सुखाय।
PDEA
Pune District Education Association

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 : 21/09/2023 Ref. No.: SUCOPSRC/ 278 /2023-2024

President
Ajit Pawar

Vice President
Rajendra Ghadge

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

Treasurer
dv. M[illegible]anrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Prof. Sandhya R. Lanke,
Shri. Jain Vidya Prasarak Mandal's
Rasiklal M. Dhariwal College of Pharmacy,
Chinchwad, Pune – 411019

Subject: Invitation as Chief guest and Judge for Oral Paper Presentation competition on 26th Sept. 2023

Respected 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. The college has recognized as research center for Ph.D. in Pharmacy under the faculty of Science and Technology, Savitribai Phule Pune University, Pune. The college recognized by ISO 9001:2015 certificate.

Madam, in collaboration with **Indian Pharmaceutical Association Pune** Branch here we are organizing **Oral Paper Presentation competition** on the occasion of **62nd National Pharmacy Week 2023-24**. Since you are an eminent expert in our Pharma field, we take this opportunity to invite you as a **Chief Guest** for the Inaugural Function of this Oral Paper Presentation competition on **26th Sept. 2023. at 10.30 am**. and we are also inviting you as **judge** for an Oral Paper Presentation competition.

We look forward to your presence and guidance. (For any query please contact to coordinator Vipul Dhasade-9970526436, email id: vipuldhasade2009@gmail.com)

Thanking You,

Yours Faithfully,

Dr. Ashok Bhosale
PRINCIPAL
Pune District Education Association's

22.9.2023

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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 : 21/09/2023 Ref. No.: SUCOPSRC/ 277 /2023-2024

President
Ajit Pawar

Vice President
Rajendra Ghadge

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

Treasurer
dv. M anrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Prof. Trushal Chorage,
JSPM's Charak College of Pharmacy & Research
Wagholi, Pune – 412 207

Subject: Invitation as Chief guest and Judge for Oral Paper Presentation competition on 26th Sept. 2023

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. The college recognized by ISO 9001:2015 certificate.

Sir, in collaboration with **Indian Pharmaceutical Association Pune** Branch here we are organizing **Oral Paper Presentation competition** on the occasion of **62nd National Pharmacy Week 2023-24**. Since you are an eminent expert in our Pharma field, we take this opportunity to invite you as a **Chief Guest** for the Inaugural Function of this Oral Paper Presentation competition **on 26th Sept. 2023. at 10.30 am**. and we are also inviting you as **judge** for an Oral Paper Presentation competition.

We look forward to your presence and guidance. (For any query please contact to coordinator Vipul Dhasade-9970526436, email id: vipuldhasade2009@gmail.com)

Thanking You,

Yours Faithfully,

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

22/09/2023
M. T. V. Chorage

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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 : 26/09/2023 Ref. No.: SUCOPSRC/ 289 /2023-2024

President
Ajit Pawar

Vice President
Rajendra Ghadge

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

Treasurer
V. M[illegible]nrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Prof. Sandhya R. Lanke,
Shri. Jain Vidya Prasarak Mandal's
Rasiklal M. Dhariwal College of Pharmacy,
Chinchwad, Pune – 411019

Respected Madam,

At the outset, we wish to convey our sincere gratitude towards you for addressing as a chief guest and judge for Oral Paper Presentation competition on **26th Sept. 2023**. Your valuable guidance to all students has rightly helped to update their knowledge.

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

Thanking you with regards.

Yours Sincerely,

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

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26.09.2023
Mrs. Lankes

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SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
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D.T.E.Institute Code : PH 6385 Website : www.pdeasubpharm.edu.in E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 26/09/2023 Ref. No.: SUCOPSRC/ 298 /2023-2024

President
Ajit Pawar

Vice President
Rajendra Ghadge

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

Treasurer
Adv. M[illegible]nrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,

Prof. Trushal Chorage,
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Respected Sir,

At the outset, we wish to convey our sincere gratitude towards you for addressing as a chief guest and judge for Oral Paper Presentation competition on **26th Sept. 2023**. Your valuable guidance to all students has rightly helped to update their knowledge.

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Sciences & Research Centre,
Kharadi, Pune-411014.

26/09/2023
Mr. T.V. Chorage

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THE INDIAN PHARMACEUTICAL ASSOCIATION PUNE BRANCH

62nd NATIONAL PHARMACY WEEK-2023

(20th September to 26th September 2023)

Theme: "Pharmacists Strengthening Health Systems"

Name of Event: Oral Paper Presentation
Date: 26.09.2023

Name & Address of Organizing College: PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

Result:

Sr. No.	Name of Students	Category	College Name	Overall
1	Ms. Khadeeja Khan	Diploma	MCE's Society's Institute of Pharmacy, Pune	WINNER
2	Ms. Dhanshree Shinde	Diploma	Bharati Vidyapeeth's Institute of Pharmacy Education. Pune	RUNNER UP
3	ms. Simran Srivastava	P.G.	Poona College of Pharmacy Education Pune.	WINNER
4	Mr. Rushikesh Sambhaji Shinde	P. G.	Maeath Kendra Mitra Mandals College of Pharmacy, Pune	RUNNER UP

Name of Coordinator: Prof. Vipul Dhasade

26.09.2023

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

1) 26/09/2023
Mr. Prushal V. Chorage.

2)
Cmes. Lankeshwar

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

62nd National Pharmacy Week - 2023

Theme: "Pharmacist Strengthening Health System"

Oral Paper Presentation Competition

26-09-2023 (Tuesday) at 10:30 am

RESPONSIBILITIES ASSIGNED

Sr. No.	Name of the committee	Name of the Members	Responsibilities	Signature
1	**Registration Committee**	Mr. Krunal Kanase Ms. Bhagyshree Shelar Ms. Ruchita Bhalerao Mr. Satish Pawar Mr. Rohit Mule Mr. Nilesh Gawari	• Preparation of Register and making of entries in it • Preparation of Feedback form • Participant Registration Payment and receipt • Collect Feedback form	
2	**Stage & Seating Arrangement Committee**	Dr. Prashant Khade Ms. Tejaswini Kande Ms. Shubhangi Karkhile Mr. Allauddin Pathan Mrs. Vidya Bhandari Mr. Kumar Sonawane	• Preparation of Banner • Rangoli • Preparation for Lamp Lighting • Felicitation of chief guest • Seminar Hall Stage and Seating Arrangement	
3	**Hospitality committee**	Ms. Kiran Ghule Mrs. Archana Survase Mr. Rajesh Ghige	• Arrangement of Refreshment For Guest and Participants	
4	**Evaluation committee**	Dr. Ravindra Patil Dr. Asmita Sakore	• Preparation of Evaluation Sheet • Finalize result in coordination with IPA Assigned Expert • Declaration of Final Result	
5	**Communication Committee**	Mr. Vipul Dhasade MS. Ketaki Lahane Ms. Shubhangi Karkhile	• Communicate with Guest • Invitation and Thanking Letter • Feedback form of Guest	

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6	**Photo & Video committee**	Ms. Kiran Ghule Ms. Poonam Khade Mr. Siddeshwar Survase	• Photographs of event with Geotag and keep the record	
7	**Technical Support Committee**	Dr. Amit Kasabe Ms. Pallavi Bansod Mr. Nitin Neharkar Mr. Shrikant Gaikwad	• Overall Conduct	
8	**Overall Co-ordination**	Mr. Vikram Veer Mr. Vipul Dhasade MS. Ketaki Lahane	• Overall co-ordination with all committees	
9	**News**	Mr. Vipul Dhasade	• News Preparation and communication	

Mrs. Ketki Lakhane
NPW Co-ordinator

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Vijaya Barge
VICE - PRINCIPAL
Pune District Education Association's
Shankarrao Ursal College Of Pharmaceutical Sciences & 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

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Pune District Education Association's

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

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3	Hospitality committee	Ms. Kiran Ghule Mrs. Archana Survase Mr. Rajesh Ghige	• Arrangement of Refreshment For Guest and Participants	
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6	**Photo & Video committee**	Ms. Kiran Ghule Ms. Poonam Khade Mr. Siddeshwar Survase	• Photographs of event with Geotag and keep the record	
7	**Technical Support Committee**	Dr. Amit Kasabe Ms. Pallavi Bansod Mr. Nitin Neharkar Mr. Shrikant Gaikwad	• Overall Conduct	
8	**Overall Co-ordination**	Mr. Vikram Veer Mr. Vipul Dhasade MS. Ketaki Lahane	• Overall co-ordination with all committees	
9	**News**	Mr. Vipul Dhasade	• News Preparation and communication	

Mrs. Ketki Lakhane
NPW Co-ordinator

Mr. Vipul Dhasade
NPW Co-ordinator

Dr. Vijaya Barge
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THE INDIAN PHARMACEUTICAL ASSOCIATION PUNE

NATIONAL PHARMACY WEEK-2023-24

(20th September to 26th September 2023)

Theme: "Pharmacist Strengthening Health System"

Name of Event: Oral Paper Presentation **Category: Diploma / P.G.** **Date: 26-09-2023**

Name & Address of Organizing College: PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

Attendance Sheet

Sr. No.	Name of Students/Participants	College Name	Contact Number	Email. Id	Sign
1.	Rishika Lohani	Indira College of Pharmacy	7424964813	rishikalohani813@gmail.com	Rishika
2.	Palocle Shruti Sunil	PES modern College of Pharmacy Moshi	9370571050	Shrutipcccoe250@gmail.com	Shruti P.
3.	Rothod mohini	Dr. D.Y. Patil. COP. Pimpri	9370509824	Rothodmohini@gmail.	R.
4.	Amle Rakesha Sanjeet	PES Modern COP. Moshi.	7558611152	amalerakesha@gmail.com	Amle.
5.	Maitreyi Joshi	Abhinav Education Society College of Pharmacy	9404092116	maitreyibjoshi2002@gmail.com	Maitreyi
6.	Khushal Ghanchi	Abhinav Education Society College of pharmacy	7021818276	khushalghanchi@gmail.com	Khushal.
7.	Anmol Dwivedi	Dr. Dy Patil College akurdi	6265023137	anmoldwivedi2020@gmail.com	Anmol

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Sr. No.	Name of Students/Participants	College Name	Contact Number	Email. Id	Sign
8.	Gargee Dhaneshwar	Dr. DY Patil Institute of pharmacy, Akurdi	8999367952	dhaneshwargargee@gmail.com	D. Gargee
9.	Surabhi Shinde	Sinhgad Institute of Pharmacy, Narhe	9552374955	surbhishinde567@gmail.com	Surbhi
10.	Shraddha Gupta	DYPIPSR	8080737473	shraddhagupta0210@gmail.com	
11.	Aafiya Ganachari	Dr. D.Y. Patil Institute of Pharmaceutical Sciences & Research	9011856265	Aganachari02@outlook.com	
12.	Akanksha Sujgur	Aissms college of pharmacy.	7218465659	sujgurakanksha@gmail.com	
13.	Kaprotvar Pallavi	Aissms College of Pharmacy	9359788253	pallavikapratovur@gmail.com	
14.	Trupti Shinde	PDEA SCOP Kharadi	9860867043	truptishinde1511@gmail.com	
15.	Dnyaneshwari Mengade	PDEA SCOP Kharadi	9373820052	dnyaneumengade19@gmail.com	
16.	Vishakha Pawar	Smt. Kashibai Navale College of Pharmacy, Kondhawa	9359388671	vishakhapawar2000@gmail.com	
17.	Vishakha Kalbe	SKN COP., kondhawa	9922835787	vishakha kalbe1999@gmail.com	
18.	Rutuja More	Sinhgad College of pharmacy, Vadgaon	9604876256	morerutuja@gmail.com	

Sr. No.

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Sr. No.	Name of Students/Participants	College Name	Contact Number	Email. Id	Sign
19.	Sumit Sudhakar More	Sinhgad college of Pharmacy Vadgan BK	9130132604	sumitsmoregg@gmail.com	
20.	Rushikesh Sambhaji Shinde	Marathwada Mitra Mandal's College of pharmacy	7620020227	rushikesh.shinde@mmcop.edu.in	
21.	Anil Babhim Gaikwad	Marathwada mitra mandal College of Pharmacy	9067263976	anil.gaikwad@mmcop.edu.in	
22.	—	—	—	—	—
23.	Sakshi Sanjay Kalamkar	SCE's Indira College of pharmacy Tathwade	8308204921	sakshikalamkar1026@gmail.com	Sakshi
24.	Supriya Keshav Jadhav	SCE'S INDIRA COLLEGE OF PHARMACY	9145050470	jsupriya249@gmail.com	Jadhav.SK
25.	Madhavi Ashok Ijjurkar	SCES's Indira College of Pharmacy.	7057784532	madhaviijjurkar.2003@gmail.com.	Ijjurkar
26.	Abhishek Mangesh Khardekar	Poona College of Pharmacy, Erandwane, Pune	8668980231	abhi5670k@gmail.com	
27.	Simran Srivastava	Poona College of Pharmacy Erandwane, Pune	9027731987	simransrivastava466@gmail.com.	Simran
28.	—	—	—	—	-

Ms. Ketaki Lakhane
NPW Coordinator

Mr. Vipul Dhasade
NPW Coordinator

Dr. Ashok Bhosale
Principal
PRINCIPAL
P D. E. A's
Shankarrao Ursal College of

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THE INDIAN PHARMACEUTICAL ASSOCIATION PUNE

NATIONAL PHARMACY WEEK-2023-24

(20th September to 26th September 2023)

Theme: "Pharmacist Strengthening Health System"

Name of Event: Oral Paper Presentation **Category: Diploma / P.G.** **Date: 26-09-2023**

Name & Address of Organizing College: PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

Attendance Sheet

Sr. No.	Name of Students/Participants	College Name	Contact Number	Email. Id	Sign
1.	Jain Hitik Madanlal	SJVPM Rasiklal.M. Dhariwal College of pharmacy	9145671122	hitik1920@gmail.com	Hitik
2.	Manisha Choudhary	Dr. D.Y. Patil College of Pharmacy	9307747867	manishachoudharyma•16@gmail.com	Manisha
3.	Diksha Garade	Dr DY patil college of pharmacy	9172732107	garadidiksha3@gmail.com	Diksha
4.	Gawade shivanjali sunil.				Ab
5.	Shivanj Girame	Sou. venutai chavan pharmacy collage, Phaltan.	9021815640	shivanigirame88@gmail.com	Shivan
6.	Arya Chavan	Trinity College of Pharmacy	9881628468	chavanarya981@gmail.com	Arya
7.	Tinety Uday. Y.	Trinity college of pharmacy	8805227440	tinetyuday27@gmail.com	Uday

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Sr. No.	Name of Students/Participants	College Name	Contact Number	Email. Id	Sign
8.	Khan Khadeeja	M.C.E Society's Institute of Pharmacy	8830114350	khadeejakhan04@gmail.com.	
9.	Yameena Patni	M.C.E.Society's Institute of Pharmacy	9545905298	yameenapatni@gmail.com	
10.	Aditi Patankar	Bharati Vidyapeeth's Institute of Pharmacy Erandwane.	9834203206	aditi.patankar0104@gmail.com	
11.	Rakhi Kudadulwar	Alard college of Pharmacy Maranji	9309956630	gangasagarkudadulwar@gmail.com	
12.	Sanjana Tanaji Patil	Marathwada mitra mandal clg of pharmacy	9807698080	sanjanapatil0310@gmail.com	
13.	Sonali Balasaheb Randive	Marathwada mitra mandal clg of pharmacy	7620955851	randivesonali2004@gmail.com	
14.	Harsika Nilesh Rathod.	Shankarrao Ursal College of Pharmacy.	9579281783.	harsikarathod1403@gmail.com.	
15.	Tejashree Sudarshan Bhondave	Shankarrao Ursal college of Pharmacy Kharadi	7020627287	tejashreebhondave25@gmail.com.	
16.	Ritesh Balram Shirsat	PDEA's college of Pharmacy Hadpsar pune-28	8668822361	riteshshirsat524@gmail.com	
17.	Shubham. Gorakhnath Marwadkar	PDEA's College of Pharmacy, Hadpsar Pune-28.	9420562861	shubhammarwadkar253@gmail.com	
18.	Dhanashree Shinde	Bharati Vidyapeeth's Institute of Pharmacy Erandwane.	7738228665	dshinde2202@gmail.com	

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Sr. No.	Name of Students/Participants	College Name	Contact Number	Email. Id	Sign
19.	Rathod Mohini	Delight clg of Pharmacy koregoan	7057562146	mrathod2146 @gmail.com	Rathod
20.	Pranali Suresh Jadhav	Dr. D.Y. Patil college of pharmacy pimpri	9370509825	Pranalijadhav2787 @gmail.com	
21.	Pranay Hanumant Ingle	RJSPM Institute of pharmacy	7756038949	Ingle pranay9893@ gmail.com	Ingle
22.	Payal Akash Garad	SUCOPSR centre kharadi	7875573649	payalgarad@gmail .com	Payal G.
23.	Sakshi Sanjay Kalamkar	Indira College of pharmacy Tathwade	8308204921	sakshikalamkar@ gmail.com	Sakshi
24.	Supriya Keshav Jadhav	Indira College of pharmacy Tathwade.	9145050470	jsupriya249@ gmail.com	Jadhav.SK
25.					
26.					
27.					
28.					

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Mr. Vipul Dhasade
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Dr. Ashok Bhosale
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THE INDIAN PHARMACEUTICAL ASSOCIATION PUNE

NATIONAL PHARMACY WEEK-2023-2024

(20th September to 26th September 2023)

Theme: "Pharmacist Strengthening Health System"

Name of Event: Oral Paper Presentation **Category: Diploma / P.G.** **Date: 26-09-2023**

Name & Address of Organizing College: PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

Evaluation Sheet

Sr. No.	Name of Students/Participants	Topic selection 5M	Objective 5M	Presentation content and knowledge 10M	Clarity and communication 10M	Conclusion 5M	Question/Answer Defense 5M	Total Marks 40M
1.	Rishika Lohani	4	4	7	6	4	2	27
2.	Madhavi Tejwekar	4	3	7	8	3	4	29
3.	Abhishek Khandekar	4	4	8	8	3	4	33
4.	Simran Srivastava	4	5	8	7	3	4	27
5.	Maiteeyi Joshi	4	3	6	7	4	4	28
6.	Khushal Ghanchi	3	3	6	8	4	4	28
7.	Anmol Dwivedi	3	4	5	8	4	4	28
8.	Gaugee Dhaneshwar	4	4	5	6	3	3	25
9.	Swabhi Shinde	4	4	6	7	4	4	29
10.	Shraddha Gupta	3	4	7	7	3	3	28
11.	Aaditya Ganachari	4	4	6	7	3	3	27
12.	Akanksha Suigave	4	3	6	7	3	4	27
13.	pallavi kapradwar	3	4	6	7	3	3	26

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Sr. No.	Name of Students/Participants	Topic selection 5M	Objective 5M	Presentation content and knowledge 10M	Clarity and communication 10M	Conclusion 5M	Question/Answer Defense 5M	Total Marks 40M
14.	Trupti Shinde	3	4	7	8	3	4	28
15.	Dnyaneshwari Mengade	4	4	6	6	3	3	26
16.	Vishakha pawar	4	4	6	8	3.5	4.5	28
17.	Vishaka kasbe	4	4	5	6	3	4	26
18.	Rutuja More	4	4	7	7	3	4	29
19.	Sumit More	4	4	6	6	3	4	27
20.	Rushikesh Shinde	4	5	8	8	3	3	31
21.	Anil Gaikwad	4	4	5	6	3	4	26
22.	Shruti Pawar.	4	4	6	5	3	4	26
23.								
24.								
25.								
26.								
27.								
28.								
29.								
30.								

luator Name and Sign:

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2.	Madhavi Jejurkar	4	3	7	8	3	03	28
3.	Abhishek Khardekar	4	4	8	8	4	02	30
4.	Simran Srivastava	4	5	8	9	4	04	34
5.	Maitreyi Joshi	4	3	7	6	3	04	27
6.	Khushal Ghanchi	3	3	6	7	3	04	26
7.	Anmol Dwivedi	3	4	6	7	3	04	27
8.	Gargee Dhaneshwar	4	4	5	8	3	04	28
9.	Surabhi Shinde	4	4	6	7	4	04	29
10.	Shreddha Gupta	3	4	6	7	3	04	27
11.	Aafiya Ganachari	4	4	6	6	4	04	28
12.	Akanksha Sujgare	4	3	6	6	3	04	26
13.	Pallavi Kapratwar	3	4	7	7	4	04	29

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14.	Trupti Shinde	3	4	7	8	3	4	28
15.	Dnyaneshwari Mengade	4	4	6	8	3	3	28
16.	Vishaka Pawar	4	4	6	8	4	2	28
17.	Vishaka Kasbe	4	4	5	7	3	4	27
18.	Rutuja more	4	4	6	6	2	4	26
19.	Sumit more	4	4	6	6	2	4	26
20.	Rushikesh Shinde	4	5	9	8	3	4	33
21.	Anil Gaikwad	4	4	4	6	3	4	25
22.	Pawar Shruti	4	3	3	6	3	4	23
23.								
24.								
25.								
26.								
27.								
28.								
29.								
30.								

Evaluator Name and Sign:

26/09/2023

Mr. Trushal V. Chorage

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Sr. No.	Name of Students/Participants	Topic selection 5M	Objective 5M	Presentation content and knowledge 10M	Clarity and communication 10M	Conclusion 5M	Question/Answer Defense 5M	Total Marks 40M
1.	Hitik Jain	04	04	08	06	03	03	28
2.	Manisha choudhary	04	02	05	06	—	—	17
3.	Diksha Garade	03	02	04	04	02	01	16
4.	Gawade Shivanjali	Ab						Ab
5.	Girame ~~shekhar~~ Shivani	4	3	4	5	2	2	20
6.	Arya Chavan	4	4	6	5	3	3	25
7.	Tinety Uday	03	02	03	03	02	02	15
I (8.)	Khadeeja Khan	04	04	08	08	04	03	31
9.	Yameena Patni	04	04	07	06	03	02	26
10.	Aditi Patankar	03	02	05	05	03	01	19
11.	Rakhi Kudaduwar	03	04	06	07	03	02	25
12.	Sanjana Patil	03	02	05	05	02	02	19
13.	Sonali Randiv	03	03	06	05	02	02	21

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Sr. No.	Name of Students/Participants	Topic selection 5M	Objective 5M	Presentation content and knowledge 10M	Clarity and communication 10M	Conclusion 5M	Question/Answer Defense 5M	Total Marks 40M
14.	Hansika Rathod	04	04	05	05	04	03	25
15.	Tejashree Bhandave	Ab						Ab
16.	Ritesh shirsat	03	03	05	05	02	02	20
17.	Shubham Marwadkar	03	03	05	05	02	02	20
18.	Dhanshree shinde	04	04	08	06	04	03	29
19.	Mohini Rathod	Ab						Ab
20.	Pranali Jadhav	04	04	07	06	04	03	28
21.	Pranay Ingle	02	02	03	03	01	01	12
22.	Payal garad	03	02	05	05	02	02	19
23.	Sakshi kalamkar	03	03	05	05	02	-	18
24.	Supriya Jadhav	Ab						Ab
25.								
26.								
27.								
28.								
29.								
30.								

Evaluator Name and Sign: 16/8/2023
(Mrs. Lanke Sandhya R.)

ATION PUNE

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THE INDIAN PHARMACEUTICAL ASSOCIATION PUNE

NATIONAL PHARMACY WEEK-2023-2024

(20th September to 26th September 2023)

Theme: "Pharmacist Strengthening Health System"

Name of Event: Oral Paper Presentation **Category: Diploma / P.G.** **Date: 26-09-2023**

Name & Address of Organizing College: PDEA's Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune

Evaluation Sheet

Sr. No.	Name of Students/Participants	Topic selection 5M	Objective 5M	Presentation content and knowledge 10M	Clarity and communication 10M	Conclusion 5M	Question/Answer Defense 5M	Total Marks 40M
1.	Nitik Jain	4	4	7	5	4	4	28
2.	Manisha choudhary	3	3	5	4	3	3	21
3.	Diksha Garode	3	3	5	4	3	3	21
4.	Gawade Shivanjali	-Ab-						
5.	Girme ~~Shekhar~~ Shivani	3	4	5	3	3	3	21
6.	Aryan Chavan	4	4	6	6	4	4	28
7.	Tutety Uday	4	4	6	5	4	4	26
8.	Khadeeja Khan	4	4	8	7	5	5	33 — 1st Rank
9.	Yameena Patil	4	4	7	7	4	4	30
10.	Aditi Patankar	3	3	5	5	3	3	22
11.	Rakhi Kuda	4	4	6	6	4	4	28
12.	Sanjana Patil	4	4	5	4	4	3	24
13.	Sonali Randiv	4	4	6	6	4	4	28

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Sr. No.	Name of Students/Participants	Topic selection 5M	Objective 5M	Presentation content and knowledge 10M	Clarity and communication 10M	Conclusion 5M	Question/Answer Defense 5M	Total Marks 40M
14.	Hansika Rathod	4	4	6	6	4	4	28
15.	Tejashree Bhondave	-Ab-						
16.	Ritesh Shirsat	4	4	5	6	4	4	27
17.	Shubham Marwadtar	4	4	5	6	4	3	26
18.	Dhanshree Shinde	4	4	7	8	4.5	4.5	32 — 2nd Rank
19.	mohini Rathod	-Ab-						
20.	Pranali ~~Gavad~~ Jadhav	4	4	6	6	4	4	28
21.	Pranay Ingle	3	3	5	5	2	2	20
22.	Payal Gavad	4	4	4	3	2	2	19
23.	Sakshi Kalamkar	4	4	5	5	3	2	23
24.	Supriya Jadhav	-Ab-						
25.								
26.								
27.								
28.								
29.								
30.								

Evaluator Name and Sign:

(Dr. Sakore A.P.)

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THE INDIAN PHARMACEUTICAL ASSOCIATION
(IPA) PUNE BRANCH

CERTIFICATE

This is to certify

PDEA'S Shankarrao Ursal College of Pharmaceutical Science and Research Kharadi ,Pune

has organised **Paper Presentation** event of

62nd National pharmacy week 2023 held in Pune, successfully. IPA-Pune Branch Appreciates their efforts

Dr. Chandrakant Kokare
PRESIDENT

Dr. L Sathiyanarayanan
HON. SECRETARY

Dr. Babita Agarwal
NPW COORDINATOR

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THE INDIAN PHARMACEUTICAL ASSOCIATION
(IPA) PUNE BRANCH

CERTIFICATE

This is to certify

Mr/Miss **Seema Choudhary** has

participated in Poster Competition event of

62 nd National pharmacy week 2023 held in Pune

Dr. Chandrakant Kokare
PRESIDENT

Dr. L Sathiyanarayanan
HON. SECRETARY

Dr. Babita Agarwal
NPW COORDINATOR

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THE INDIAN PHARMACEUTICAL ASSOCIATION
(IPA) PUNE BRANCH

CERTIFICATE

This is to certify

Mr/Miss **Payal Ranit** has

participated in Poster Competition event of

62 nd National pharmacy week 2023 held in Pune

Dr. Chandrakant Kokare
PRESIDENT

Dr. L Sathiyanarayanan
HON. SECRETARY

Dr. Babita Agarwal
NPW COORDINATOR

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THE INDIAN PHARMACEUTICAL ASSOCIATION
(IPA) PUNE BRANCH

CERTIFICATE

This is to certify

Mr/Miss **Payal Ranit** has

participated in Poster Competition event of

62nd National pharmacy week 2023 held in Pune

Dr. Chandrakant Kokare
PRESIDENT

Dr. L Sathiyanarayanan
HON. SECRETARY

Dr. Babita Agarwal
NPW COORDINATOR

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THE INDIAN PHARMACEUTICAL ASSOCIATION
(IPA) PUNE BRANCH

CERTIFICATE

This is to certify

Mr/Miss **Suraj Badra** has

participated in General Aptitude event of

62nd National pharmacy week 2023 held in Pune

Dr. Chandrakant Kokare
PRESIDENT

Dr. L Sathiyanarayanan
HON. SECRETARY

Dr. Babita Agarwal
NPW COORDINATOR

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THE INDIAN PHARMACEUTICAL ASSOCIATION
(IPA) PUNE BRANCH

CERTIFICATE

This is to certify

Mr/Miss Snehal Badade has

participated in Group Discussion event of

62nd National pharmacy week 2023 held in Pune

Dr. Chandrakant Kokare
PRESIDENT

Dr. L Sathiyanarayanan
HON. SECRETARY

Dr. Babita Agarwal
NPW COORDINATOR

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Pune District Education Association's

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

Health Check-up Camp

Pune District Education Association's

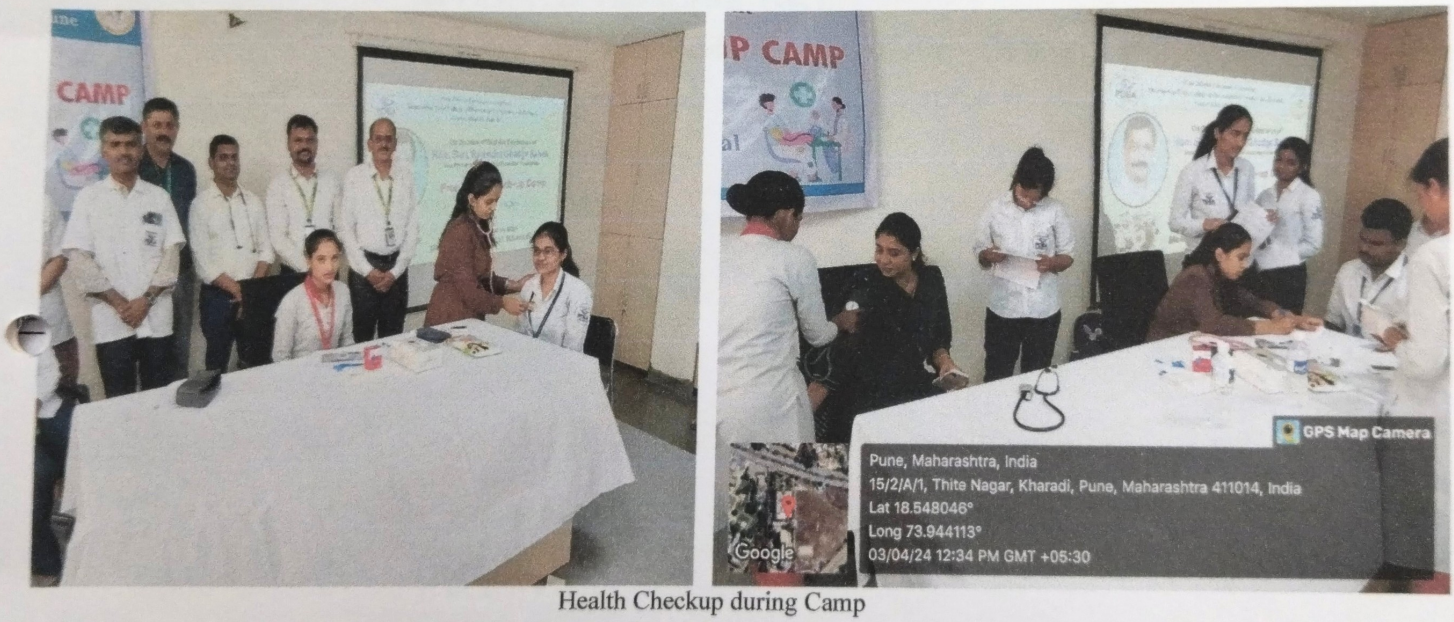
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre,
Kharadi, Pune-14

Free Health Check-Up Camp

[3rd April 2024]

Board of student's development of college was organized free health checkup Camp on 3rd April 2024 in college. This Health Check up Camp was organized for the first year B Pharmacy, and first year M Pharmacy students of the college. The camp was organized in collaboration with Motherhood Hospital, Kharadi, 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.

Motherhood Hospital doctors & nursing staff team were present for this camp. In this, doctors & nursing staff team were honored by the college. A total of 63 students were examined in this health check-up camp. The activity was coordinated by Dr. Prashant Khade.



Health Checkup during Camp

Dr. Prashant Khade

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

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Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Pune - 411014
Approved by : Pharmacy Council of India, New Delhi. • All India Council for Technical Education
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Maharashtra State Board of Technical Education.
Recognised by : Government of Maharashtra D.T.E.Institute Code : PH 6385 MSBTE Code : 2143
Website : www.pdeasubpharm.edu.in E-mail : sucopsrc_2009@yahoo.co.in Tele. : 020 - 27013835

Date : 03/04/2024 Ref. No.: SUCOPSRC / /2023-2024

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,

Mr. Saneer Karbhari
Cluster Manager- Marketing,
Motherhood Hospital, Kharadi,
Pune- 411014.

Respected 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 and Motherhood Hospital, Kharadi, for your kind cooperation for the conduct of Health Check-up Camp on 03rd April 2024 in the college for First Y. D. Pharm, 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
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

Board of Students Development

(Free Health Checkup Camp)

Date: 02/04/2024

Notice No: 337

(A.Y. 2023-24)

All student of F. Y. D. Pharm, F. Y. B. Pharm, and F. Y. M. Pharm are hereby inform that, College has organized Health Checkup Camp on Wednesday, 03rd April 2024 in college. All the students should attend the health checkup camp at 11 am in the seminar hall.

Adjustment of Lectures:

Sr. No.	Lectures	Name of faculty	Adjusted date	Adjusted time
1.	Biochemistry	Dr. Amit Kasabe	06/04/2024	01 to 02 pm
2.	Human Anatomy & Physiology II	Mr. Krunal Kanse	06/04/2024	02 to 03 pm

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

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Pune District Education Association's

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

Board of Students Development

Students Health Service Scheme

Name: Khushal Kolhe

Address (Local): DMR Pg, Near Zensar, Kharadi

Address(Permanent):

Class: F.Y. BPharm Roll No: 27

Contact No: 8767396472 Category: SC/ST/DTNT/OBC/EBC/OPEN/ANY OTHER

Date of Health Check-up: 03/04/2024

Male / Female: Male

Birth Date: 22/07/2005

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	Scanty	Painful	Menarche
Males:	Phimosis	Testes	Inguino-scrotal swelling			
Height:	cm.	**Weight:**	Kg. 61-65	**Pulse:** 75	**B.P.**	126/78 mm of Hg

C.V.S.:

R.S.:

P/A:

SKIN:

EAR: NAD

NOSE:

THROAT:

EYES:

TEETH & GUMS:

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HEALTH CHECKUP CAMP FOR

F.Y.B.Pharm

F.Y.D.Pharm

F.Y.M.Pharm

Date :- 03/04/2024

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Sr. No.	Name of Student	class	Mobile number	F/M
1.	Adhav Vaishnavi	F.Y.B	8180940959	F
2.	Bajare Vedant	F.Y.B	7058761632	M
3.	Bangar Manasi	F.Y.B	7821043795	F
4.	Bharne sanskruti	F.Y.B	9699116189	F
5.	Bhosale Pratiksha	F.Y.B	8308437568	F
6.	Chendge preeti	F.Y.B.	8329817150	F
7.	Deosarkar Kunika	F.Y.B.	9699078587	F
8.	Dodke Aditya	F.Y.B.	8668488678	M
9.	Donde srushti	F.Y.B.	9975048545	F
10	Dorge Aarti	F.Y.B	9021013525	F
11.	Gaikwad Rupali	F.Y.B.	8390757648	F
12.	Galne Kuldeep	F.Y.B.	9881965596	M
13.	Ghodke Harsh	F.Y.B.	9021823514	M
14.	Gholap Madhavi	F.Y.B.	9960382277	F
15.	Ghule Prachi	F.Y.B.	9011834949	F

Blood group.	Height	wt.	BP.	Major finding	Sign.
B+	170	40	110/80	fit	Adhav.
B+	176 cm	68kg	110/80	fit	
B+	144	58.9	120/80	fit	
A+ve	5.3 ft.	40 kg	120/80	fit	
A+	5.5 ft.	40kg	120/70	fit	P.B.Bhosale
O+ve	5'5	58	100/70	Fit	
B+	152.	60kg	100/70	Fit	
A+ve	175	82kg	114/72	Fit	
B+	5	35 kg	120/60	Fit	
—	4'11	46 kg	120/80	fit	
O+	5'3.	46 kg	120/80	fit.	
O+ve	5.7 ft.	60 kg	114/72 mmHg	fit	
B+ve	5'4	51.2 kg	128/70	fit	
B+	5'3.	37	110/85	fit	
A+	4'11	35 kg	110/80	fit	

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Gr no.	Name of student	Class	Mobile number	f/M
16.	Hampale Om	F.Y.B.	7385833325	M
17	Indalkar Aryan	F.Y.B.	9823008294	M
18.	Jagtap Akansha	F.Y.B.	7420896931	F
19.	Jagtap swarupa	F.Y.B.	9049917373	F
20.	Joshi shreeganesh	F.Y.B.	9284159454	M
21	Kalbhor Ritesh	F.Y.B.	7038679817	M
22	kamble Deepti	F.Y.B.	9322032518	F
23.	Karande Yashashree	F.Y.B.	9322032518	F
24.	Karkhile shantanu	F.Y.B.	7038988057	M
25.	Kolhe khushal	F.Y.B.	8767396472	M
26.	Kutwal Vaishnavi	F.Y.B.	9699923232	F
27.	Lokhande Ankita	F.Y.B.	8208176434	F
28.	Magar shweta	F.Y.B.	9403097363	F
29.	Mankudiyil Ashlinmary	F.Y.B.	7499913474	F
30	Maske sanket	F.Y.B.	8767653488	M

Blood group	Height	wt.	BP	Major finding	Sign.
A+	5.6	63 kg	110/70	fit	
O+	170.6cm	47.5kg	100/80	Fit	
B+ve	163	37 kg	120/70	Fit	
B+ve	163.	40	120/80	Fit	
A+ve	171.cm	70kg	128/82 mmHg	fit	
O+	174 cm	54 Kg	120/80	fit	
B+	165	54	110/70	fit	
O+	170	64kg	110/70	fit	
B+	177	61	120/80	Fit	
B+ve	5.8ft	61.65	126/78 mmHg	fit	
B+ve	165	46 kg	100/80	Fit	
A+ve	158cm	58.2	110/80	fit	
B+ve	153.	49.	110/70	fit	
B+ve	160	53.	110/70	fit	
A+ve	171 cm	56 kg	110/80	fit	

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Sr no.	Name of Student	Class	Mobile number	f/M
31.	Mathapati Aishworya	F.Y.B.	8432272033	F
32.	Naikwadi Rutuja	F.Y.B.	8180973189	F
33.	Narode Atharv	F.Y.B.	—	M
34.	Pande Nikhil	F.Y.B.	9834639970	M
35.	Pathare shruti	F.Y.B.	8983578171	F
36.	Pawar Tanishka	F.Y.B.	9699116189	F
37.	Pethkar Atharv	F.Y.B.	9322436171	M
38.	Purohit Roshni	F.Y.B.	8668532178	F
39.	Satav siddhi	F.Y.B.	9822442005	F
40.	shaikh Mahek	F.Y.B.	8805335798	F
41.	sharma Hemlata	F.Y.B.	8446668413	F
42.	Shinde sanskar	F.Y.B.	8983235897	M
43.	shinde shivani	F.Y.B.	8830398508	F
44.	shingade sayali	F.Y.B.	7276388661	F
45.	Sonkamble Bhushan	F.Y.B.	8625878358	M

Blood group	Height	wt	BP	Major finding	Sign
O+	5'3	45KG	110/70	fit	
B+	5'2	56 Kg	100/70	fit	
←		—		—	
B+ve	5.7ft	50 kg	114/60	fit	
B+ve	4'11	41	120/70	fit	
B+ve	152 cm	69	120/80	fit	
B-	180	54 kg	100/70	fit	
AB-	5'4	66	120/80	fit	
O+	5.1 ft	45 Kg	114/70	fit	
O+	154	38.20	110/80	Fit	
A+	157	42	120/60	fit	
A+ve	180cm	64kg	100/60	Fit	
		43kg	120/80	fit	
O+	152.4	54.25	120/80	fit	
B+ve	155.cm / 5.11 ft	74 kg	122/80	fit	

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Pune District Education Association's

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

Seminar on Health and Hygiene of Girls

Pune District Education Association's

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

Board of Students Development

Fearless Girl Campaign (निर्भय कन्या अभियान)

Seminar on

"Health and Hygiene of Women's"

26th Feb 2024

Board of Students Development of Savitribai Phule Pune University, Pune, sponsored the Fearless Girl Campaign (निर्भय कन्या अभियान) organized in college on date 26th Feb 2024. On this occasion, the college organizes a seminar on the Health and Hygiene of Women. Dr. Sushruta Mokadam (MBBS, MD, Senior Consultant-Obstetrician & Gynecologist Motherhood Hospital, Kharadi, Pune) invited was as chief guest and speaker of the seminar.

Objective: It aims to develop the confidence and personality of a lady student who comes from a rural area and are deprived section of society. The main objective of this scheme is to develop a critical mind, self-confidence, and a commitment to society. The lady students are given training in health, law, and social activities. They are also given training in self-employment and all possible other activities that enhance their social confidence.

Dr. Prashant Khade (Students Development officer) gave the preamble of the program. On this occasion, College principal Dr. Ashok Bhosale guided the student and he explained the importance of this campaign for girls.

Dr. Sushruta Mokadam (MBBS, MD, Senior Consultant-Obstetrician & Gynecologist Motherhood Hospital, Kharadi, Pune) explained to the students how to overcome the physical problems of women and how to have a routine to prevent any disease. He also solved their questions by discussing them with the students.

Student development officer Dr. Prashant Khade & Cultural In charge Mrs. Pallavi Kharbas Coordinate this Program.

Memorandum of Understanding Signed Between College and Motherhood Hospital

Felicitation of Dr. Sushruta Mokadam

Dr. Sushruta Mokadam gave an expert talk on the Health and Hygiene of women.

Mrs. Pallavi Kharbas
Cultural In-charge

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

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Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE, KHARADI, PUNE-14.

Board of Students Development

Nirbhay Kanya Abhiyan

(Fearless Girls Campaign)

26th February 2024.

PROTOCOL

Sr. No.	Events	Responsible Person
1.	Anchoring	Ms. Bakti Harpale (F. Y. D. Pharm)
2.	Felicitation	Chief Guest by Dignitaries
3.	Memorandum of understanding Signed between college and Motherhood Hospital	College Principal and Motherhood Hospital Doctor
4.	Preamble	Dr. Prashant Khade (Student Development Officer)
5.	Principal Address	Dr. Ashok Bhosale
6.	Seminar on "Women's Health & Hygiene"	Dr. Sushruta Mokadam. MBBS, MD Senior Consultant-Obstetrician & Gynecologist Motherhood Hospital, Kharadi, Pune.
7.	Vote of Thanks	Mrs. Shraddha Kambale (S. Y. D. Pharm)
8.	Pasaydan & Technical Support	Mr. Nitin Neharkar (Asst. Professor)

Mrs. Pallavi Kharbas
Cultural In-charge

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

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Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Pune - 411014
Approved by : Pharmacy Council of India, New Delhi. ● All India Council for Technical Education
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Maharashtra State Board of Technical Education.
Recognised by : Government of Maharashtra D.T.E.Institute Code : PH 6385 MSBTE Code : 2143
Website : www.pdeasubpharm.edu.in E-mail : sucopsrc_2009@yahoo.co.in Tele. : 020 - 27013835

Date : 23 / 02 / 2024 Ref. No.: SUCOPSRC / 815 / 2023 - 2024

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. Sushruta Mokadam.
MBBS, MD
Senior Consultant-Obstetrician & Gynecologist
Motherhood Hospital, Kharadi, Pune.

Subject: Invitation as Resource Person for Nirbhay Kanya Abhiyan (Fearless girl Campaign)

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 Pharmaceutical Sciences. The college is conducting D. Pharm, B. Pharm and M. Pharm with specializations in Pharmaceutics and Pharmaceutical Quality Assurance. Savitribai Phule Pune University has recognized as a research center for Ph.D. course in Pharmacy from 2019-20. The College is dedicated to 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.

As per our telephonic conversation, I am pleased to extend an invitation to you for sharing your knowledge as a **resource person on the topic: Women's Health and Hygiene in Nirbhay Kanya Abhiyan (Fearless girl Campaign) on 26th Feb. 2024 at 11.30 am.** This program aims to develop the confidence and personality of a girl's student. Since you are eminent in this field, we take this opportunity to invite you as a resource person for this Campaign.

We look forward to your presence and guidance.

Thanking you!

Dr. Ashok Bhosale
Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

Institute Copy

Pune District Education Association's
SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Pune - 411014
Approved by : Pharmacy Council of India, New Delhi. • All India Council for Technical Education
Affiliated to : Savitribai Phule Pune University (PU/PN/Pharm/384/2009), Code 1235
Maharashtra State Board of Technical Education.
Recognised by : Government of Maharashtra D.T.E.Institute Code : PH 6385 MSBTE Code : 2143
Website : www.pdeasubpharm.edu.in E-mail : sucopsrc_2009@yahoo.co.in Tele. : 020 - 27013835

Date : 26 / 02 / 2024 Ref. No.: SUCOPSRC / 804 / 2023 - 2024

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. Sushruta Mokadam
MBBS, MD,
Senior Consultant-Obstetrician & Gynecologist,
Motherhood Hospital, Kharadi, Pune.

Dear Madam,

At the outset, we wish to convey our sincere gratitude towards you for addressing as a resource person on 26th Feb. 2024 at Nirbhay Kanya Abhiyan (Fearless girl Campaign) on 'Women's Health and Hygiene'. Your valuable guidance has rightly helped us. Your expertise in the field has been truly inspiring for all students to expand their views.

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

Thanking you with regards.

Yours Sincerely,

Dr. Ashok Bhosale
Principal
PDEA'S Shankarrao Ursal College of Pharmaceutical Sciences & Research Centre, Kharadi, Pune-14.

C. Problem Solving Methodologies

Organizing Seminars with Complex Topics

A Report of
Seminar on Eco-Friendly and Economic Methods in Various Fields of Pharmacy Utilizing Hydrotrophy, Mixed Hydrotrophy, and Mixed Solvency Concepts

A seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts was organized in the institute on May 30, 2024, at 11.45 a.m. Dr. R. K. Maheshwari, Ex. Professor and Head, Dept. of Pharmacy, SGITS, Indore, was the resource person for the seminar.

Dr. Ashok Bhosale, principal, welcomed him, and Dr. Vijaya Barge, vice principal, introduced him to the M.Pharm. students and faculty members.

While guiding the students and faculty members, he focused on the application of the mixed solvency concept in various analyses of these poorly water-soluble drugs. Further, he mentioned that such analytical methods are eco-friendly and cost-effective. Also, he said that these methods should be adopted by various pharmacopoeias so that the use of such costly and harmful organic solvents can be minimized.

The seminar was attended by around 50 M. Pharm. students and faculty members.

The seminar was concluded with a vote of thanks by coordinator Dr. Vijaya Barge, vice principal.

A seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts was organized in the institute on May 30, 2024, at 11.45 a.m. Dr. R. K. Maheshwari, Ex. Professor and Head, Dept. of Pharmacy, SGITS, Indore, was the resource person for the seminar.

Felicitation of Dr. R. K. Maheshwari, Ex. Professor and Head, Dept. of Pharmacy, SGITS, Indore, by Dr. Ashok Bhosale, principal.

Dr. R. K. Maheshwari, Ex. Professor and Head, Dept. of Pharmacy, SGITS, Indore, is guiding the students and faculty members.

Dr. R. K. Maheshwari, Ex. Professor and Head, Dept. of Pharmacy, SGITS, Indore, is guiding the students and faculty members.

Dr. Vijaya Barge, vice principal, delivered a vote of thanks.

Dr. Vijaya Barge
Vice Principal & Coordinator

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

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SHANKARRAO URSAL COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH CENTRE
Kharadi, Tal. Haveli, Dist. Pune - 411014
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D.T.E.Institute Code : PH 6385 | Website : www.pdeasubpharm.edu.in | E-mail : sucopsrc_2009@yahoo.co.in
Phone : 020 - 27013835

Date : 30/5/2024 Ref. No.: SUCOPSRC/ 1133 /2023-2024

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Ajit Pawar

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Rajendra Ghadge

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Adv. Sandeep Kadam
Senate Member, SPPU, Pune

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Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. Ashok Bhosale

To,
Dr. R. K. Maheshwari
Ex. Professor and Head
Dept. of Pharmacy
SGITS, Indore

Subject: Invitation as a resource person for a seminar.

Dear Sir,

As per our telephonic conversation, I am pleased to extend a formal invitation to you to sharing your knowledge as a resource person on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m. The purpose of the proposed seminar is to provide students and staff members with an opportunity to acquire and utilize new knowledge and skills that will benefit them to updating their knowledge in the field of pharmacy.

Since you are an eminent person in this field and have made valuable contributions to the topic, we take this opportunity to invite you as a resource person for this seminar.

Thanking you.

(Dr. Ashok Bhosale)
Principal

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Date : 30/5/2024 Ref. No.: SUCOPSRC/ 1136 /20 23/20 24

President
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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. R. K. Maheshwari
Ex. Professor and Head
Dept. of Pharmacy
SGITS, Indore

Dear Sir,

At the outset, we wish to convey our sincere gratitude towards you for sharing your knowledge as a resource person on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

Our students and faculty members have benefited from your invaluable guidance by being able to learn and use new skills that will benefit them in updating their knowledge in the field of pharmacy.

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

Thanking you.

Dr. Ashok V. Bhosale
Principal
Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14.

Received

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences
And Research Center, Kharadi, Pune

A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m.

Attendance Sheet

Date: 30.05.2024

Sr. No.	Name of the student	Class	Sign.
1	komal waster	S.Y.M.pharm	
2	Dnyaneshwari Mengade	S.Y.M.Pharm	
3	Yeode Mirmala	S.Y.M.pharm	
4	Vishaktha Jaiswal	S.Y.M.Pharm	
5	Anuradha Daundkar	S.Y.M.Pharm	
6	Simran Prajapati	S.Y.M.pharm	
7	Jyoti mirgudwad	S.Y.M.pharm	
8	Pratiksha Deshmukh	S.Y.M.pharm	
9	Bhawana Bangare	S.Y.M.Pharm	
10	Makude Payal	S.Y.M.Pharm	
11	Trupti Shinde	S.Y.M.Pharm	
12	Prathamesh Virkar	S.Y.M.Pharm	
13	Bhagyo Walkar	S.Y.M.Pharm	
14	Nigade Abhimanyu	S.Y.M.Pharm	
15	Shubham S. Panchal	S.Y.M.Pharm	
16	Dagadgave Sudhir P.	S.Y.M.Pharm	
17	Prathamesh Gawali	S.Y.M.Pharm	
18	Nilesh Parade	S.Y.M.Pharm	
19	Hirave Prathamesh	S.Y.M.pharm	
20	Rohit Gaikwad.	S.Y.M.Pharm	
21	Randil Nikhil	S.Y.M.pharm	
22	Avantika Nalawade	S.Y.M.pharm	

Sr. No.	Name of the student	Class	Sign.
23	Krishna Sable	S.Y.M (QA)	Sable
24	Ganesh Mhaske	S.Y.M. (QA)	G.A.Mhaske.
25	Om Nirpane	S.Y.M. (QA)	Nirpane
26	Pallavi Dalvi	S.Y.M. (QA)	Dalvi.
27	Vaishnavi Jadhav.	S.Y.M. (QA)	VJadhav.
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Kharadi, Pune - 411014

Principal
PDEA'S Shankarrao Ursal College
of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences
And Research Center, Kharadi, Pune

A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m.

Attendance Sheet

Date: 30.05.2024

Sr. No.	Name of the faculty member	Designation	Sign.
1	Dr. Amrita Jadhav	Asst. Prof.	
2	Dr. Sujit Kakade	Asst. Prof.	
3	Mrs. Trishna. P. S.	Asst Prof	
4	Mr. Nitin Neharkar	Asst. Prof.	Nitin
5	Ms. Anjali Pande	Asst. Prof.	
6	Mrs. B. G. Shelar	Asst. Prof	
7	Mrs. Deepika Bajapati	Lecturer	
8	Ms. Poonam Ankush Jadhav	Asst. Prof	Jadhav
9	Veer V. S.	Asst Prof	
10	S. G. Kanan	Asst. Prof	
11	K. R. Ghute	Asst. Prof	
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of Pharmaceutical Sciences &
Research Centre, Kharadi, Pune-14

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

A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

FEEDBACK FORM

Name of the staff member: Student :- Dagadgave Sudhir Prakash

Designation: S.Y. M-Pharm

Sr. No.	Particular	Excellent	Good	Average	Satisfactory
1.	How did u find the overall seminar?	✓			
2.	Did this seminar help you to update your current knowledge?	✓			
3.	How was the interaction with the speaker during the seminar?	✓			
4.	Overall effectiveness of seminar	✓			

Note: Strike √ wherever necessary

Suggestions if any: Excellent it was !

Date: 30/05/2024

Signature:

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A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

FEEDBACK FORM

Name of the staff member/ student - Bhagwat Bhaskar Haralkar

Designation:

Sr. No.	Particular	Excellent	Good	Average	Satisfactory
1.	How did u find the overall seminar?	✓			
2.	Did this seminar help you to update your current knowledge?	✓			
3.	How was the interaction with the speaker during the seminar?	✓			
4.	Overall effectiveness of seminar	✓			

Note: Strike √ wherever necessary

Suggestions if any: Nil.

Date: 30/05/2024

Signature:

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A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

FEEDBACK FORM

Name of the staff member/ student – Virkar Prathamesh Ravindra.

Designation: S.Y.M Pharm Student.

Sr. No.	Particular	Excellent	Good	Average	Satisfactory
1.	How did u find the overall seminar?	✓			
2.	Did this seminar help you to update your current knowledge?	✓			
3.	How was the interaction with the speaker during the seminar?	✓			
4.	Overall effectiveness of seminar	✓			

Note: Strike √ wherever necessary

Suggestions if any: No suggestion.

Date: 30/05/2024

Signature:

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A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

FEEDBACK FORM

Name of the staff member: student - Om Balaji Nirpane

Designation: S.Y. M.Pharm (Q.A)

Sr. No.	Particular	Excellent	Good	Average	Satisfactory
1.	How did u find the overall seminar?	✓			
2.	Did this seminar help you to update your current knowledge?	✓			
3.	How was the interaction with the speaker during the seminar?	✓			
4.	Overall effectiveness of seminar	✓			

Note: Strike √ wherever necessary

Suggestions if any: No.

Date: 30/05/2024

Signature: Nirpane

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A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

FEEDBACK FORM

Name of the staff member/ student – Avantika Nalawade

Designation: S.Y. M.Pharm

Sr. No.	Particular	Excellent	Good	Average	Satisfactory
1.	How did u find the overall seminar?	✓			
2.	Did this seminar help you to update your current knowledge?	✓			
3.	How was the interaction with the speaker during the seminar?	✓			
4.	Overall effectiveness of seminar	✓			

Note: Strike √ wherever necessary

Suggestions if any: NO

Date: 30/05/2024

Signature:

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A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

FEEDBACK FORM

Name of the staff member: Veer Vikram Shankar

Designation: Asst Professor

Sr. No.	Particular	Excellent	Good	Average	Satisfactory
1.	How did u find the overall seminar?	✓			
2.	Did this seminar help you to update your current knowledge?	✓			
3.	How was the interaction with the speaker during the seminar?	✓			
4.	Overall effectiveness of seminar	✓			

Note: Strike √ wherever necessary

Suggestions if any: Very nice Organization of seminar.

Date: 30/5/24

Signature: Veer

PuneDistrictEducationAssociation's
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A Seminar on the topic of eco-friendly and economic methods in various fields of pharmacy utilizing hydrotrophy, mixed hydrotrophy, and mixed solvency concepts on May 30, 2024, at 11.30 a.m

FEEDBACK FORM

Name of the staff member: Mr. Kunal G. Kanase.

Designation: Asst. Professor

Sr. No.	Particular	Excellent	Good	Average	Satisfactory
1.	How did u find the overall seminar?	✓			
2.	Did this seminar help you to update your current knowledge?	✓			
3.	How was the interaction with the speaker during the seminar?	✓			
4.	Overall effectiveness of seminar	✓			

Note: Strike √ wherever necessary

Suggestions if any: Very Nice seminar

Date: 30/5/2024

Signature:

Pune District Education Association's

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

Question Bank for Day to Day Interaction with students during Practical Classes

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: 2023-24

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?

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

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

(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?

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.

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

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

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.

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.

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.

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.

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.

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.

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Mrs. Trusha P. Shangrapawar

Cultural Co-ordinator

Class: First Year M. Pharm. (Semester-I, 2019 P)
Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)
Academic Year:2023-24

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

Class: First Year M. Pharm. (Semester-II, 2019 P)
Subject: Pharmaceutical Validation (MQA202T)
Academic Year:2023-24

Question Bank

1. Define Validation. Write the scope and types of validation.
2. Write short note on validation master plan.
3. Write about FAT and SAT.
4. Define Qualification. Explain equipment qualification.
5. Elaborate qualification of Hardness tester.
6. Write a note on Qualification of Friability tester.
7. Write qualification of dry heat sterilizer.
8. Give Qualification of Autoclave.
9. Write in detail qualification of Tablet compression machine.
10. Write about performance qualification parameters of HPLC.
11. Give the qualification of UV-Visible spectrophotometer.
12. Write about performance qualification parameters of HPLC.
13. Give the qualification of UV-Visible spectrophotometer.
14. What is scope of process validation?
15. Write about revalidation.
16. What is process validation? Discuss different types of process validation.
17. What are different approaches to process validation?
18. Elaborate types of process validation. Explain process validation of coated tablets.
19. What are the steps involved in analytical method validation.
20. When should method validation be carried out?
21. Discuss the different parameters of method validation as per ICH guidelines.
22. Discuss the different parameters of method validation as per USP guidelines.
23. Write a note on Clean in Place (CIP).
24. Describe different cleaning methods.
25. Write in detail about electronic records.

26. Add a note on electronic signature.
27. Write about intellectual Property Protection (IPP).
28. Add a note on steps involved in patent filing.
29. What are different types of Patent applications? Elaborate in detail.

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

Question Bank

Course: Drug Delivery System (PATTERN 2019)
Class: F. Y. M. Pharm
Semester: I
Academic Year- 2023-2024

Chapter No- 1: Sustained Release and Controlled Release Formulation

1. What are the objectives of oral sustained released dosage form?
2. Draw an ideal plasma concentration curve for sustained release and controlled release formulations.
3. Define the term-
   a) repeat action
   b) delayed release
   c) extended release
4. Write the drug selection criterion for oral sustained release drug delivery systems.
5. What is partition coefficient?
6. Define anion and cation exchange resin with examples.
7. Explain the considerations for selection of polymers.
8. Classify polymers used in sustained release formulation.
9. Define bioelectronic medicine, neuromodulation and electroceuticals.
10. Give the mechanism involve in laser-based writing system used in 3D printing.
11. Define the terms, telehealth, telemedicine and telepharmacy.
12. What is sustained release and controlled release formulations? Give its merits & demerits in detail.
13. What are the factors affecting the formulation of oral sustained release drug delivery system?
14. Explain dissolution controlled mechanism of drug release.
15. Explain different mechanisms involved in drug release from polymer.
16. What is natural polymer? Give its merit and demerits. Explain its physical and chemical properties.

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17. Write a note on biodegradable synthetic polymer.
18. Give detail account about cellulose polymer.
19. Write in detail about personalized medicine.
20. What is pharmacogenetics?
21. What is bioelectronic medicine? Give its significance.
22. What is 3D painting? Explain advantages, applications and challenges of 3D printing,
23. What is telepharmacy? Write its merit and demerit. Give its applications.

Chapter No-2: Rate Controlled Drug Delivery System

24. Define the term-
    a) modified release
    b) extended release
    c) controlled release
    d) sustained release.
25. Give advantage and disadvantage of controlled release
26. What is magnetic force triggered drug delivery?
27. What is the mechanism involved in mechanical activated drug delivery system?
28. Explain in brief about enzyme used for enzyme activated drug delivery system.
29. What are different types of feedback responsive drug delivery system?
30. What is OROS-CT osmotic system?
31. Describe drug selection criterion for controlled drug delivery system.
32. What is semipermeable membrane?
33. What is the difference between SR and CR7 Explain formulation challenges and rationale for CR.
34. Classify rate controlled drug delivery system in detail.
35. Write in detail about mechanically activated system.
36. Explain in detail pH activated drug delivery system.
37. Describe pH responsive hydrogel system in detail.
38. Explain various systems for drug release by enzyme activation.
39. What is osmotic pressure? Explain mechanism of osmosis.
40. Describe in detail feedback responsive drug delivery system.

Chapter No-3: Gastro Retentive Drug Delivery System

41. Give advantages of gastro-retentive drug delivery system.
42. Give unsuitable candidates for gastro-retentive drug delivery system.
43. How GRDDS differs from conventional drug delivery system?

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44. Draw neat labelled diagram of gastrointestinal tract
45. Write a short note on gastrointestinal mucus.
46. Write a short note on Migrating Myoelectric Cycle.
47. Define Buoyancy Lag Time and Floating time.
48. What is GRDDS? Give its merit and demerits. Explain anatomy and physiology of gastrointestinal tract in detail.
49. Explain Migrating Myoelectric Cycle. Discuss factors influencing gastric retention of dosage in detail.
50. Explain in detail formulation approaches to enhance GI transit.
51. Describe in detail evaluation parameters for GRDDS.

Chapter No-4: Ocular Drug Delivery System

52. Give advantages & disadvantages of ocular drug delivery system.
53. Enlist the barriers in ocular drug absorption.
54. Define nanosuspension & nanoparticle.
55. Why is drug not present more time in eye?
56. Define iontophoresis, sonophoresis & microneedle.
57. What are formulation approaches to improve ocular bioavailability?
58. What are Novel ophthalmic dosage forms?
59. Explain in detail ophthalmic inserts.
60. Discuss various barriers for ocular drub penetration.
61. Explain in detail various ways to overcome barriers in ocular drug penetration.
62. Write in detail about blood-ocular barriers.
63. Write a note on ophthalmic inserts.
64. What are Formulation approaches to improve ocular bioavailability?

Chapter No-5: Transdermal Drug Delivery System

65. Give ideal characteristics of chemical penetration enhancer.
66. Write four strategies of microneedle used for TDDS.
67. What are ideal properties of backing material used for TDDS?
68. Explain shear adhesive test for TDDS.
69. What is skin irritation study?
70. What is hypodermis?
71. What is TDDS? Give its merit and demerits. Explain the structure of skin in detail.
72. Explain in detail about factors affecting transdermal drug delivery. Give mechanism of transdermal penetration.

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73. Give in detail account of physical penetration enhancement method.
74. Describe in detail evaluation parameter for TDDS.
75. Which are the components required TDDS? Explain each in detail.
76. Why TDDS is beneficial? Which properties of drug are essential? Give various approaches for formulation of TDDS.
77. Explain *in vitro* permeation studies for TDDS.

Chapter No-6: Protein and Peptide Delivery

78. What is quaternary structure of protein?
79. Write properties of protein and peptides.
80. What are advantages and disadvantages of parenteral route
81. Explain advantages and disadvantages of nasal route.
82. What is BBB?
83. Explain absorption enhancers.
84. What is liposome?
85. What is a carbon nanotube?
86. Explain in detail structure of protein
87. Explain in detail about barriers for protein drug delivery.
88. Describe carriers system for protein.
89. Describe in detail macromolecules for protein.

Chapter No-7: Vaccine Delivery System

90. Explain the concept of vaccine drug delivery.
91. Write a note on Single shot vaccine.
92. Give factors affecting antigen release.
93. Give types of biodegradable polymers in vaccine drug delivery system
94. Write a short note on hurdles of mucosal vaccine design.
95. Explain in detail about Uptake of antigens.
96. Describe single shot vaccines in detail.
97. Explain in detail mucosal delivery of vaccines.
98. Describe in detail transdermal delivery of vaccines.

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Question Bank

Course: Cosmetics and cosmeceuticals (PATTERN 2019)
Class: F. Y. M. Pharm
Semester: II
Academic Year- 2023-2024

Chapter No- 1: Cosmetics Regulatory

1. Define cosmetics.
2. Explain (SCC).
3. Explain spurious cosmetic.
4. Explain Misbranded cosmetics.
5. Explain Indian regulatory requirements for labeling of cosmetics
6. Explain regulatory provisions relating to import of cosmetics
7. Explain prohibition of manufacture and sale of certain cosmetics in details.
8. Explain offences and penalties of Cosmetics Regulatory.

Chapter No- 2: Cosmetics Biological Aspects

1. Define cosmetics.
2. Define Rash.
3. Define Eczema.
4. Explain Structure of skin.
5. Define Dermatitis.
6. Explaine Biological basis for cosmetics
7. Explaine Dry skin in details.
8. Explain pigmentation in details.
9. Explaine structure of hair and hair growth cycle.

Chapter No- 3: Formulation Building Blocks of Cosmetics

1. Define shampoo.
2. Enlist conditioning agents of shampoo.
3. Enlist clarifying agents of shampoo.
4. Enlist Evaluation of Shampoos shampoo.
5. Define moisturizing cream.
6. Explain toothpaste in details.
7. Explain Surfactants in details.
8. Explain nonionic surfactants in details.

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9. Explain Emollients details.

Chapter No- 4: Design of Cosmeceutical Products

1. Define Cosmeceutical.
2. Classify Sun burn.
3. Define Sunscreen.
4. Give function of Vitamin D.
5. Give number of organic compound has been screened for sunscreening properties.
6. Write short note on Cosmeceutical.
7. Explain sun protection in details.
8. Give treatment of dry skin.
9. Write short note on Acne.

Chapter No- 5: Herbal Cosmetics

1. Define cosmetics.
2. Define Amla.
3. Define Herbal products.
4. Give Advantages of herbal cosmetics.
5. Write short note on Herbal cosmetics for skin.
6. Write short note on Indian Extracts for Fal Cosmetics.
7. Write short note on Herbal products.
8. Write short note on herbal ingredients used in hair care.
9. Write short note on herbal ingredients used in skin care.

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Affiliated to SPPU, Pune

PHARMACOLOGY-3 QUESTION BANK-6 SEMESTER B PHARMACY

UNIT-1

DRUG ACTING ON RESPIRATORY SYSTEM (5+2+2M)

SHORT ESSAYS — 5 MARKS

1. what is bronchial asthma? Classify drug used in its treatment.
2. Mention xanthine derivatives and write their mechanism of antiasthmatic action?
3. Explain mechanism of action, adverse effect and therapeutic uses of selective Beta 2 agonist (salbutamol).
4. Classify antitussive with example. Write their general mode of action and uses.
5. What are mucolytics ? Give example. Write mechanism of action of bromohexine.
6. What are respiratory stimulants? Explain pharmacology of any one.
7. Define respiratory stimulant with examples. Write their mechanism of action and therapeutic uses.

SHORT ANSWER 2 MARKS

8. Differentiate between bronchial asthma and COPD.
9. What are the causes of COPD.
10. Name the drug used in COPD.
11. Enlist bronchodilators
12. What are leukotriene antagonist? Give example.
13. Mention mast cell stabilizer.
14. Define expectorant with example.
15. Write uses of expectorant and antitussive?
16. What are difference between expectorant and antitussive?
17. Mention four antitussive agents?
18. What are mucolytics? Give example.
19. What are the adverse effect and uses of bromhexine
20. What are nasal decongestants? Give example.
21. List respiratory stimulants.

Name and Signature of Teacher

Deepika Prajapati

UNIT-2

3. GENERAL PRINCIPLE OF CHEMOTHERAPY 5+2

SHORT ESSAYS 5 MARKS

1. Define chemotherapy. Write classification of antibacterial agents.
2. Classify antibiotics on the basis of mechanism of action along with examples.
3. Write chemical classification of antimicrobial agents with example.
4. Define chemoprophylaxis. Write briefly on types of chemoprophylaxis along with example.
5. Example rational behind combined therapy of antimicrobial agents with examples.
6. Write a note on causes and prevention of antimicrobial resistance.
7. Explain mechanism of antimicrobial resistance.

SHORT ANSWER 2 MARKS

1. Four classes of antibiotics acting by inhibiting cell wall synthesis.
2. Mention four class of antibiotics acting by inhibiting protein synthesis.
3. Define bacteriostatic and bactericidal agents with example.
4. Mention mechanism of development of anti microbial resistance.
5. What are probiotics? Give example.
6. What are preprobiotics? Give example.
7. Give four reason for combined uses of antibiotics.
8. What are superinfection? Give example.

4. ANTIBIOTICS AND ANTIMICROBIAL AGENTS 10+5

LONG ESSAYS 10 MARKS

1. Classify sulphonamides with example. Describe their mechanism of action and uses.
2. What are sulphonamides? Classify then with examples. Write the mechanism of action and uses of co-trimoxazole.
3. Classify penicillins. Write mechanism of action, adverse effects and uses of penicillin-G.
4. Classify semi synthetic penicillin with example? Discuss antimicrobial spectrum, mechanism of action and uses of ampicillin.
5. What are cepphalosporins? Classify them with examples. Write their mechanism of action, adverse reactions and therapeutic uses.
6. Write sources. MOA, adverse effect and therapeutic uses of tetracyclines.
7. What are aminoglycoside antibiotics? Write the antimicrobial spectrum, MOA, adverse action and therapeutics uses of streptomycin.
8. What are macrolides? Give examples. Discuss their antimicrobial spectrum, MOA, and therapeutic uses.

SHORT ESSAYS 5 MARKS

1. What are sulphonamides? Classify them with example.
2. Write MOA and merits of colrimoxazole.
3. What are MOA and uses of penicillins.
4. What MOA and uses of streptomycin.

Deepika Prajapati

5. What are broad spectral antibiotics? Give example. Write MOA of chloramphenicol.
6. Classify tetracyclines with example. Example why tetracycline causes discoloration of teeth.
7. What are polyene antibiotics? Give examples. Enlist their therapeutic uses.
8. Classify fluoroquinolones with example and write their MOA ofloxacin.
9. Write the mode of action and therapeutic uses of fluoroquinolones.
10. Write briefly pharmacology of dapsone and clofazimine.

UNIT-3

5. CHEMOTHERAPY OF DISEASES

LONG EASSY 10 MARKS

1. Classify antifungal agents with example. Write MOA, adverse effect and uses of amphotericin-B.
2. Classify antifungal agents with example. Write MOA, adverse effect and uses of triazoles.
3. Classify antifungal agents with example. Discuss anti-fungal spectrum, MOA, and uses of systemic triazoles.
4. Classify antitubercular agents. Explain MOA of INH and Rifampicin.
5. What is DOTS? Classify anti TB drugs with examples. Write the MOA, adverse effect and uses of INH.
6. Classify antiamoebic agents with examples. Write MOA, adverse effect and uses of metronidazole.
7. Name the causative organism of malaria. Classify antimalerials with example.
8. Classify antimalarial agents with example. Discuss pharmacology of choloroquine.

SHORT ESSAYS 5 MARKS

1. Classify antiviral and antiretroviral agents with example.
2. Classify antiviral agents with example. Write the adverse effects and uses of acyclovir.
3. Write MOA, adverse effect and uses of zidovudine.
4. Classify anti viral agents with examples. Write effect and therapeutic uses of zidovudine.
5. Write MOA, adverse effect and uses of acyclovir.
6. Write MOA, adverse effect and uses of amphotericin-B.
7. Classify antiamoebic agents with example. Write the uses of tinidazole.
8. Write a flow chart showing life cycle of plasmodium species.
9. Write MOA, adverse effect and uses of chloroquine.
10. Write MOA and uses of chloroquine.
11. Classify anti-tubercular drugs with example and write the mechanism of action of INH.
12. Classify antileprotic drugs with example. Write the mechanism of action of dapsone.
13. Classify type of leprosy and antileprotic agents with examples.
14. Classify anthelmintics with examples. Write the pharmacology of albendazole.

Deepika Deepika Prajapati

15. Classify anthelmintic agents with examples. Write mechanism of action of benzimidazoles.

SHORT ANSWERS 2 MARKS

1. What is DOTS therapy?
2. Write adverse effect of rifampicin.
3. Write the adverse effect pf streptomycin.
4. Mention types of leprosy.
5. What are blood schizonticides. Give one example.
6. Mention four malarial parasites.
7. Outline mechanism of action of metronidazole.
8. Mention the drugs uses for treatment of filariasis.

UNIT-4

6. CHEMOTHERAPHY OF UTI, STD AND CANCER 5+2

SHORT ESSAYS 5 MARKS

1. Classify anticancer agents with example.
2. Describe mechanism of action and therapeutic uses of alkylating agents.
3. Write mechanism of action and adverse effect of methotrexale.
4. Write mechanism of action and adverse effect of 5-fluorouracil.
5. Classify types of anti metabolites with examples.

SHORT ANSWERS 2 MARKS

1. Mention common causative organisms for UTI.
2. Mention four urinary antiseptics.
3. Mention four hormonal anticancer agents.
4. What are major adverse effect cytotoxic agents.
5. Mention common causative organism of sexually transmitted diseases.
6. Write causative organism and drug of choice for syphilis and gonorrhoea.
7. Mention one sexual transmitted diseases and treatments.
8. Mention the first line of drug therapy for syphilis.

IMMUNOPHARMACOLOGY 5+2

SHORT ESSAYS

1. What are immunosupressants and immunostimulants? Give examples. Write their application.
2. Classify immunosuppresants with example and mention their uses.
3. Classify immunosuppresants with example, write the mechanism of action of tacrolimus.
4. Explain mechanism of action and uses of cyclosporins.
5. Write MOA, adverse effect and uses of corticosteroids.
6. Write a note on monoclonal antibody as innunosupressants.
7. Write briefly on monoclonal antibodies with example.
8. Classify immunostimulants with examples. Write note on types and uses of interferons.

SHORT ANSWER 2 MARKS

1. What are immunosuppressant? Give examples.
2. Enlist four immunostimulant.
3. Enlist T-cell inhibitors.
4. Explain mechanism of action and uses of cyclosporine.
5. Write adverse effects of cyclosporine
6. Write the adverse reaction of tacrolimus
7. Write the uses of corticosteroids
8. What are adverse effects of corticosteroids?
9. What are monoclonal antibodies used for immunosuppression

8.PRINCIPLE OF TOXICOLOGY

SHORT ESSAYS MARKS

1. Explain the acute ,subacute and chronic toxicity studies along with their purpose
2. Highlight on ABCD regimen of acute poisoning management.
3. Outline the steps involve in the management of acute poisonings.
4. Outline steps involve in the elimination of orally ingested poisons.
5. Outline general principle of treatment of acute poisoning.
6. Write a note on re-correction of vital functions during acute poisoning
7. Write briefly on special toxicity tests.
8. Explain genotoxicity and teratogenicity with suitable examples.
9. Explain mutagenicity and chronic toxicity with suitable examples.
10. Explain the terms carcinogenicity and mutagenicity with examples.
11. Write clinical symptoms and outline steps involved in the treatment of barbiturates poisoning.
12. Write the signs , symptoms and treatment of morphine poisonings.
13. Write clinical symptoms of heavy metals poisonings. Add a note on their antidotes.
14. Write the signs, symptoms and treatment of arsenic poisonings.
15. Write clinical symptoms and outline steps involved in the treatment of lead poisonings.

SHORT ANSWERS 2MARKS

1. Define acute toxicity.
2. What is teratogenicity ? Give an examples
3. Explain genotoxicity
4. Mention antidotes for morphine and organophorous poisinings.
5. Write signs and symptoms of organphosphorous poisonings.
6. Mention four heavy metals and their antidotes.
7. Write antidotes for morphine and lead poisoning.
8. Mention antidotes for arsenic and lead.
9. What are the antidotes for lead and mercurty?

9. CHRONOPHARMACOLOGY

SHORT ANSWERS 2 MARKS

1. Explain the term chronopharmacology.
2. Write significance of chronopharmacology
3. Write the significance of chronopharmacology.
4. Define biological rhythms.
5. Mention four biological rhythms.
6. What are infradian rhythms? Give an example.
7. What is circadian rhythms? Give an example of drugs affected by it.
8. Mention drugs affected by circadian rhythm.
9. What is biological clocks?
10. Mention important classes of drugs affected by biological cycles.

Deepika Prajapati

Assignments

Pune District Education Association's
Shankarrao Ursal College of Pharmaceutical Sciences and Research Centre, Kharadi, Pune-411 014.

ASSIGNMENT

Course: Pharmacology III

Course code:BP602T

Class: Third Year B. Pharm.

Semester: Sem-VI (2019P)

Academic Year: 2023-24

Name : Shinde Rutuja Rajiv.
Class : T.Y.B.Pharm (Sem 6th)
Roll no : 55.

Pharmacology – III

Asthama.

• Definition :-

Asthama is defined as a chronic inflammation disease of airway that is characterised by increase responsiveness of tracheobronchial tree to a multiplicity of stimuli

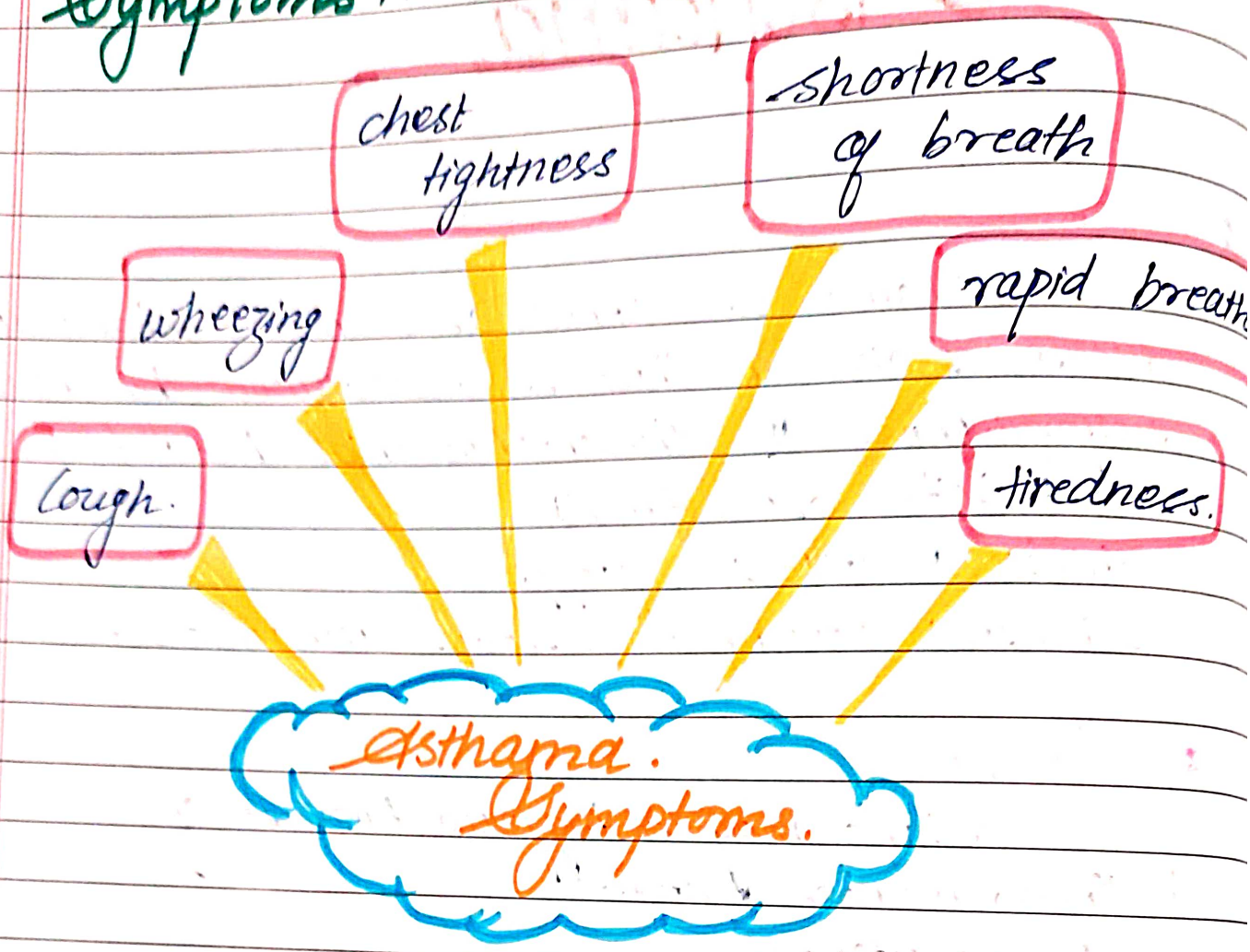
Extrinsic : episodic, atopy.
Intrinsic : perennial, status asthamaticus.

• Causes :-

Asthma may be triggered because of :

1) Environmental factors.
   Air pollutants.
   Smoking
   Dust
   Chemicals.
2) Genetic factor :-
   Family history
   Certain genes.

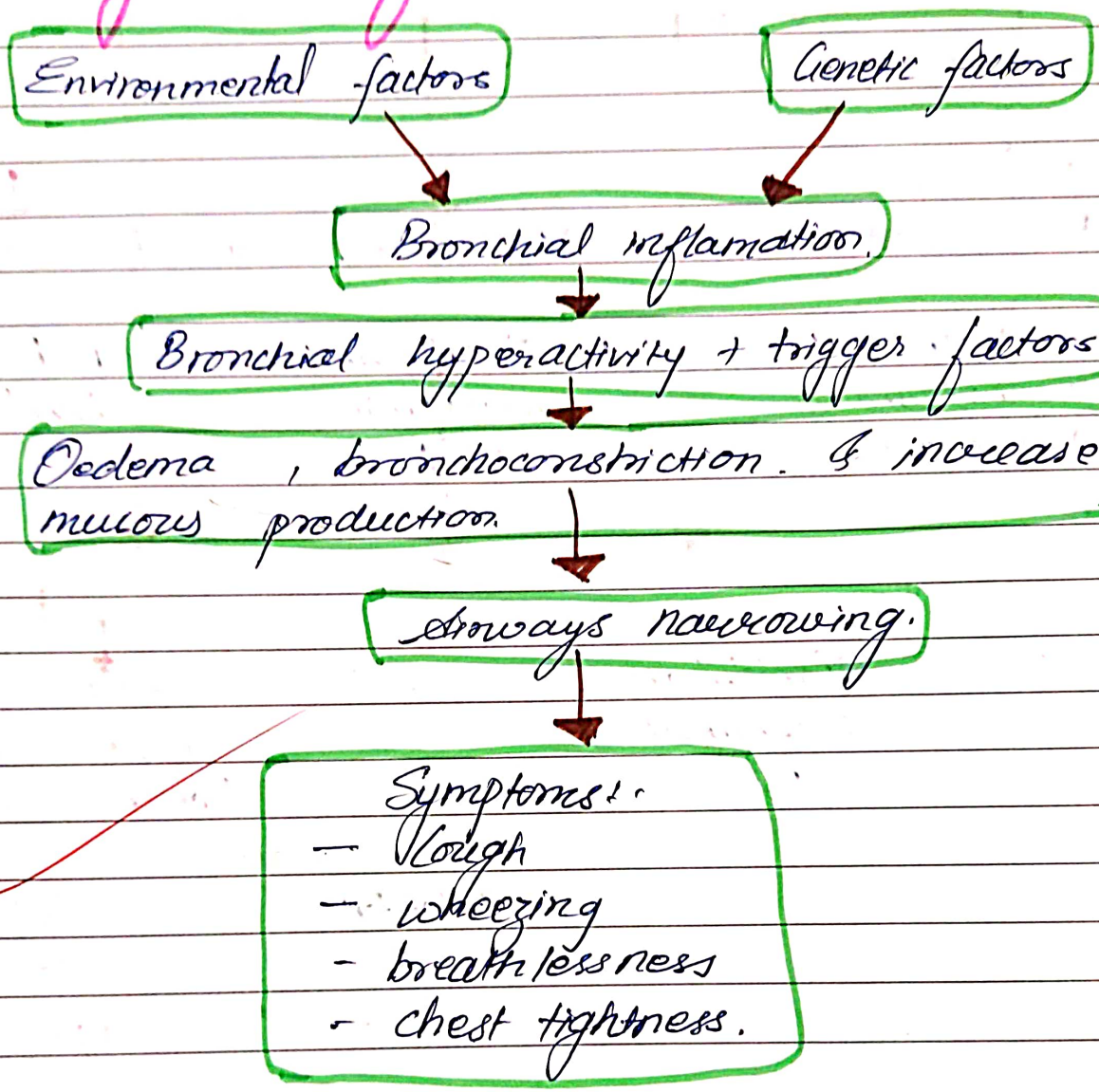
Symptoms :-



Types:

1) Extrinsic Asthama (Allergic)
2) Intrinsic Asthama (Non allergic)
3) Mixed asthama (Extrinsic and Intrinsic)
4) Occupational Asthama.
5) Drug Induced Asthama.
   - Aspirin Induced Asthama.
   - NSAID Induced Asthama.
6) Excercise induced Asthama.
7) Cough variant Asthama
   - Very common (especially in children)

Pathogenesis of Asthama.



Drugs Used in treatment of Asthama.

Drugs for Bronchial Asthama.

Broncho-dialators

- β_2 - Sympathomimetics
  - Salbutamol
  - Terbutaline.
  - Bambuterol.
- Methylxanthenes
  - Theophylline
  - Amelophyline
  - Choline.
- Anticholinergics
  - Ipratropium
  - Thidropium

Leukotrienes Antagonist
- Montelukast
- Zafirlukast

Mast cell stabelizers
- Sod. cromoglycate
- Ketotifen

Corticosteroids

Systemic
Hydrocortisone
Prednisolone

Inhalation
- Beclomethason dipropionate.
- Budesonide

Anti-IgE antibody
Omalizumab.

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Deepika Prajapati

Pune District Education Association's

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

Continuous Assessment I examination 2023-2024

Subject: - Pharmacology- III (BP602T)

Class: -Third Year B. Pharm. Semester VI (2019P)

Mark-sheet of Assignment

Sr. No	Name of the students	Marks (Max. Marks 10)
1.	Miss Rutuja Shinde	9
2.	Mr. Yogiraj Thombare	8
3.	Miss Rutuja Surwase	8
4.	Mr. Gaurav Todermal	6
5.	Miss Akshada Shinde	6
6.	Miss Mrunali Tade	8
7.	Miss Neha Rikame	8
8.	Miss Divya Chavan	9

Deepika Rajpati – Deepika

Name and Signature of Subject Teacher

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

Assignment on Problems for Structure Elucidation

Subject: Modern Pharmaceutical Analytical Techniques (MPAT 101T)

Class: First Year M. Pharm. Sem-I (2019 P) **Date: 20-12-2023**

Max Marks: 25

Q1. An Organic compound with molecular mass 58 is transparent above 200 nm in its ultraviolet spectrum .In infrared , the absorption bands formed are i)2941-2857 cm^{-1} (m) ii)1458 cm^{-1} (m) and in NMR spectrum two signals are formed i) Triplet 5.25 τ (J=7.1cps ,29.4 squares) and ii) quintet 7.25τ (τ=7.1 cps,14.6 squares).

Q2.An organic compound with molecular mass 69 is transparent above 200 nm. The absorption bands in infrared spectrum are i)2941 cm^{-1} (m) ii)2273 cm^{-1} (m) iii)1460 cm^{-1} (m).In NMR two signals are formed one is septet at 7.28τ (J=6.7 cps .4.2 squares) and another is doublet at 8.67τ (J=6.7 cps and 25.8 squares).

Q3.A compound with molecular mass 71 is transparent in the UV spectrum. In infrared medium bands are formed at i)2941-2857 cm^{-1},2247 cm^{-1} and at 1460 cm^{-1}. Two singlets are formed at i)5.78τ (16.8 squares) and ii) 6.51τ (23.9 squares).

Q4. An organic compound with molecular mass 72 absorbs at 274 nm ε_{max} 17. In infra-red, a strong absorption band is formed at 1715 cm^{-1} and medium absorption bands are formed at 2941-2857 cm^{-1} (m) and at 1460 cm^{-1} (m).The signals in the NMR spectrum are i)7.52 τ quartet (J=7.3 cps ,12 squares)7.88 τ singlet (17.6 squares) and 8.93 τ (triplet)(J = 7.3 cps ,18.2 squares).

Q5. A compound with molecular weight 116 gave the following spectral information:

(i) UV: 283 mμ ε_{max} 22.

ii) IR: 3000- 2500 (b), 1715 (s), 1342 cm^{-1} (w).

iii) NMR: 7.88 τ Singlet (3H), 7.40 τ Triplet (2H), 7.75 τ Triplet (2H) and -1.1 τ singlet (1H).

Find the structural formula of the compound.

2008.

Dr. Vijaya Barge

Pune District Education Association's

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

Assignment for Practice (2023-24)

Subject: Modern Pharmaceutical Analytical Techniques (MPAT101T)

Class: First Year M. Pharm. Sem-I (2019 P) **Time: 1.5 hrs.**

Date: 20.12.2023 **Max Marks: 25**

MARKSHEET

Roll No.	Marks obtained out of 25
1	23
2	24
3	22
4	21
5	24
6	23
7	25
8	23
9	23
10	25
11	24
12	25
13	25
14	24
15	22
16	21
17	23

1/2

18	22
19	Ab
20	23
21	24
22	24
23	24
24	22
25	24
26	24
27	24
28	25
29	23
30	22
31	23

Name and sign of subject teacher Dr. Vijaya Barge

2/2

25/25

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Page No.
Date 20 12 23

MPAT ASSIGNMENT

Name :- Rajeshwari pattaraya Pawar.
Sub :- Modern Pharmaceutical Analytical Techniques
Roll No :- 13

Problem 1 :- An organic compound with molecular mass 58 is transpecent above 200 nm, in its UV spectrum. In IR, the absorption bands formed are

i) 2941 - 2859 cm^{-1}
2) 1458 $(m^{-1}$

In NMR spectrum, two signals are formed.

1) Triplet 5.25 I (J = 7.1 cps, 29.4 square)
2) quintet 7.25 I (J = 7.1 cps, 14.6 square)

Solution :-

A] In UV region 200 nm λmax are absorbed & got a σ-n transition like C-O-

B] In IR region.

1) 2941 - 2859 cm^{-1} vibrational frequency are absorbed by SP_3 (C-H) streching vibration
2) 1458 is a range of SP_3 (CH) Bonding Vibration.

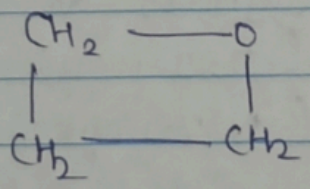
C] NMR :-

i) Triplet- $\longrightarrow -CH_2$
ii) quintet $\longrightarrow -CH_2-CH_2-CH_2$

i) Triplet are given by $-CH_2$
neighbouring proton
n+1
∴ 2+1 $-CH_2$ group

ii) quintet are given by the 4 neighbouring Proton
n+1
4+1 $-CH_2-CH_2-CH_2$ may be present.

Expected structure is



Problem 2 :- An organic compound with molecular wt 69 is transparent above 200 nm. The bands in IR spectrum are 1) 2941 cm^{-1}
2) 2273 cm^{-1}
3) 1460 cm^{-1}

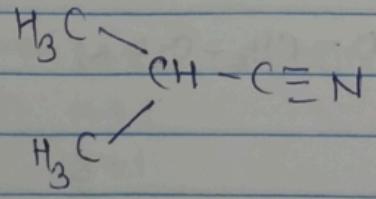
In NMR two signals are formed
i) Septet at 9.28 τ (J = 6.7 CPS)
ii) doublet at 8.67 τ (J = 6.7 CPS & 25.36)

Solution :- In IR region.
1) 2941 cm^{-1} → It is given by SP_3 (C-H) streaching
2) 2273 cm^{-1} → It is given by presence of -C≡N
3) 1460 cm^{-1} → It is due to (C-C) stretching

In NMR region.

Signal	Neighbouring Proton & Carbon
i) Septet :-	H_3C (2) — CH — CH_3 (6) ; 6 + 1 → Neighbouring proton
ii) doublet :-	-CH ; 1 + 1 → Neighbouring proton

Expected structure -



Problems :- A compound with mol. mass. 71 is transpecent UV spectrum.
In IR bands are formed at i) 2941 - 2857 cm^{-1}
ii) 2247 cm^{-1}
iii) 1460 cm^{-1}

In NMR two signals are formed at
i) 5.78 τ (1.68 square)
ii) 6.51 τ (2.3.9 square)

Solution :- In IR region -
1) 2941 - 2857 cm^{-1} vibrational frequency band are appe due to sp^3 hybridization & -C-H. streching Band.
2) 2247 cm^{-1} → In IR 2280 - 2200 cm^{-1} region absorbed triplet bond It may be $-C \equiv N$
3) 1460 cm^{-1} vibrational frequency Band are appear due the -C-C stretching Bond.

In NMR region
Two singlet it means a neighbouring atom don't have any neighbouring proton According to mol. mass 71. this neighbouring atom are may be $-O-$ & both carbon atom are attach with that atom.

Expected structure is

$$H_3C-O-CH_2-C \equiv N$$

Problem 4 :- An organic compound with mol. mass 72 absorb at 274 nm E_{max} 17.

In IR i) a strong absorption band is formed a 1715 cm^{-1}.

ii) medium absorption bands are formed at 2941-2857 cm^{-1}.

iii) 1460 cm^{-1} (m).

The signal in NMR spectrum are

i) 7.52 τ (quartet) (J=7.3 cps, 12 square)

ii) 7.88 τ singlet (19.6 squares)

iii) 8.98 τ Triplet (J = 7.3 cps, 18.2 square)

Solution:- A] By UV spectrum :-

The presence of UV spectrum at 274 nm which show $n \rightarrow \pi^*$ transition. So this spectrum are may be due to carbonyl Group C=O with low extinction coefficient.

B] IR → i] 1715 cm^{-1} - strong absorption band are formed due to presence of Carbonyl Group >C=O, this Carbonyl Group presence are confirmed.

ii] 2941-2857 cm^{-1} - It shows due to C-H stretching

iii] 1460 cm^{-1} — It shows C-C stretching presence

In NMR -

i] quartet → It show neighbouring atom have 3 protons-

n+1

3+1

↳ neighbouring proton

It means $-CH_3$ molecule are here.

ii) Singlet – singlet means neighbouring atom are don have any neighbouring proton
It means neighbouring atom is $-\underset{1}{\underline{C}}-$

iii) Triplet – It means neighbouring atom have 2 neighbouring proton
It mean $-\underline{CH_2}$ is neighbouring atom
n+1
2+1
↳ neighbouring proton

3 Expected structure —

$$H_3C-\underset{}{CH_2}-\overset{\overset{O}{\|}}{C}-CH_3$$

Problem 5 :- A compound with mol. wt 116 gave the following spectral information :

i) UV – 283 mμ Emax 22

ii) IR - a) 3000 - 2500 (b)
b) 1715 (s) cm^{-1}
c) 1342 cm^{-1}

iii) NMR . a) 7.88 τ singlet (3H)
b) 7.40 τ triplet (2H)
c) 7.75 τ triplet (2H)
d) 1.1 τ singlet (1H)

Solution :-

i) UV :- In UV 283 mμ means low intensity carbonyl group present

$>C=O$

ii) IR :-

a) 3000 - 2500 cm^{-1} → In IR region this frequency are absorbed by O-H Stretching Band

b) 1715 cm^{-1} → It shows the presence of Carbonyl Group $>C=O$

c) 1342 cm^{-1} → This IR region frequency are absorbed by -C-O- functional Group.

[III] NMR.

signal.	Main atom have Proton	Neigh bouring have Proton atom	structure
① singlet	3H	NO - proton	main atom ↗ O - C - CH_3 ↓ neighbouring atom
② Triplet- 7.40 t	2H	2H	$-CH_2-CH_2-$ 7.40 [
③ Triplet- 7.95 t	2H	2H	$-CH_2-CH_2-$
④ singlet	1H	NO-Hydrogen	$-\overset{O}{\overset{\|\|}{C}}-O-H$

Expected structure -

$$H_3C-\overset{O}{\overset{\|\|}{C}}-CH_2-CH_2-COOH$$

singlet (7.88 t) — triplet (7.95 t) — triplet (7.40 t) — singlet (1.1 t)

Pune District Education Association's

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

Date: 22/11/2023

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

1/2

a) Absorbance

b) Transmittance

c) Absorptivity

d) molar absorptivity

7. Originate due to electronic transitions in benzenoid 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.U. Baige)

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

GPAT Guidance Program Examination 2023-24

MARK SHEET

Name of the Examiner: - Dr. Vijaya Barge **Maximum Marks: - 10**

Date: 22/11/2023

Sr. No.	Marks Obtained
01	09
02	08
03	10
04	10
05	09
06	08
07	07
08	08
09	09
10	09
11	10
12	09
13	09
14	10
15	08
16	10
17	09
18	10
19	08
20	09
21	09
22	08

(Dr. Vijaya Barge)
Name and Signature of Examiner

Pune District Education Association's

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

GPAT Guidance Program 2023-2024

Subject: - Pharmaceutical Microbiology **Max. Marks:-10**

Date:- 06/01/2024 **Time:- 10 min**

Note: 1. All questions are compulsory.

2. Figures to right indicate full marks.

Q.1 Multiple Choice Questions

1) Who invented the system of pasteurization?
   a) Louis Pasteur b) Lord Joseph Lister
   c) Alexander Fleming d) Antony Van Leeuwenhoek
2) When rod shaped bacteria appears in pairs, it is known as?
   a) Diplobacilli b) Streptobacilli
   c) Diplococci d) Staphylococci
3) Bacteria having clusters of flagella at both poles of cells are known as?
   a) Lophotrichous b) Peritrichous
   c) Amphitrichous d) Monotrichous
4) Bacterial locomotion is accomplished by
   a) Fimbria b) Flagella
   c) Ribosomes d) Capsule
5) The first phase of a growth curve is
   a) Lag phase b) Log phase
   c) Stationary phase d) Decline phase
6) Which of the following is prokaryotic microorganism?
   a) Fungi b) Bacteria
   c) Algae d) Viruses
7) What is Mycology?
   a) Study of fungi b) Study of bacteria
   c) Study of virus d) Study of algae
8) The cell wall of fungi is made up of .....
   a) Chitin b) Peptidoglycan
   c) Lipids d) Pectin
9) Which of the following is the example of yeast?
   a) Saccharomyces cerevisiae b) Penicillin notatum
   c) Aspergillus niger d) Aspergillus fumigates
10) Ribosomes of prokaryotes have a sedimentation coefficient of?
   a) 90S b) 80S
   c) 50S d) 70S

Mr. Sujit Kakade

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

GPAT Guidance Program Examination 2023-24 06/1/24

MARK SHEET

Name of the Examiner: - Mr. Kakade S. S. **Maximum Marks: - 10**

Sr. No.	Marks Obtained
01	10
02	09
03	10
04	09
05	08
06	10
07	09
08	08
09	10
10	09
11	09
12	09
13	10
14	10
15	09
16	10
17	08
18	08
19	07
20	08
21	09
22	10

Dr. Sujit Kakade

Name and Signature of Examiner

Pune District Education Association's

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

GPAT Guidance Program 2023-2024

Subject: - Pharmaceutics **Max. Marks: -10**

Date: - 13/01/2024 **Time: - 10 min**

Note: 1. All questions are compulsory.

2. Figures to right indicate full marks.

Q.1 Multiple **Choice Questions**

1. **Green color shows pH**

   ○ 3

   ○ 9

   ○ 5.5

   ○ 8

2. **Glass syringes are sterilized by**

   □ Dry heat

   □ Moist heat

   □ Ethylene oxide

   □ Gamma radiations

3. **Which Mill is used for suspensions and emulsions**

   ○ Ball mill

   ○ Cutter mill

   ○ Fluid Energy Mill

   ○ Colloidal Mill

4. **Powdered Glass test is not performed on**

   ○ Type I glass

   ○ Type II glass

   ○ Type III glass

- ○ Type IV glass

5. **Solid dosage forms include**
   - ○ Syrups
   - ○ Suspension
   - ○ Emulsion
   - ○ Tablets

6. **Karl Fischer Method is used to detect**
   - ○ Density
   - ○ Viscosity
   - ○ Moisture Content
   - ○ Clarity

7. **Microcapsule is not prepared by**
   - ○ Pan Coating
   - ○ Solvent Evaporation
   - ○ Air Suspension
   - ○ Cascade Impactor

8. **Disintegration time of Dispersible tablet is**
   - ○ 3 min
   - ○ 30 min
   - ○ 60 min
   - ○ 2 hrs

9. **Example of chelating agent is**
   - ○ Glycerine
   - ○ CMC
   - ○ Sod EDTA
   - ○ Shellac

10. **Tablets are evaluated for**

- ○ Clarity
- ○ Pyrogens
- ○ Weight Variation
- ○ All of the above

Answer
mrs. T. P. Shangrapawar

Pune District Education Association's

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

GPAT Guidance Program 2023-2024

Subject: - Novel drug delivery system **Max. Marks: -10**

Date: - 25/01/2024 **Time: - 10 min**

Note: 1. All questions are compulsory.

2. Figures to right indicate full marks.

Q.1 Multiple Choice Questions

1. A lipid bilayer structure that encloses an internal aqueous volume

a). Niosome b). Liposome

c). Solid lipid nanoparticle d). Nanoparticle

2. A spherical solid lipid particle prepared from physiological lipid, dispersed in water or in aqueous surfactant solution.

a). Solid lipid nanoparticle b). Liposome

c). Niosome d). Nanoparticle

3. A non-ionic surfactant based multilamellar or unilamellar vesicular structure

a). Microspheres b). Liposome

c). Niosome d). Nanoparticle

4. This particulate system is also known as "bodies of water".

a). Aquasome b). Liposome

c). Niosome d). Dendrimer

5. Which of the following is a non- erodible insert

a). Ocussert b). Collagen shield

c). NODS d). SODI

6. A prominent structure for ocular absorption of drugs

a). Conjunctiva b) Choroid

c). Sclera d) Cornea

7. The polymer used in "Lacriset"

a). Hydoxy ethyl cellulose b). Hydoxy Methyl Cellulose

c). Methyl cellulose d) Hydroxy propyl cellulose

8. An ocular device that has the shape of a flag

a). Ocusert b). Lacrisert

c). NODS d). SODI

9. Which of the following does not constitute an appendageal route

a). Sweat glands b). Hair follicle

c). Sebaceous gland d). Stratum corneum

10. "Transderm-Scop" is used in the treatment of

a). Hypertension b). Angina

c). Motion sickness d). Antidote for smoking

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

GPAT Guidance Program Examination 2023-24

MARK SHEET

Name of the Examiner: - Mrs. Trupti Shaha **Maximum Marks: - 10**

Date: 25/01/2024

Sr. No.	Marks Obtained
01	7
02	6
03	8
04	9
05	5
06	8
07	8
08	7
09	6
10	7
11	7
12	8
13	8
14	9
15	5
16	7
17	7
18	8
19	6
20	7
21	7
22	8

Trupti.

Name and Signature of Examiner

TRUPTI SHAHA.

Pune District Education Association's

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

Research Activity for UG/PG/Ph. D. students

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A Review on Transdermal Patches

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Abstract :

Drug delivery can easily be applied to the surface of the human skin. The skin on an adult average has a surface area of around 2 m² and receives approximately 1/3 of the blood that circulates throughout the body. In the last few decades, the pharmaceutical industry has placed a greater emphasis on establishing controlled medication delivery. Currently, 74% of medications are taken orally, and their effectiveness is found to be subpar. A transdermal drug delivery system was developed to enhance such traits. Researchers have been interested in transdermal drug delivery because of its many biomedical benefits. However, the biggest obstacle to effectively delivering medication molecules to the systemic circulation via this route is the excellent impervious nature of skin. Transdermal drug delivery, which is distinct from topical drug delivery, is the process of delivering a drug through the skin to produce a systemic effect. Transdermal drug delivery system development is a multidisciplinary endeavor that includes basic feasibility studies, which begin with the choice of a drug molecule and continue through the demonstration of adequate drug flux in an ex vivo and/or in vivo model. The manufacturing of a drug delivery system that satisfies all the strict requirements that are specific to the drug molecule (physicochemical and stability factors), the patient (comfort and cosmetic appeal), the manufacturer (scale-up and manufacturability), and—above all—the economy is critical This review article provides an overview of TDDS, its advantages over conventional dosage forms, drug delivery routes across human skin, penetration enhancers, various components of Transdermal patches, types of Transdermal patches..

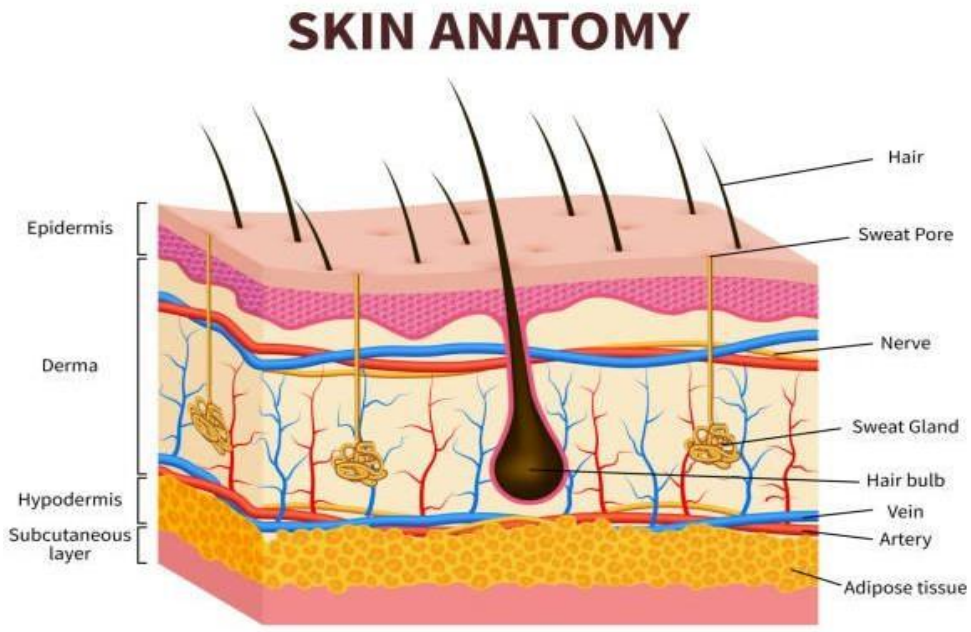
Keywords :

TDDS, Topical drug delivery, Types of transdermal patches , novel drug delivery system.

Introduction :

Effective drug delivery in addition to appropriate drug selection are necessary for the best possible therapeutic results. Drug delivery can easily be applied to the surface of the human skin. The amount that is absorbed of a drug at the site of action, which is influenced by the dosage form and the degree of absorption of the drug there, determines the pharmacological response, or the intended therapeutic effect as well as the undesirable side effect.[1] The conventional methods of administering medication have been injections and tablets; however, new options are gaining traction. Transdermal is one extremely effective alternative delivery method. The skin on an adult average has a surface area of about 2 m^2 and receives about 1/3 of the blood that circulates throughout the body. In order to administer a medication via the skin's transdermal layer, it is imperative to comprehend the skin.[2]

ANATOMY AND PHYSIOLOGY OF SKIN:



STRUCTRE OF SKIN:-

The skin can be considered to have four distinct layers of tissue.

1. Stratified, vascular ,cellular epidermis
2. Stratum Corneum
3. Dermis
4. Subcutaneous connective tissue (hypodermis)

EPIDERMIS:-

The epidermis is a stratified squamous epithelium, composed of proliferating basal and differentiated suprabasal keratinocytes which acts as the body's major barrier against an inhospitable environment, by preventing pathogens from entering, making the skin a natural barrier to infection. It also regulates the amount of water released from the body into the atmosphere through transdermal water loss.[3]

STRATUM CORNEUM:-

The stratum corneum is the outermost layer of the epidermis, consisting of dead cells (corneocytes). The purpose of the stratum corneum is to form a barrier to protect underlying tissue from infection, dehydration, chemicals and mechanical stress. (Figure 1.1) The Stratum corneum is 10 to 20 cell layer thick over most of the body. Each cell is flat, late like structure 34- 44 pm long, 25-36 um wide, 0.5-0.20 um thick with surface area of 750 to 1200 um stocked up to each other in brick like fashion. Cells of the stratum corneum contain a dense network of keratin, a protein that helps keep the skin hydrated by preventing water evaporation. These cells can also absorb water, further aiding in hydration. In addition, this layer is responsible for the "spring back" or stretchy properties of skin. A weak glutenous protein bond pulls the skin back to its natural shape.[4]

DERMIS:-

Dermis is 3 to 5mm thick layer and is composed of a matrix of connective tissue, which contains blood vessels, lymph vessels and nerves. The cutaneous blood supply has essential function in regulation of body temperature. It also provides nutrients and oxygen to the skin while removing toxins and waste products. Capillaries reach to within 0.2 mm of skin surface and provide sink conditions for most molecules penetrating the skin barrier.[5]

SUBCUTANEOUS TISSUE (HYPODERMIS):-

The subcutaneous tissue (from Latin subcutaneous, meaning "beneath the skin"), also called the hypodermis, hypoderm (from Greek, meaning "beneath the skin"), the hypodermis or subcutaneous fat tissue supports the dermis and epidermis. It serves as a fat storage area. This layer helps to regulate temperature, provides nutritional support and mechanic al protection. It carries principal blood vessels and nerves to skin and may contain sensory pressure organs. For transdermal drug delivery, drug has to penetrate through all these three layers and reach into systemic circulation while in case of topical drug delivery only penetration through stratum corneum is essential and then retention of drug in skin is desired.[6]

COMPONENTS OF TRANS- DERMAL PATCHES :

a) **Release Liner:** Protects the Patch during storage.
b) **Drug reservoir:** The most important part of TDDS is drug reservoir. It consists of drug particles dissolved or dispersed in the matrix. To make the drug soluble, solvents and co solvents are used(7).
c) **Adhesive:** Serves to adhere the components of the Patch together along with adhering the Patch to the skin. The adhesive must possess sufficient adhesion property so that the TDDS should remain in place for a long time. Commonly used adhesives are silicone adhesives, poly isobutylene adhesives and poly acrylate based adhesives [8].
d) **Membrane:** Membrane controls the release of the drug from the reservoir and multi- layer Patches.
e) **Backing:** Protects the Patch from the outer environment. Commonly used backing materials are polyesters, aluminized polyethylene terepthalate and siliconized polyethylene terephthalate[9].

TYPES OF POLYMER USED :

(I) Polymer Matrix :

a) **Natural polymers:** Cellulose derivative. Gelatin, Waxes, Proteins, Gum, Shellac, Natural rubber, starch.
b) **Synthetic Elastomers:** Hydrin rubber, silicone rubber, Nitrile, Acrylonitrile, Neoprene.
c) **Synthetic polymers:** Polyvinyl alcohol. polyvinyl chloride, polyethylene, polypropylene, polyamide, polyurea, epoxy.

(II) Drug :

Drug solution in direct contact with release liner.

Physiochemical properties :

a) The drug should have a molecular weight less than 1000 Daltons.
b) The drug should have affinity for both lipophilic and hydrophilic Phases.
c) The drug should have a low melting point.

Biological properties :

a) The drug should be potent with a daily dose of the order of a few mg/day.
b) The half life (15) of the drug should be short. C .The drug must not produce allergic response.

(III) Permeation Enhancer :

The flus J. of drug across the skin can be write as J = D dc/dx

1= the Flux

D = diffusion coefficient

C = Concentration of the diffusing spectes X-Spatial coordinate

a) Solvent: These compounds increase penetration possibly by swelling the polar pathway. e.g.: Alcohols Methanol & Ethanol, Dimethyl acetemide, Propylene glycol and Glycerol.

b) Surfactants: The ability of a surfactant to alter penetration is a function of the polar head chain length. group and the hydrocarbon

L Anionic surfactant-Sodium lauryl sulphate Diacetyl sulphosuccinate

Nonionic Surfactant:-Pluronic F 127, Pluronic F68

Bile Salt-Sodium taurocholate, Sodium deoxycholate.

(IV) Other excipients :

Adhesives

a) It should not be irritant
b) It should be easily removed
c) It should not leave an un washable residue on the skin
d) It should have excellent contact with the skin.
e) Physical & chemical compatibility with the drug
f) Permeation of drug should not affect.

TYPES OF TRANSDERMAL PATCHES :

a) Single layer drug in adhesive: In this type the adhesive layer contains the drug. The adhesive layer not only serves to adhere the various layers together and also responsible for the releasing the drug to the skin.

b) Multi-layer drug in adhesive: This type is also similar to the single layer but it contains an immediate drug release layer and other layer will be a controlled release along with the adhesive layer.

c) Vapour Patch: Commonly used for releasing of essential oils in I decongestion. Various other types of vapor Patches are also available in the market which are used to improve the quality of sleep and reduces the cigarette smoking conditions [(10)].

d) Reservoir system: The drug releases only through the rate controlling membrane, which can be micro porous or non porous. In the drug reservoir compartment, the drug can be in the form of a solution, suspension, gel or dispersed in a solid polymer matrix.

e) Matrix system:

i. Drug-in-adhesive system [(11)].
ii. Matrix-dispersion system

f) Micro reservoir system:

In this type the drug delivery system is a combination of reservoir and matrix- dispersion system. This thermodynamically unstable dispersion is stabilized quickly by immediately cross-linking the polymer in situ by using cross linking agents [(12)].

ADVANCE DEVELOPMENT IN TDDS :

Electroporation which uses short electrical pulses of high voltage to create transient aqueous pores in the skin.

Sonophoresis (which uses low frequency ultrasonic energy to disrupt the stratum corneum). Even magnetic energy, coined magnetophoresis has been investigated as a means to increase drug flux across the skin [(16)].

MECHANISM OF ACTION OF TRANSDERMAL PATCH :

The application of the Transdermal Patch and the flow of the active drug constituent from the Patch to the circulatory system via skin occur through various methods. Drug diffusion mechanism through a Transdermal Patch

Popular Uses

- The first commercially available vapour Patch to reduce smoking was approved in Europe in 2007. The highest selling Transdermal Patch is the nicotine Patch, which releases nicotine in controlled doses to help with cessation of tobacco smoking.
- Two opioid medications used to provide round-the-clock relief for severe pain are often prescribed in Patch form:. Fentanyl and Buprenorphine[17].
- Estrogen Patches are sometimes prescribed to symptoms as treat menopausal well as menopausal osteoporosis. post- Other Transdermal Patches for hormone delivery include the contraceptive Patches.
- Emsam, a transdermal form of the MAOI selegiline, became the first transdermal delivery agent for an antidepressant approved for use in the US. in March 2006.
- The Clonidine anti-hypertensive available drug in Transdermal Patch form under the brand name Catapres-TTS[18]

Transdermal patches Are Not Used in

1. For acute pain
2. Rapid dose titration is required.
3. Requirement of dose is equal to or less than 30 mg/24 hrs.[19]

Factors Affecting Transdermal Bioavaibility :

1. Physiological factors
2. Formulation factors

Physiological factors include :

1. Age of the patient
2. Stratum corneum layer of the skin
3. Anatomic site of application on the body
4. Skin condition and disease
5. Race
6. Skin metabolism
7. Desquamation (peeling or flaking of the surface of the skin)
8. Skin irritation and sensitization [20,21]

Table 1: Examples of marketed transdermal drug delivery system

Sr.	Therapeutic agents	TDDS	Designs
1	clonidine	Catapres – TTS (Boehringer Ingelheim)	Four – layer patch
2	Estradiol	Estraderm (Novartis)	Four – layer patch
3	Estradiol	Vivelle (Novartis)	Three- layer system
4	Estradiol	Climara (Novartis)	Three –layer system
5	Fentanyl	Duragesic(janssen)	Four -layer patch

6	Nicotine	Prosstep(lederie)	Multilayer round patch
7	Testosterone	Testoderm(Alza)	Three- layer patch
8	Nicotine	Habitrol(Novartis consumer)	Multilayer round patch
9	Nicotine	Nicoderm CQ (Smithkline Beecham Consumer)	Multilayer rectangular patch
10	Nicotine	Nicotrol (McNell Consumer)	Mulltilayer rectangular patch

EVALUATION OF TRANSDERMAL PATCHES :

(A) Physical evaluation : [22]

- Drug content uniformity
- Folding endurance
- Thickness of Patches
- Moisture Lost(23)
- Moisture Gain
- Tensile strength
- Drug carrier Interaction[24]

(B) In vitro method :

In vitro study of Transdermal Patch through Franz diffusion cell [25-27]

Kinetics of drug release

1. Physical Evaluation :

Thickness: The thicknesses of the prepared Patches were measured in 3 different points by using a vernier caliper and determined the average thickness.

Drug content determination: Aπ accurately weighed portion of film (about 100 mg) is dissolved in 100 mL of PBS in which drug is soluble and then the solution is placed in magnetic stirrer continuously for 24 h. Then the whole solution is sonicated.. After sonication and subsequent filtration. drug in solution is estimated by UV spectrophotometer in 10, 20, 30, 40, 50 µg/ml (dilutions).

Weight Variation: The Patches were subjected to mass variation by individually weighing randomly selected Patches.

Moisture lost: The prepared films were weighed individually and kept in a desiccator. Containing calcium chloride at room temperature for 24 h. The films were weighed again after a specified interval. The percent moisture content is calculated using following formula.

% Moisture content = [Initial weight-Final weight/Initial weight] x100

Moisture gain: The accurately weighed films were kept in desiccators at room temperature for 24 hours, containing saturated solution of potassium chloride in order to maintain 80-90% RH. After 241 hours the films were taken out and weighed again. The percentage moisture uptake was calculated from the formula mentioned below.

% moisture uptake = [Final weight- Initial weight/ initial weight] x100

Folding Endurance: Evaluation of folding endurance involves determining the folding capacity of the films subjected to frequent extreme conditions of folding. Folding endurance is determined by repeatedly folding the film at the same place until it break. The number of times the films could be folded at the same place without breaking is folding endurance.

Tensile strength: Tensile strength can be measured by the % elongation. Strech the membrane until it started to break. To measure, a breaking point. In this evaluation. parameter firstly cut a certain square shaped membrane, in these case, chosen about 3x3 cm length and 3 cm breadth, two different ends of this square shaped part of membrane attach with the help of clip, one end of the clip to be fixed, another end of clip attach with the point note down the weight, till the breaking point. At its breaking point note down the weight.

Flatness: Longitudinal strips were cut out from the prepared medicated film the lengths of each strip were measured. Then variation in the length due to the non- uniformity in flatness was measured. Flatness was calculated by measuring constriction of strips and a zero percent constriction was considered to be equal to a hundred percent flatness.

In-vitro skin permeation studies: The amount of drug available for absorption to the systemic pool is greatly dependent on drug released from the polymeric transdermal films. The drug reached at skin surface is then passed to the dermal microcirculation by penetration through cells of epidermis, between the cells of epidermis through skin appendages. Usually permeation studies are performed by placing the fabricated Transdermal Patch with goat skin or rat skin in between receptor and donor compartment in vertical diffusion cell such as Franz diffusion cell or keshary-chien- diffusion cell. (28) The transdermal system is applied to the hydrophilic side of the membrane and then mounted in the diffusion cell with lipophillic side in contact with receptor fluid. The receiver compartment is maintained at specific temperature (usually 32+5°C for skin) and is continuously stirred at a constant rate. The samples are withdrawn at different time intervals and equal amount of buffer is replaced each time. The samples are diluted appropriately and absorbance is determined using double beam spectrophotometer. [(29)]

1.2.1 ADVANTAGES OF TRANSDERMAL DRUG DELIVERY SYSTEM:-

1. Transdermal drug delivery can be used as an alternative delivery system for patients who cannot tolerate oral dosage forms.
2. Avoid the first pass effect e.g. transdermal nitroglycerin. It is rapidly metabolized by the liver when taken orally.
3. Drug therapy may be terminated rapidly by removal of the application from the surface of the skin.
4. Self administration is possible with these systems.
5. Improved patient compliance and comfort via non-invasive, painless and simple application.
6. Improved bioavailability.
7. More uniform plasma levels and maintain plasma concentration of potent drugs.
8. Longer duration of action resulting in a reduction in dosing frequency.
9. Transdermal medication delivers a steady infusion of a drug over an extended period of time.
10. An equivalent therapeutic effect can be elicited via transdermal drug input with a lower daily dose of the drug than is necessary, e.g. the drug is given orally.
11. They are easily and rapidly identified in emergencies (eg, unresponsive, unconscious or comatose patient) because of their physical presence, features and identifying markings.
12. It is of great advantage in patients who are nauseated or unconscious.
13. Drugs that cause gastrointestinal upsets can be good candidates for transdermal delivery because this method avoids, direct effects on stomach and intestine.

14. Peaks and troughs in plasma level can be avoided, which reduce the risk of side effects. Thus, drugs that require consistent plasma levels are very good candidates for transdermal drug delivery
15. Allows continued drug administration permitting the use of a drug with short biological half- life

1.2.2 DISADVANTAGES OF TRANSDERMAL DRUG DELIVERY SYSTEM:-

1. Many drugs especially drugs with hydrophilic structures permeate the skin too slowly may not achieve therapeutic level, Only potent drugs are suitable candidates for transdermal patch because of the natural limits of drug entry imposed by the skin's imperability.
2. The drug, the adhesive or other excipients in the patch formulation can cause erythema, itching, and local edema.
3. The barrier function of the skin changes from one site to another on the same person, from person to person and also with age.
4. Some drugs e.g. scopolamine transdermal patch placed behind the ear, it is uncomfortable.
5. Long time adhere is difficult.
6. Difficult to administer large dose i.e. more than 10 mg/ day. Not suitable for high drug doses.
7. Adhesion may vary with patch type and environmental conditions.
8. Drugs that require high blood levels cannot be administered.
9. Along with these limitations the high cost of the product is also a major drawback for the wide acceptance of this product.

Conclusion :

Successful transdermal drug application requires numerous considerations. Bearing in mind that the basic functions of the skin are protection and containment, it would seem exceptionally difficult to target the skin for drug delivery. However, with our greater understanding of the structure and function of the skin, and how to alter these properties, more and more new drug products are being developed for transdermal delivery. The properties of the drug, the characteristics of the transdermal device, selection of in-vivo model and the status of patient's skin are all important for safe and effective drug delivery. The transdermal drug delivery system could be one day one of the best novel drug delivery system.

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A Review on Continuous Glucose Monitoring System: A Competent Technique in Monitoring and Management of Blood Glucose Levels

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ABSTRACT

Continuous glucose monitoring system (CGMS) is an emerging and widely accepted technique for monitoring and management of blood glucose levels. Blood glucose level can be compared with a tennis ball, the way a tennis ball bounces blood sugar also behaves the same going from high to low rapidly. Without having an accurate measurement of the patient's level of sugar, injecting insulin could pose more of a risk to the patient rather than a benefit by inducing hypoglycemia. Continuous glucose monitoring system measures blood glucose level every 5-15 minutes of intervals which helps in having a clear idea of blood glucose level and accordingly dose of insulin that can be administered. This review discusses the history of blood glucose monitoring in the past 100 years, and also gives detailed information on the continuous glucose monitoring system, its working, technology, its wide usage and its superiority over other glucose monitoring techniques and limitations that are to be addressed, and also giving a view on how the future will be of glucose monitoring based on the survey of the variety of literature available on the topic. This review will help readers to understand the continuous glucose monitoring system in the most precise manner and will help to adopt continuous glucose monitoring systems more efficiently in the management of diabetes.

KEYWORDS: *Continuous glucose monitoring system, CGM, History of Glucose monitoring, Future of Glucose monitoring, Flash glucose monitoring, SMBG, Diabetes, CGM sensor technology, Artificial Pancreas, Closed loop system, Glucose monitoring, Glucose monitors*

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INTRODUCTION

Diabetes is one of the largest global health emergencies of this century, ranking among the 10 leading causes of mortality together with cardiovascular disease (CVD), respiratory disease, and cancer. According to the World Health Organization (WHO), non-communicable diseases (NCDs) accounted for 74% of deaths globally in 2019, of which, diabetes resulted in 1.6 million deaths, thus becoming the ninth leading cause of death globally. By the year 2035, nearly 592 million people are predicted to die of diabetes [1]. India has an estimated 77 million people (1 in 11 Indians) formally diagnosed with diabetes, India ranks second most affected in the world, after China. Furthermore, 700,000 Indians died of diabetes, hyperglycemia, kidney disease, or other complications of diabetes in 2020. One in six people (17%) in the world with diabetes is from India [2]. In 2020, according to the International Diabetes Federation (IDF), 463 million people have diabetes in the world of which 77 million belong to India. According to the IDF estimates, India has the second highest number of children with type 1 diabetes after the United States. As Per the World Health Organization, 2% of all deaths in India are due to diabetes [2]. As it all makes the issue of Diabetes very severe and precautionary steps should be taken to control the number of individuals with diabetes.

Type 1 diabetes is a demanding lifelong condition. It requires individuals to measure blood glucose multiple times a day, facilitating insulin dose adjustment in the unrelenting endeavour to achieve normoglycaemia and minimize the future risk of micro and macrovascular complications [3]. Diabetes

is characterized by chronic hyperglycemia and causes long-term complications like retinopathy, neuropathy, and nephropathy. It generally accelerates macro- and microvascular changes. Because of lifestyle changes (i.e., eating more and exercising less), diabetes has become a global epidemic [4]. Despite major progress in the care of people living with Type 1 diabetes, many fail to achieve modern glycaemic targets. Blood glucose level can be compared with a tennis ball, the way a tennis ball bounces blood sugar also behaves the same going from high to low rapidly. A key barrier to achieving near-normal glucose levels is the need for frequent finger stick blood glucose monitoring. Pain and inconvenience are recognized reasons for nonadherence with self-monitoring of blood glucose [3].

A continuous glucose monitor is a wearable body sensor that automatically and repeatedly measures glucose at regular intervals (ranging from every 5 to 15 minutes) from interstitial fluid (ISF). Patients or their health care professionals utilize the glycaemic patterns visualized by a CGM to make a lifestyle or medication changes to best improve their blood sugar control. CGM was developed to improve diabetes outcomes, especially A1C and hypoglycemia. Numerous RCTs have demonstrated benefits from using CGM, including either a lower A1C without increasing hypoglycemia, reduced hypoglycemia without improvement in A1C, or both favourable outcomes [5]. This review gives detailed information about the continuous glucose monitoring system (CGMS), its sensor, the technology involved, its Advantages, Disadvantages, History, and future of CGMS technology.

History of Blood Glucose Monitoring:-

Diabetes is characterized by chronic hyperglycemia and causes long-term complications like retinopathy, neuropathy, and nephropathy. It generally accelerates macro- and microvascular changes. Because of lifestyle changes (i.e., eating more and exercising less), diabetes has become a global epidemic [4]. Without having an accurate measurement of the patient's level of sugar, injecting insulin could pose more of a risk to the patient rather than a benefit by inducing hypoglycemia [6]. Various inventions were made from time to time to measure blood glucose levels. The important breakthrough are listed below to give a brief idea explaining how the blood sugar levels were checked in earlier times and how the new methods were developed to check BSL from time to time.

- By 1925, home testing for sugar in the urine was introduced which involved the process of eight drops of the patient's urine being mixed in a test tube with 6 cc of Benedict's solution, all components of which were dispensed by a physician at the time. The instructions required that the test tube be placed in boiling water for several minutes and depending on the colour change observed, the patient would know their sugar level Green represented light sugar in the urine, yellow represented moderate sugar, and red/orange presented heavy sugar [6].
- By the late 1940s, Helen Free developed the "dip-and-read" urine test known as Clinistix, which was capable of monitoring urine glucose levels virtually instantaneously [6].Free's team was able to embed the reagents on a filter paper strip comprising the first test specific for glucose, with release in 1956. This advancement used a double sequential enzymatic reaction via glucose oxidase, peroxidase, and orthotolidine. In this reaction, glucose oxidase catalyzed the oxidation of glucose to gluconic acid while also converting oxygen to hydrogen peroxide. With a peroxidase, the hydrogen peroxide was used for the oxidation of ortho-toluidine into a deep blue chromogen which was the visual indicator of glucose level [6].
- The first test strips for blood glucose were developed in 1964 by Earnest C Adams and were known as Dextrostix from Ames-Miles Laboratories. It was the first ever dry-reagent blood sugar test strip. It used the same glucose oxidase/peroxidase reaction as the Clinistix but with an addition of an outer semipermeable membrane. This semipermeable membrane was capable of trapping red blood cells but allowed glucose to pass through the membrane to react with the aforementioned dry reagents. The stepwise approach for this test, developed by Anton Clemens from Ames-Miles, required a drop of blood to be placed on the paper strip for 1 min, and then to be washed off. The colour that remained was compared to a standard colour chart, providing a rough estimation of a patient's blood glucose levels. However, there were limitations. This test required a large drop of blood (30uL), and a reaction time of 60 s, and it was reliant on colour matching. Dextrostix laid the foundation for the future area of research known today as blood glucose meters [6].
- The first portable glucose meter, Ames Reflectance Metering, was created in the late 1960s and became available in 1970. Since then, self-monitoring of blood glucose (SMBG) has become possible. Self-monitoring blood glucose meters are portable devices that measure blood glucose concentration on a drop of capillary blood

using finger-stick blood samples and test strips. Since the meters and reagent strips costs have been reduced, SMBG has become the most widely used method for measuring blood glucose levels. Nowadays, SMBG is an essential tool in diabetes self-managing. By enabling patients to monitor their blood glucose levels, significantly improved glycaemic control and diabetes management among diabetics have been observed. However, pain associated with the finger prick is one of the biggest limitations of this method. Another weakness of this method is the insufficient sampling frequency. The SMBG provides only the current capillary blood glucose concentration without information about the glucose trend. Intermittent capillary glucose testing with three to four finger-stick tests provides a snapshot of day-to-day glucose control [7].

- As early as 1962, Huisman and Dozy had shown the increase of the HbA1 fraction in red blood cells of diabetic patients, raising the hypothesis of a reaction of HbAo with "components other than glutathione", but not especially with glucose. The interest in HbA1c increased rapidly when Rahbar described in 1968 the elevated percentage of this fraction to total hemoglobin in diabetic patients. One of the first systematic demonstrations of HbA1c increase in diabetic patients was made by Trivelli et al. in 1971[8].

Continuous Glucose Monitoring System (CGMS):
A continuous glucose monitor is a wearable body ensor that automatically and repeatedly measures glucose at regular intervals (ranging from every 5 to 15 minutes) from interstitial fluid (ISF). Patients or their health care professionals utilize the glycaemic patterns visualized by a CGM to make a lifestyle or medication changes to best improve their blood sugar control [5].

In 1999, a new era in diabetes care began as the first-ever continuous glucose monitoring (CGM) system was approved to help people diagnosed with diabetes. The development of this new technology allowed patients to monitor their blood sugars by inserting a device subcutaneously. The CGM system measures a patient's glucose levels in their interstitial fluid (IF) over the course of the entire day. For patients with Type I diabetes, it is recommended to have 4 blood glucose readings per day. With CGMs, instead of the 4 readings per day, patients and medical providers now have detailed knowledge of the fluctuations each unique patient experiences throughout the course of their day. The sensor component of the continuous glucose monitoring system is capable of taking measurements every 5 min. With this extensive data, medical providers can make long-term adjustments in drug therapy unique to every patient's lifestyle. An additional benefit of CGM is the detection of hypo and hyper-glycemia. The most up-to-date devices now send alert signals to patients when their blood glucose falls out of the acceptable range. The extremes of hypo and hyperglycemia are known to put a patient with diabetes at greater risk of stroke, vision loss, kidney disease, amputations, and even death [6].

Continuous glucose monitoring actually provides utility in a wide range of patients with type 1 DM, including:

1. patients regularly and frequently performing SMBG
2. those who have frequent hypoglycemia episodes with hypoglycemia unawareness
3. those with clinically significant glycaemic variability
4. those with A1c levels above goal
5. those whose SMBG values do not match their corresponding A1C values
6. those who are participating in sports or high-risk occupations and need to avoid hypoglycemia
7. Other patient groups such as insulin treated patients with type 2 DM, noninsulin treated patients with type 2 DM, and pregnant women may also benefit from CGM, however additional evidence from randomized controlled trials (RCTs) of CGM are needed in these populations [9].

Components of Continuous glucose monitoring system:-
There are generally three parts of Continuous Glucose Monitor that are

1. Sensor
2. Transmitter
3. Receiver

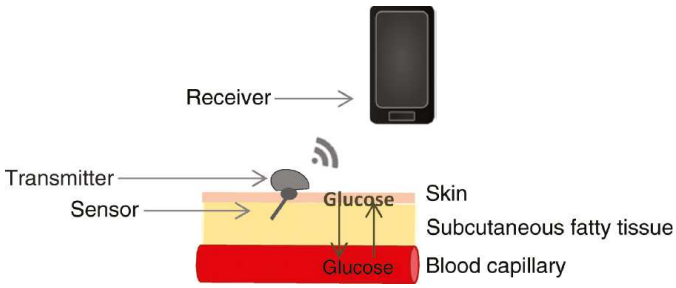

Fig 1:- Components of CGMS

1. Sensor:-
The sensor is easily inserted just under the skin with an applicator and is used to measure glucose levels. Sensors are typically placed on the abdomen but some sensors are approved for use on alternate body locations. The sensor has a small adhesive to hold it in place [10].

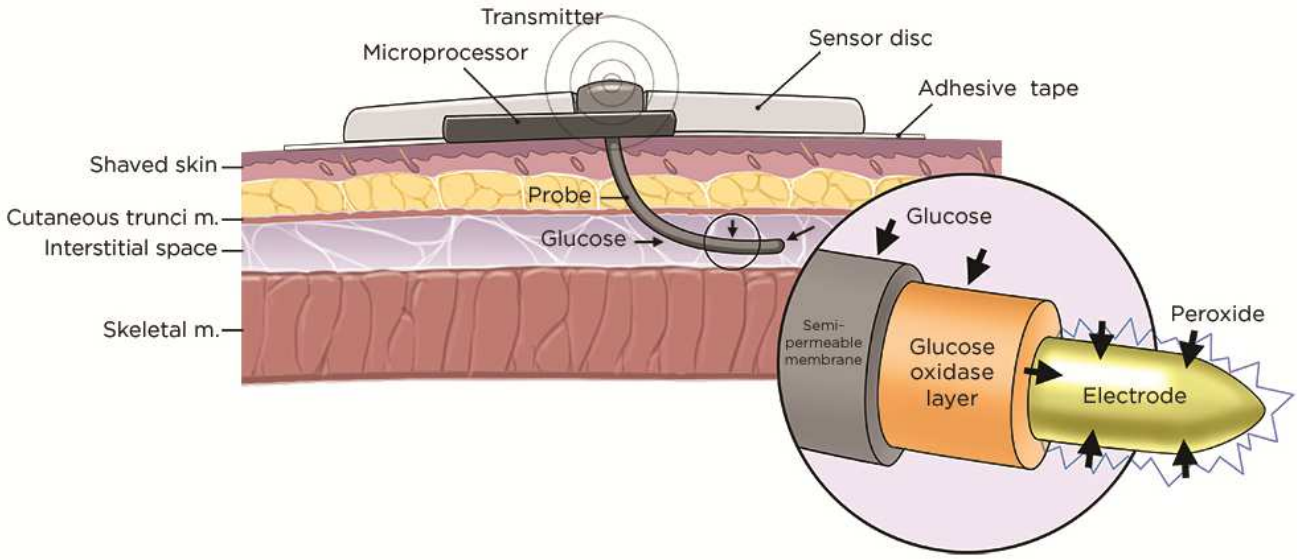

Fig 2:- Senser Used in CGMS Devices

2. Transmitter:-

The transmitter is a small, lightweight piece that fits onto the sensor. The transmitter wirelessly sends the glucose data from the sensor to the monitor or an insulin pump if the sensor is integrated with a pump [10].

3. Receiver:-

The receiver is a slim, portable and discreet component that is carried by the user and displays the glucose information sent from the transmitter. This device displays the current glucose level as well as the trended information. The receiver also alerts the user in the case of impending highs and lows [10].

Fig 3:- Transmitter and Receiver

Alarms:-

Many CGMs contain alarms that automatically notify the user when certain glycaemic patterns are detected. Threshold alarms sound after the glucose concentration is either below or above a predefined range and warn a patient to take corrective action. Rate-of-change alarms sound when the glucose rises or falls above a certain velocity. Predictive alarms sound when a proprietary algorithm, based on the absolute glucose concentration and the rate of change of the glucose concentration, predicts a glucose concentration outside of a predefined range. Predictive alarms allow patients to take preventative rather than only corrective action [5].

Data obtained from CGMS:-

Data obtained from CGMS is in Graphical form as well as individual readings also can be obtained. The graph shows the trends occurring in Blood glucose levels throughout the day. The target range is already set so by the reference from the graph one can judge whether the sugar levels are in range or whether frequent hypoglycemia

or hyperglycemia events are occurring. By referring to the graph obtained from CGMS the registered medicinal practitioner can give the best possible treatment to the patient where the ultimate goal will be of maintaining the sugar level in a target range. The alarms for high and low sugar are also incorporated in CGMS which gives alerts about the high and low sugar that the patient is unaware therapeutically and the situation can be treated before it reaches a greater level of severity.

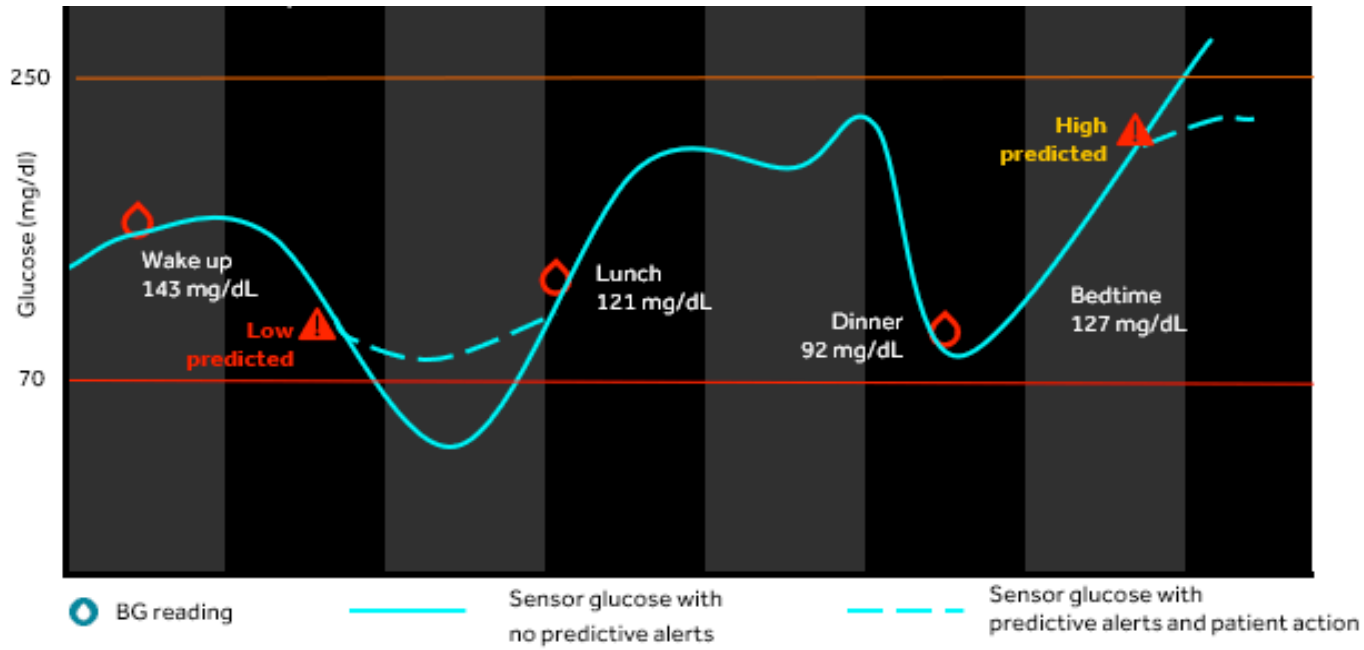

Fig 4:- CGMS Graph

CGMS vs SMBG (Finger stick method):-

1. The traditional method of measuring blood glucose levels is a finger stick blood glucose measurement that is displayed using a blood glucose meter (BGM). The BGM provides a single glucose reading at a single point in time [10].
2. The key difference between CGM and BGM is that CGM provides continuous glucose readings throughout the day and night. Beyond just the glucose readings, CGM displays a glucose trend graph and direction arrows that allow people with diabetes to anticipate approaching glucose highs and lows [10].
3. Compared to self-monitoring of blood glucose (SMBG) with a traditional glucose meter, CGM measures glucose automatically and as often as every five minutes, which generates 288 measurements per day. SMBG requires patient initiation and rarely generates more than 4-7 measurements per day.
4. For CGM, measuring glucose hundreds of times each day requires no additional pain, blood waste, or financial cost beyond the baseline costs of using CGM.
5. Beyond simply increasing the quantity of glucose measurements, CGM also provides trend information about the direction and rate of changing glucose concentrations.
6. Most real-time CGM products can sound alerts to warn of low, high, falling, or rising glucose levels, whereas SMBG does not. Such alerts are uniquely able to inform patients of important glycemic events when they are otherwise not aware, such as during sleep or when the patient is occupied with other activities.
7. Finally, if a CGM can be integrated with an insulin pump, then the CGM can automatically adjust or suspend basal insulin delivery in response to glycemic trends.
8. A disadvantage of CGM compared to SMBG is that CGM sensors will occasionally fail or generate outlier data points that can be further off than most outlier data points of SMBG.
9. Therefore, non-adjunctive use, meaning that treatment decisions should not be based on CGM data alone. Instead, patients were required to verify the CGM information with a confirmatory finger stick glucose measurement.
10. This changed in December 2016, when the FDA approved the Dexcom G5 Mobile CGM system (Dexcom, San Diego, CA) as the first CGM where treatment decisions could be made without a confirmatory finger stick test [9].

Features	CGMS	SMBG
Provides Continuous Glucose Data	Yes	No
Show the rate and direction of glucose change	Yes	No
Research shows the use has improved time in target range and reduced A1c, hospital admission, hypoglycemia	Yes	No
Personalized alerts to help identify hypo/hyperglycemia	Yes	No
Graph on trends of sugar throughout the day	Yes	No
Patients initiation to check glucose required	No	Yes
Pain and loss of blood occurs	No	Yes

Example explaining CGMS & SMBG data:-

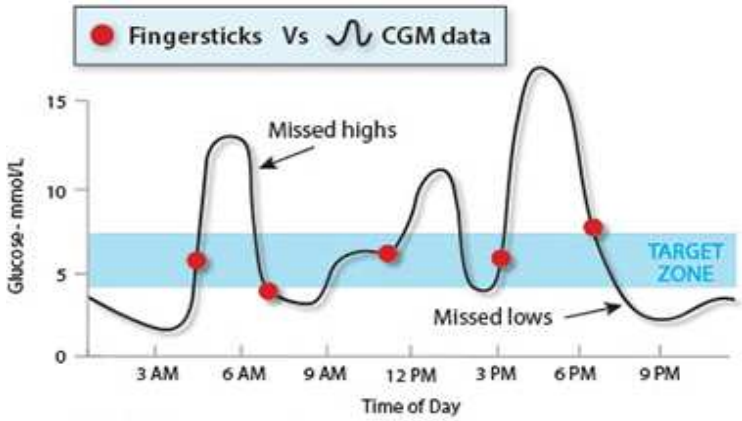

Fig 5:- CGMS VS SMBG Data

In the above example, the graph obtained by CGMS data is compared with the finger stick method which is Self-monitoring of blood glucose (SMBG). It shows that CGMS data shows every high and low sugar occurring throughout the day. But the finger stick method misses the important highs and lows in sugar throughout the day and only shows the sugars that are in the target range. This is because of the limitation of the finger stick method of not being able to measure the data as frequently as CGMS. By the readings of the finger stick method, a Registered medicinal practitioner will consider the excellent management of blood glucose and give the treatment accordingly which can result in serious effects of Diabetes and hospitalization can be required.

Advantages of CGMS:-

1. The main advantage of continuous glucose monitoring is that it can help identify fluctuations and trends that would otherwise go unnoticed with intermittent finger stick measurements [10].
2. There is no question that relative to SMBG, use of CGM can dramatically improve the quality of glycemic control both in type 1 and type 2 diabetes [11].
3. The benefit is especially pronounced in high-risk patients with frequent or severe hypoglycemia, often associated with hypoglycemia unawareness [11].
4. Offers alerts:- The most significant benefit of all real-time CGM systems is having audible alarms that can warn you if your blood sugar (blood glucose) is getting too high. This allows time for adjustments that could lessen the impact of high or low blood sugar or avoid it altogether [6].
5. Shares data:- The ability to share data with family members and friends is another important feature. It acts as a safety net, especially when traveling. For example, if you don't wake up to a low glucose alarm during the night, someone else will be alerted and can get in touch with you [6].
6. Eliminates finger sticks. While not all real-time CGMs offer this benefit, some allow you to make treatment decisions—how much insulin to dose, for instance without the need for finger-stick confirmation. Plus, some are factory calibrated, eliminating the hassle and pain of calibrating with finger sticks [6].
7. Glucose readings at the push of a button. Easy and discreet view of up to 288 glucose readings per day [10].
8. Trend arrows that reflect the speed and direction of glucose level to help avoid impending lows and highs with appropriate action [10].
9. Trend graphs to offer a retrospective view of the effect on glucose levels from things like food, exercise, medication and illness [10].

10. Reduction in Haemoglobin A1c without increasing low blood glucose events [10].
11. Short-term masked CGM can be used to detect problems, evaluate quality of glycemic control, describe patterns of glucose, assess risks of hypoglycemia and hyperglycemia by time of day and day of the week. This can be helpful to the physician and patient [11].

Disadvantages:-

1. LAG Time:- Time taken by glucose to equilibrate between blood and interstitial fluid compartments is called lag time. CGMs measure glucose in interstitial fluid, which can lag 5-15 minutes behind the blood glucose, especially when the blood glucose levels are changing rapidly. the difference in reading between blood and interstitial fluid can be about 10-20% or greater [9].
2. CGMS cannot be used as a replacement for glucose meters because it does not satisfy conventional goal performance criteria for in vitro glucose measurements and can lead to clinically incorrect treatment decisions [12].
3. most of the devices need to be calibrated 2- 4 times a day during the time when the blood glucose is most stable [13].
4. CGMs are expensive and require sensor changes every 3-14 days depending on the type of sensor [13].
5. There can be false alarms due to physical compression of the sensor, which can be inconvenient for the patient [13].
6. Certain medications can interfere in the accuracy of the sensors, as listed in. Most common is the use of acetaminophen, which can lead to false elevation in the sensor glucose levels due to interference in the mechanism of action of the sensor. e.g., Acetaminophen, Bilirubin, Cholesterol, Creatinine, Dopamine, Ephedrine, Methyl dopa, Ibuprofen, Tetracycline, Tolbutamide, Triglycerides, Vitamin C, etc [13].
7. More research is required in order to use CGM during pregnancy, in dialysis and in critically ill patients. Use of noninvasive epidermal glucose sensors seems promising [13].
8. Sensor lifetime:-Sensor lifetime is another factor that contributes to cost, inconvenience, and slow user acceptance. Even the durability of the adhesive used for attachment of the sensor to the skin is a matter of concern. One can expect that user acceptance will continue to improve as sensor lifetime increases and ease of sensor insertion improves [14].
9. Calibration:- Calibration using capillary blood glucose meters and reagent strips involves cost, discomfort, and inconvenience, increases the number of devices and complexity, and may add psychological burden [14].
10. Devices can be expensive in comparison with Glucose meters.

➢ **Comparison Between different Brands of CGMS:-**

CGMS Brand	Dexcom G5	Dexcom G6	Medtronic Guardian	Freestyle Libre Flash	Eversense
Calibration Required?	Yes	No	Yes	No	Yes
Frequency of calibration	12 hours	None	12 hours	None	10-14 hours
Can administer insulin referring to senser readings	Yes	Yes	No	Yes	Yes
Frequency of sensor to be changed	Every 7 days	Every 10 days	Every 7 days	Every 14 days	Every 90 days
Warm up period	2 hours	2 hours	2 hours	1 hour	24 hours
Easy to insert?	No	Yes	No	Yes	Requires medical procedure
Alarms and alerts?	Yes	Yes	Yes	No	Yes
Predicts lows and highs	No	Yes	Yes	No	yes
Connects with insulin pumps	No	Yes	Yes	No	No

Recent Advancement and Future of CGMS technology:-

Future sensors under development (compared to current sensors) are intended to:-

1. Require less frequent calibration [9]
2. Last Longer [9]
3. Be smaller and less obtrusive [9]

4. Be more accurate [9]
5. Integrate more closely with pumps to create closed loop systems utilizing additional input from non-glucose sensors [9].

CGMS technology is going to be highly useful for not only just for monitoring glucose but in overall management of diabetes. There is ongoing research in developing devices that monitor interstitial fluid, blood or other body fluid glucose levels noninvasively, such as by using electrochemical sensors worn on the skin. The sensors being developed and currently under trial include small meters strapped to the arm, skin patches, contact lenses and tattoos. More research is needed to assess if perspiration, ocular fluid and saliva can be used to monitor glucose instead of blood or interstitial fluid [13]. The various advancements that are going on in CGMS technology are

1. Flash glucose monitoring:-

The Libre Flash:- The Libre Flash is another CGM type system, which enables continuous interstitial glucose monitoring without the need for blood glucose calibration, as it is factory calibrated, but the continuous data is only available for 8-hours retrospectively on user prompt. The system uses a glucose sensor inserted into the skin over the triceps and a reader is used to scan over the sensor in order to display the last 8-hours of glucose readings, with a reading every 15-minutes. The sensor is factory calibrated and each sensor can be worn for up to 14 days [13].

2. Closed loop system or Artificial pancreas:-

Closed-loop technology or the artificial pancreas is medical device system that has 3 components. The components consist of the CGM, which is connected wirelessly to the insulin therapy delivery function carried out by a pump and a digital controller. The digital controller analyzes the data and makes decisions about any insulin therapy adjustments needed and instructs the pump accordingly. Integrating these 3 functions together creates an automated closed-loop system. The first hybrid closed loop system in the United States was introduced by Medtronic in 2017 and was called the Medtronic 670 G with automatic basal rate adjustments without bolus automation. Development of fully automated closed loop systems utilizing both insulin and glucagon are underway.

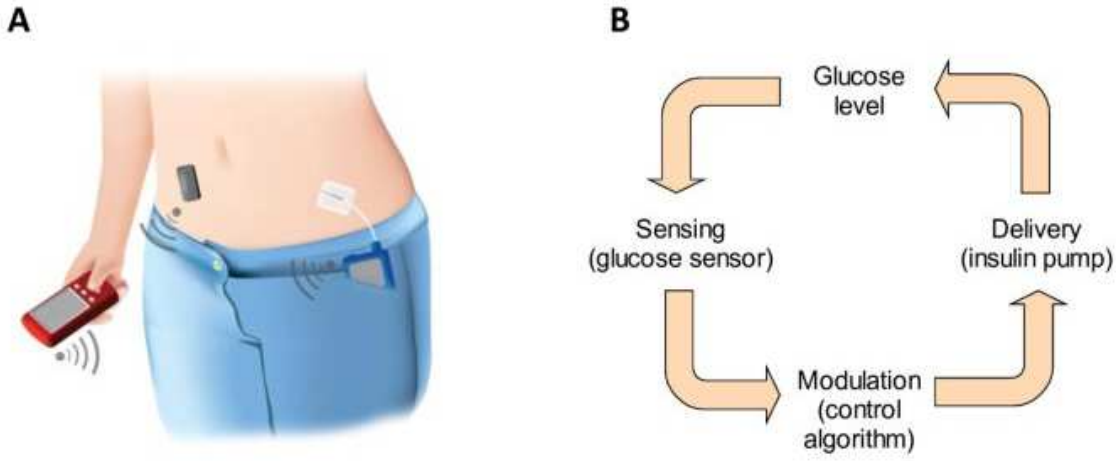

Fig 6:- Closed loop system or Artificial pancreas

3. Optical methods:- Optical glucose sensing is the most widely studied method, for the development of non-invasive blood glucose measurement. Even though none of the optical based biosensors that meet clinical accuracy are commercialized yet, several researches are undergoing [15].
4. Electromagnetic method:- Electromagnetic sensing involves measurement of bloods dielectric properties detected through changes in eddy currents using electromagnetic coupling between two inductors. The change in blood glucose concentration results in the variation of bloods dielectric properties such as permittivity and conductivity. This causes changes in the electromagnetic coupling of nearby inductors affecting their impedances which results in variations in resonant frequency. The variations in frequency shift helps to determine bloods dielectric properties correlated with the concentration of glucose [15].

Conclusion:-

CGMS was developed with the intention of improving diabetes outcomes, especially A1C and hypoglycemia but if used correctly CGMS can be used in various prospectives by which patients can be treated more effectively and good results can be obtained with minimum side effects. The implementation of CGM has improved HbA1c levels

and also reduced the incidence of hypoglycemic events [13]. One study shows that CGM is a well-tolerated and versatile tool for obesity research in both pediatric and adult patients [16]. Another study concluded that CGMS could be useful in routine clinical practice to provide much more information on the glucose profile than intermittent self-monitoring of blood glucose (SMBG) [12]. CGMS sensors when incorporated with insulin pumps can result in better management of diabetes which is commercially known as an artificial pancreas or closed-loop system [17]. Research is underway to assess whether glucose levels can be monitored in other body fluids such as perspiration, breath, ocular fluid, and saliva [13]. LAG being the limiting factor in the whole CGMS technology more research should be done to minimize the side effects occurring due to lag. More research should be carried out on pregnant ladies so that management of gestational diabetes will become more sophisticated. Considering overall scenarios CGMS technology if used properly can be helpful in increasing the quality of lifestyle in diabetic as well as non-diabetic people and can cause a positive impact on the healthcare system.

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Formulation Development and evaluation of a Nanofibrous Gel Containing Ketoconazole and Clotrimazole.

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Abstract---

Topical drug administration is a localized method of delivering drugs to specific areas of the body via topical channels such as ophthalmic, rectal, vaginal, and cutaneous. 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 Nanofibrous gel using Ketoconazole and Clotrimazole. For the treatment of fungal Infection, Topical Ketoconazole and Clotrimazole is used to treat Fungal Infection. Ketoconazole and Clotrimazole belongs to the antifungal family of drugs. It works by reducing fungal infection. Topical Nanofibrous gel of Ketoconazole and Clotrimazole was prepared by using High molecular weight water soluble polymer Hydroxy propyl methyl cellulose such as K35 grade and other excipients including carbopol, methyl paraben, Glycerin and purified water were reported in the formation of Nanofibours gel. In the present investigation combination of Ketoconazole and Clotrimazole Nanofibrous gel.The formulated gel was evaluated for pH, viscosity, Spreadability, extrudability, conductivity, particle size, zeta potential, in vitro drug diffusion studies. Among the formulated gel batch 3 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 and reduced side effects associated with conventional treatment.

Keywords -ketoconazole, clotrimazole, fungal , topical

Introduction

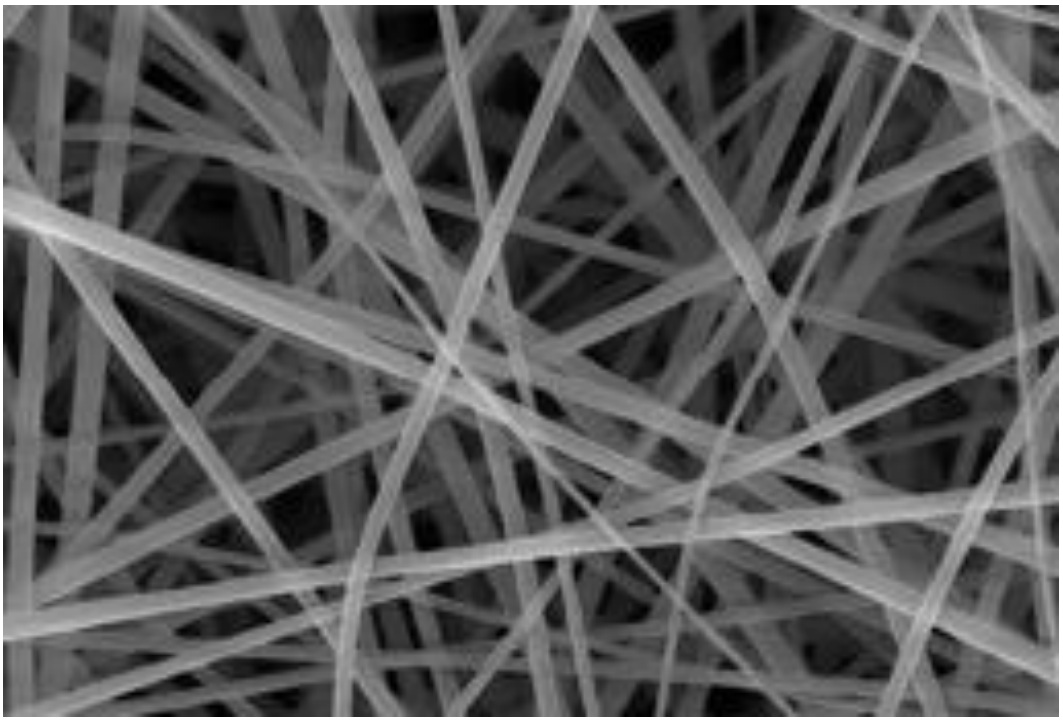
- Nanofibers are **fibers with diameters in the nanometer range** (typically, between 1 nm and 1 μm).
- Nanofibers can be generated from different polymers and hence have different physical properties and application potentials.
- There exist many different methods to make nanofibers, including drawing, electrospinning, self-assembly, template synthesis, and thermal-induced phase separation.
- Electrospinning is the most commonly used method to generate nanofibers because of the straightforward setup, the ability to mass-produce continuous nanofibers from various polymers, and the capability to generate ultrathin fibers with controllable diameters, compositions, and orientations.

Electrospinning method for Both the Solutions

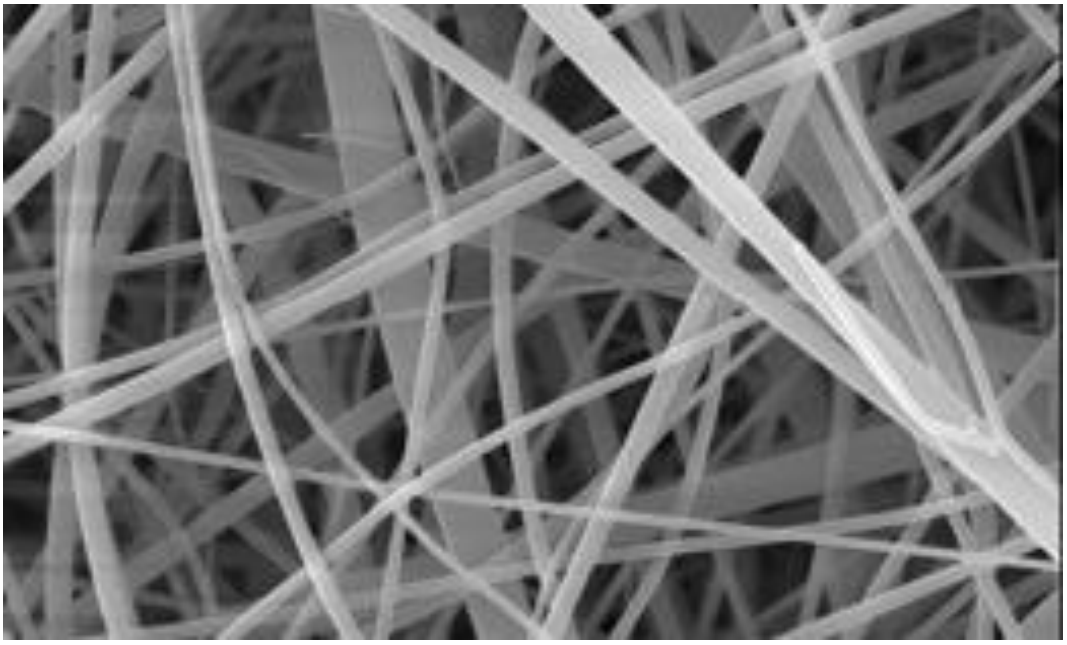
All spinning solutions were prepared at room temperature under stirring for 24 h to ensure their homogeneity. Electrospinning was conducted using a *γ*-High Voltage Research DC power supply generator with a maximum voltage of 50 kV. The electrospinning solutions were fed through the tip of the needle by syringe pump with a stable flow rate (0.5 mL/h). Meanwhile, high voltage (15 kV) was applied to the needle and the nanofibers were concurrently collected on the grounded and steady metal plate which was placed at 15 cm from the needle and covered with Al foil. Temperature and relative humidity were 20±2°C and 60±5%, respectively.

5μM

Sample 1



Sample 2



Sample 3

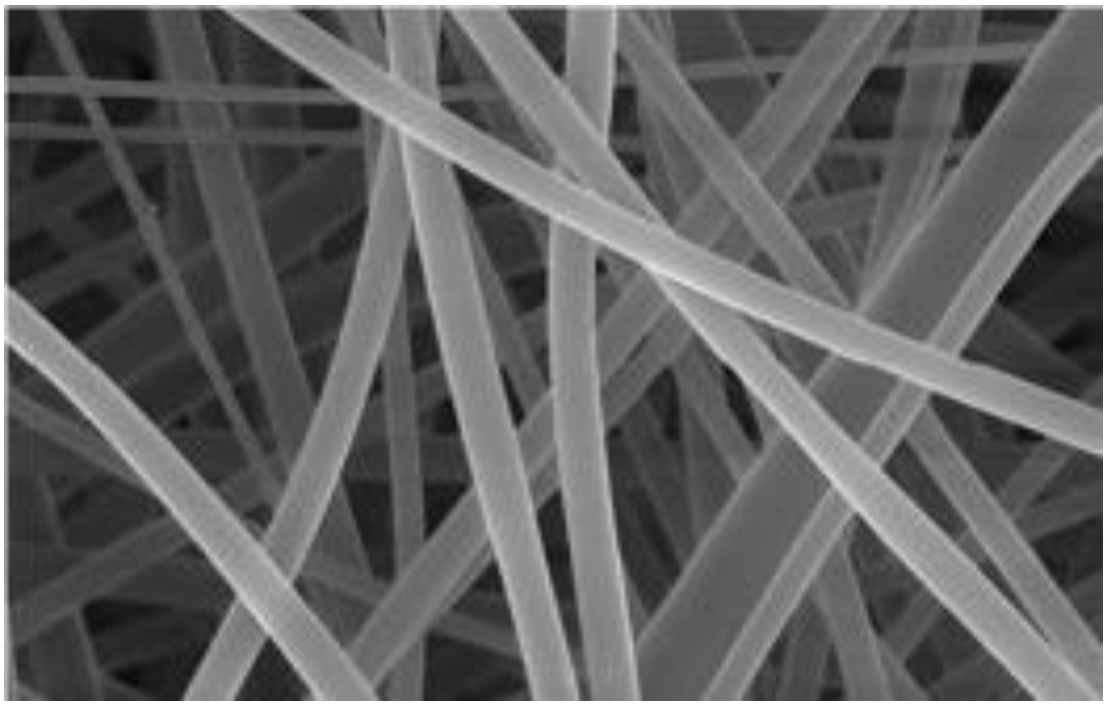


Table 1 . The effect of electrospinning parameters on the size of the nanofibers.

Effect of flow rate		Effect of distance		Effect of Volt	
Flow rate (mL h−1)	**Size (nm)**	**Distance (cm)**	**Size (nm)**	**Voltage (kV)**	**Size (nm)**
0.3	**415±102**	**5**	**458±108**	**10**	**412±115**
0.5	**201±112**	**10**	**315±156**	**20**	**358±123**
0.7	**517±251**	**15**	**158±253**	**30**	**195±147**
0.9	**602±62**	**20**	**641±45**	**50**	**174±125**

ELECTROSPINNING

As illustrated, the basic setup for electrospinning is rather simple, making it accessible to almost every laboratory.[1,2]The major components include a high-voltage power supply, a syringe pump, a spinneret (usually, a hypodermic needle with blunt tip), and a conductive collector. The power supply can be either direct current (DC) or alternating current (AC). During electrospinning, the liquid is extruded from the spinneret to produce a pendant droplet as a result of surface tension. Upon electrification, the electrostatic repulsion among the surface charges that feature the same sign deforms the droplet into a Taylor cone, from which a charged jet is ejected. The jet initially extends in a straight line and then undergoes vigorous whipping motions because of bending instabilities. As the jet is stretched into finer diameters, it solidifies quickly, leading to the deposition of solid fiber(s) on the grounded collector. In general, the electrospinning process can be divided into four consecutive steps: (i) charging of the liquid droplet and formation of Taylor cone or cone-shaped jet; (ii) extension of the charged jet along a straight line; (iii) thinning of the jet in the presence of an electric field and growth of electrical bending instability (also known as whipping instability); and (iv) solidification and collection of the jet as solid fiber(s) on a grounded collector.,[2,3,4,] A more detailed discussion of these four

Materials and Methods

Ketoconazole was purchased from Yarrow chem Products (Pune,India). Clotrimazole was purchased from Yarrow chem Products. Methyl paraben was purchased from Research-lab Fine Chem Industries (Mumbai, India). HPMC K35 was purchased from Ashland Inc. Netherland. All the chemicals were of analytical grade. Polyvinyl Alcohol(PVA) was purchased from Research-lab Fine Chem Industries (Mumbai, India). Poly Lactic co Glycolic Acid(PLGA) was purchased from Research-lab Fine Chem Industries (Mumbai, India).

Methods [5,6]

Identification of pure drug

Identification of pure drug was carried was by Fourier Transform Infra-red Spectrophotometry (Shimadzu 8400s) scanned in the range of 400-200nm.

Drug-excipient compatibility study

Studies of drug-excipient compatibility are important to ascertain drug and excipients are compatible with each other. DSC graph and 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 Ketoconazole as well Clotrimazole 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. Ketoconazole had peaks at 1643 (C=CO stretching), 817 (C-Clstretching), 1512(C=Cstretching), 2841(C-H stretching), and 1041(C-O stretching), while Clotrimazole showed characteristic peak values at 756 (C-Cl stretching); 2940 (C-H stretching); 1535 (C=C stretching) and 1620 (C=N stretching). These peak values were in accordance with previously reported spectra of Clotrimazole(Fig. 2)

Fig.1 FTIR of Ketoconazole

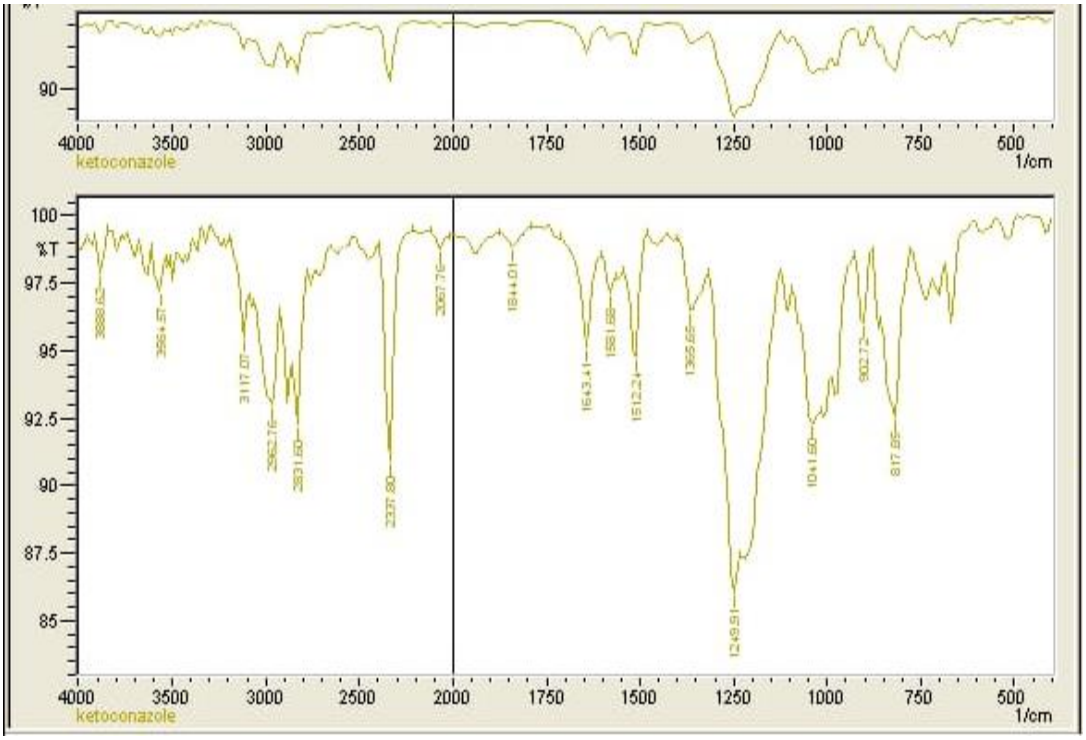
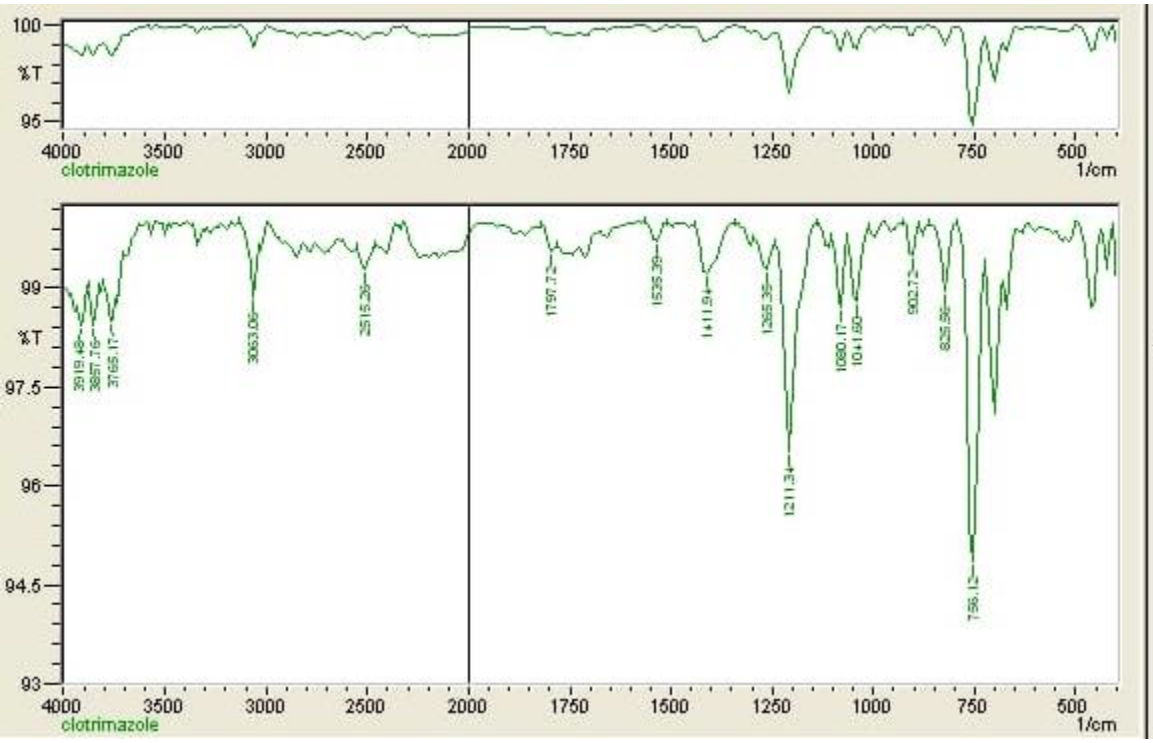


Fig.2 FTIR of Clotrimazole



UV spectroscopy

The linearity of the responses of both drugs 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 Ketoconazole obtained was y = 0.1995x+0.533 The linearity curve was found to be linear in the a for mentioned concentrations (the correlation coefficient (r^2) of determination was 0.9994) (Fig.1). Similarly, the equation of the linearity curve for Clotrimazole obtained was y= 0.132x + 0.0515. The linearity curve was found to be linear for mentioned concentrations. (the correlation coefficient (r^2) of determination was 0.995) (Fig.2)

Fig 3.Calibration Curve of Ketoconazole

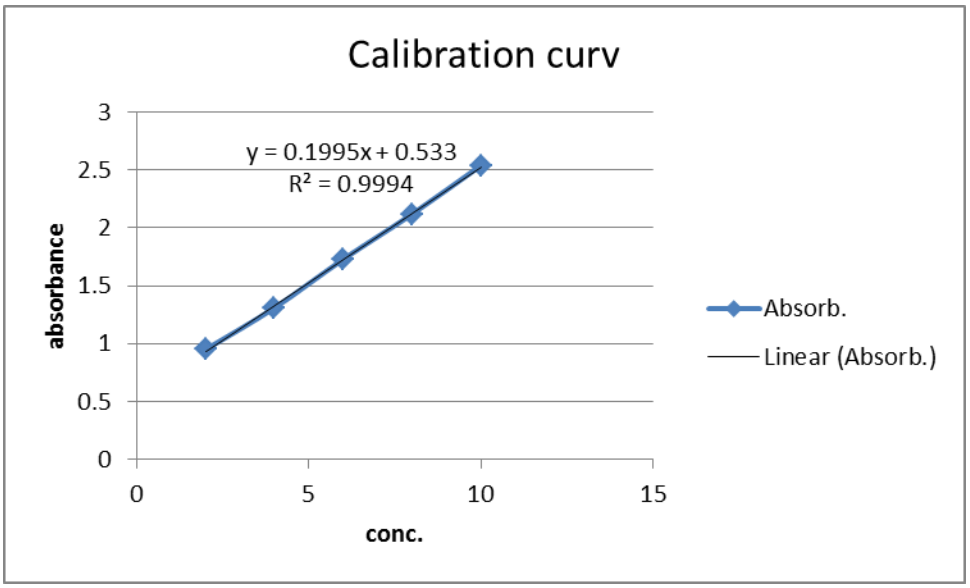
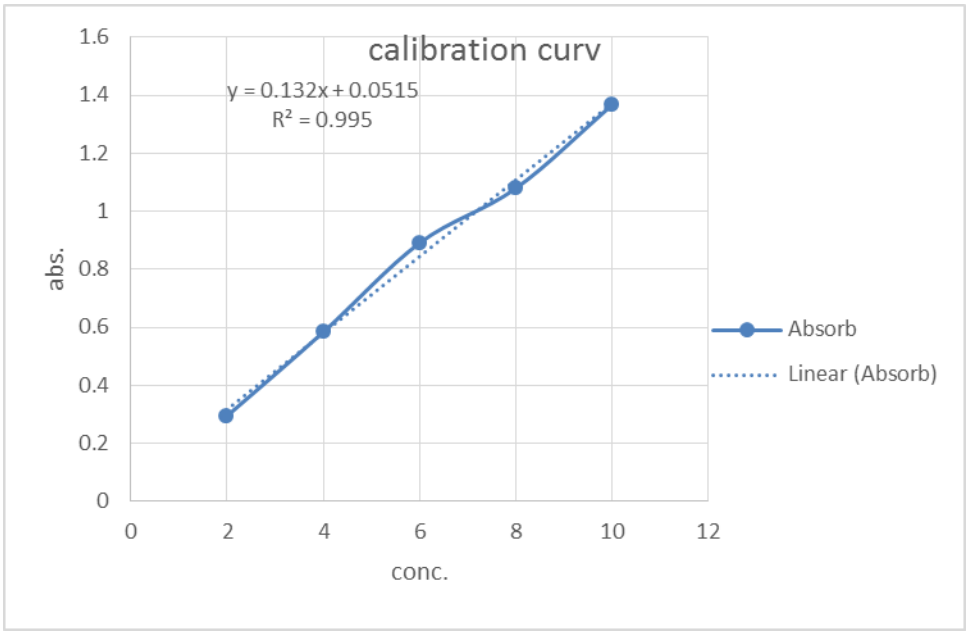


Fig 4.Calibration Curve of Clotrimazole



Preparation of Gel

To obtain O/W gel formulation HPMC K35 polymer was solubilized in purified water with constant trituration. In polymer dispersion Carbopol was added slowly with continuous stirring along with Ketoconazole, Clotrimazole and metyl paraben and was mixed well by continuous trituration. Finally gel was made by adjusting the pH of the mixture to 7.0 and resulted in desired gel consistency good homogeneity and spreadibility.

Table 2- Composition of gel (KC1-KC3)

Ketoconazole	10mg	10mg	10mg
Clotrimazole	10mg	10mg	10mg
Methyl Paraben	0.025	0.025	0.025
HPMC K35	200mg	220mg	240mg
Carbopol	0.025	0.025	0.025
Glycerin	Q.S	Q.S	Q.S
Purified water	Q.S	Q.S	Q.S

Evaluation of Gel

1. Appearance - Patient compliance is aided by the use of colour. The prepared gels were examined visually for clarity, colour, and particle presence.

2. pH [7,8] :- A digital pH metre (Model EQ-610) was used to determine the pH of the gel. In distilled water, 1 gm gel was swirled until a homogeneous suspension was obtained. The volume of the solution was increased to 100 mL, and the pH was determined. The pH of each formulation was done in triplicate and average value are determine.

3. Viscosity[9,10]:- The gel's viscosity was determined using a (LV) Brookfield viscometer. The spindle no. 96 is utilised since the system is nonNewtonian. The viscosity was tested for 2 minutes.

4. Conductivity[11]:- A direct reading digital conductivity meter (Systronics model no. 304) and dipping type conductivity cell.

5. Zeta Potential[12]:- 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.

6. Particle size[13]:- 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.

7. Spreadability[14,15]:- Excess sample was sandwiched between the two glass slides, and a 100 g weight was used to compress the sample to a uniform thickness for 5 minutes. The pan was filled with weight (250 g). The time it took to separate the two slides in seconds was used as a measure of spreadability.

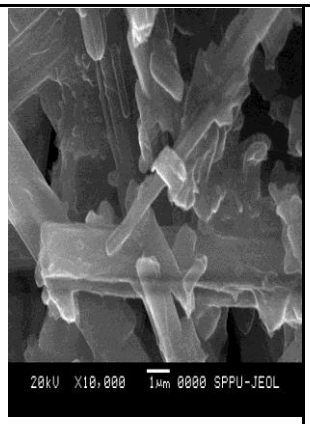
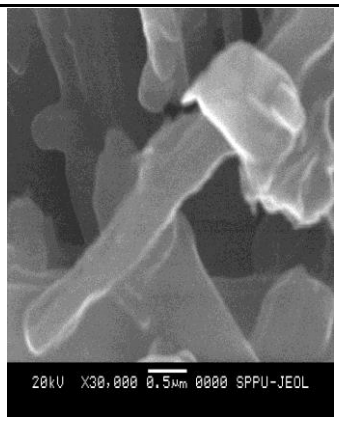
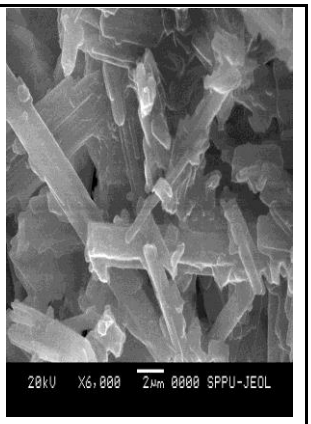
8. Extrudability[16,17]:- Measure the force required to extrude the material from tube. Extrudability was based upon the quantity in percentage of gel and gel extruded from lacquered aluminium collapsible tube on application of weight in grams required to extrude at least 0.5 cm ribbon of gel in 10 seconds. +++ excellent ++ very good + average

9. Scanning electron microscopy[18]:- 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.

10. Content uniformity[19]:- Drug content of gel was determine by dissolving accurately weighed 1gm of gel in methanol. After suitable dilution absorbance was recorded by using UV- visible spectrophotometer (UV – 1800 Shimadzu, Japan) at 290 and 225nm. Drug content was determined using slope of standard curve.

11. Diffusion studies[20,21]:- The study was performed using Franz diffusion cells with dialysis membrane with the use of the instrument Jasco V-630 model no V-630. Here the microemulsion based gel equivalent to10mg of Ketoconazole was placed on the donor compartment and the receptor compartment was filled with mixture of phosphate buffer solution (pH 7.4) and 30% methanol, maintained at 37 ±10 °C for in vitro diffusion studies, artificial dialysis membrane was soaked in the same buffer solution for 24hrs before mounting on the diffusion cells. Receptor liquid was withdrawn after each hours and sink condition was maintained by replacing liquid kept at same temperature. Ketoconazole concentration was assayed using UV spectrophotometer. Using the photometric mode for noting absorbance of UV/VIS bandwidth was taken at wavelength of Clotrimazole was taken at wavelength of 263nm and diffusion study of gel was performed.

Particulars	KC	KC	KC
Appearance	Off-white to yellow gel with suspended particles	Off-white to yellow gel with suspended particles	Off-white to yellow gel with suspended particles
Fill volume (gm)	10	10	10
pH	6.8-7.2	6.8-7.2	6.8-7.2
Conductivity **1)200ms 2)20ms 3)2ms 4)200µs 5)20µs**	1)0 2)00.7 3)0.67 4)1 5)1	1)0 2)00.6 3)0.69 4)1 5)1.0	1)0 2)00.1 3)0.12 4)148 5)1
Zeta potential (mV)	-20.7mV	-22.3mV	-23.7mV
Particle size (nm)	333.1nm	339.1nm	244.3nm
Spredability (gm.cm/sec)	3.2±0.0156	4.1±0.0264	3.9±0.057
Extrudibilty	++	+++	++

Scanning electron microscopy			
Uniformity of content(%)1) Ketoconazole	94.6	96.1	98.4
Clotrimazole	93.5	95.4	97.3

In vitro Diffusion studies

Table 3- Data of In-vitro drug release studies of gel of Ketoconazole (%)

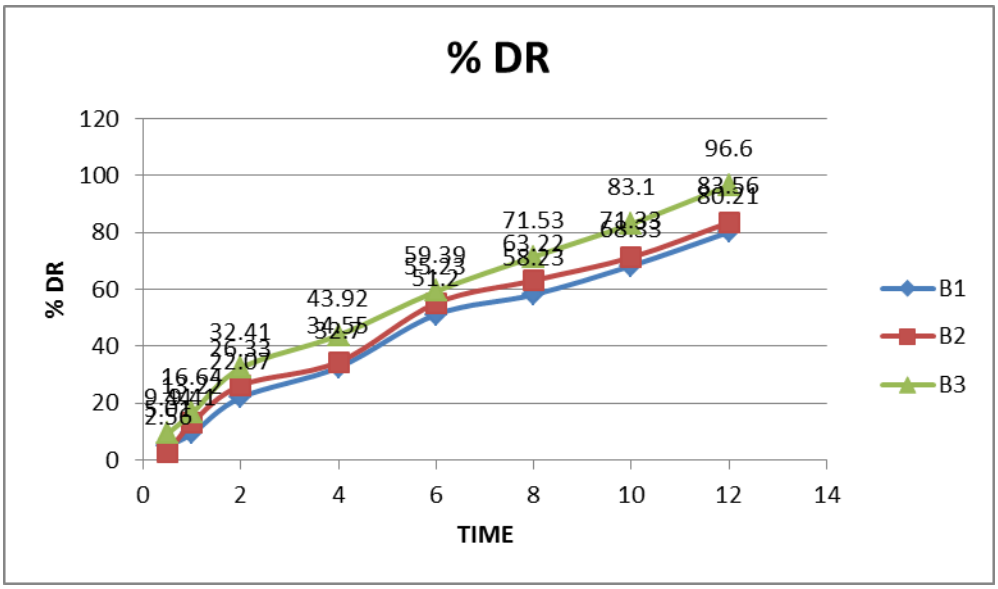
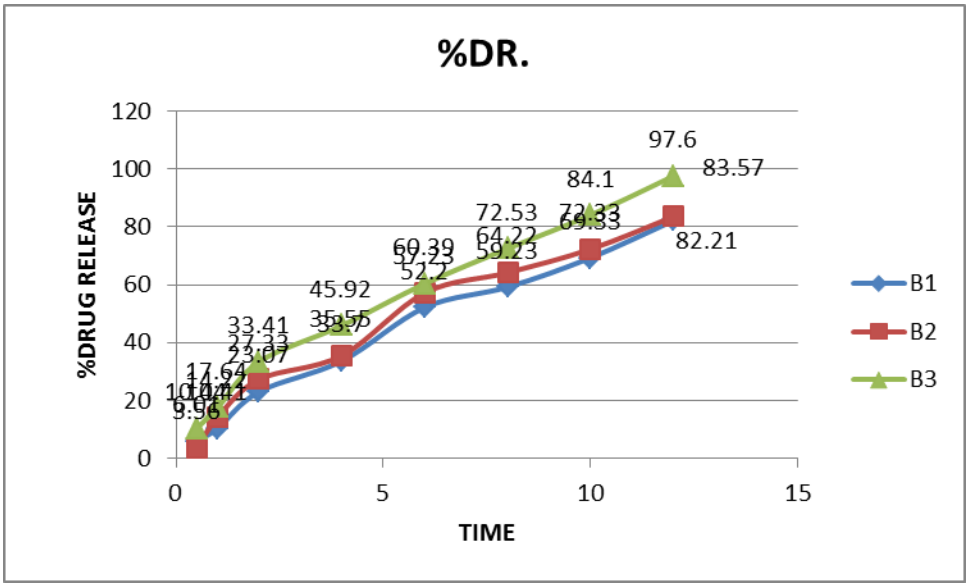


Table 4- Data of In-vitro drug release studies of gel of Clotrimazole(%)



Viscosity results KC1 (Spindle number-96)

RPM	Surface(cP)	Middle(cP)	Bottom(cP)
20	8766	9281	9563
30	6844	7656	7594
50	4331	4931	5006
60	3000	4375	4578

Viscosity results KC2 (Spindle number-96)

RPM	Surface(cP)	Middle(cP)	Bottom(cP)
20	7313	9094	9188
30	5063	6781	7375
50	3938	4294	5139
60	2313	2531	3038

Viscosity results KC3 (Spindle number-96)

RPM	Surface(cP)	Middle(cP)	Bottom(cP)
20	7453	9328	9757
30	7969	7344	7438
50	5044	5100	5456
60	6047	6422	7422

Conclusion

- It can be concluded that from the experimental study carried out that the formulation of a Nanofibrous gel containing Ketoconazole and Clotrimazole drug yields a formulation with spherical and smooth surface, nano in size range. The prepared Nanofibrous was smooth without any lumps, particle and aggregates. So, all the formulations are homogenous. Based on all the factors the nanofibrous gel drug delivery system B3 shows good drug content compared to other. The particle size of the nanofibrous gel formulation is optimum and it is less than 1000 nm. So, it concluded that the particles are in tiny and nano in size range. All nanofibrous gel formulations shows pH in the range of 5.5 to 7. Based on the Spreadability diameter study it shown the nanofibrous gel is having good Spreadability. Nanofibrous gel formulations shown viscosity range from 5000-50000 cps. It concluded that they are stable in nature. Formulation Batch-3 shows highest percentage of drug release compare to other formulations. In-vitro diffusion studies show Batch-3 formulation shows controlled release pattern of drug from the formulation. Zeta potential of batch B-3 shows -22.3mV. High zeta potential values shows there will be no particles coming together and no flocculation. Hence it is conclude that formulation Batch-3 is an optimized batch containing optimum HPMC and Carbopol.

Acknowledgement

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Formulation Development and Evaluation for Mouth Dissolving Tablet Containing Bromelain

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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.

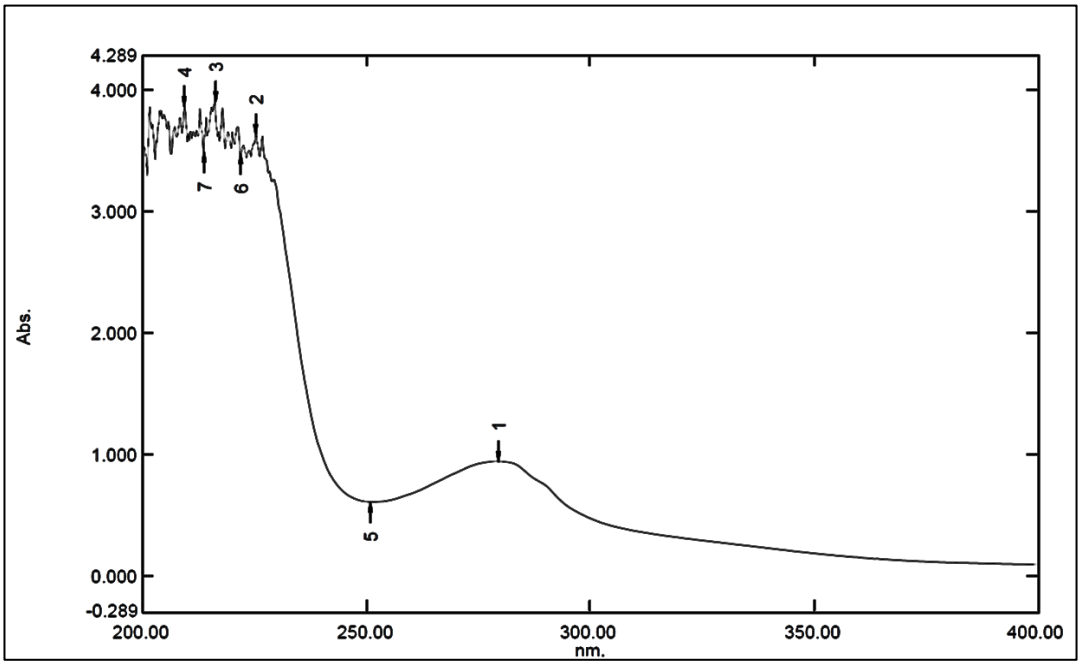

Figure 1: UV spectra of Bromelain in water at 279.40 nm

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).

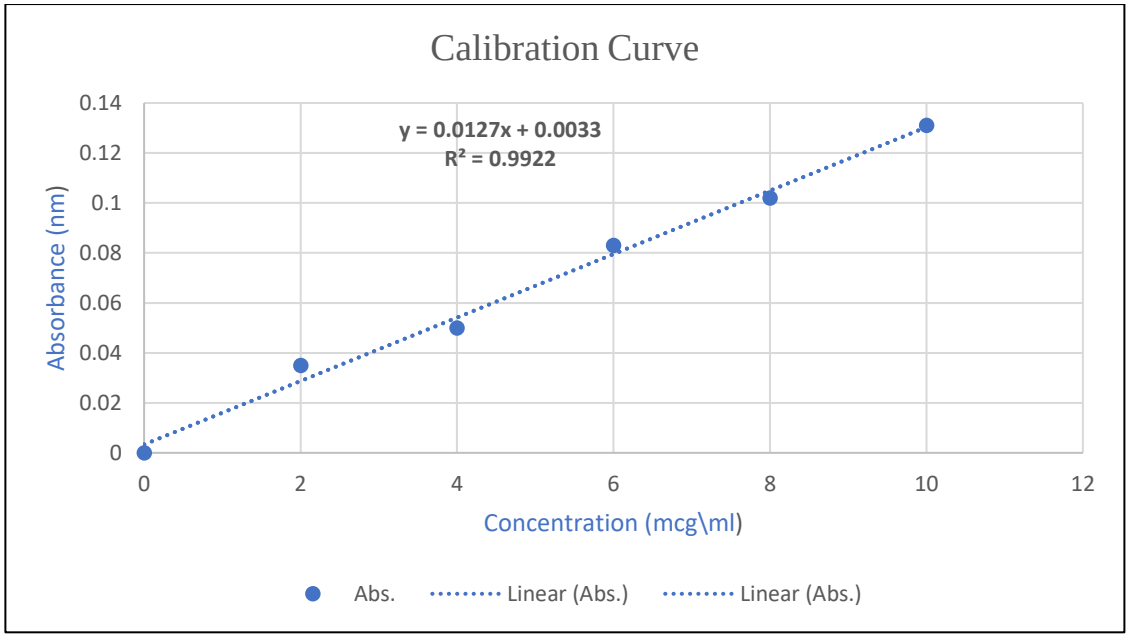

Figure 2: Calibration Curve of Bromelain in Water

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).

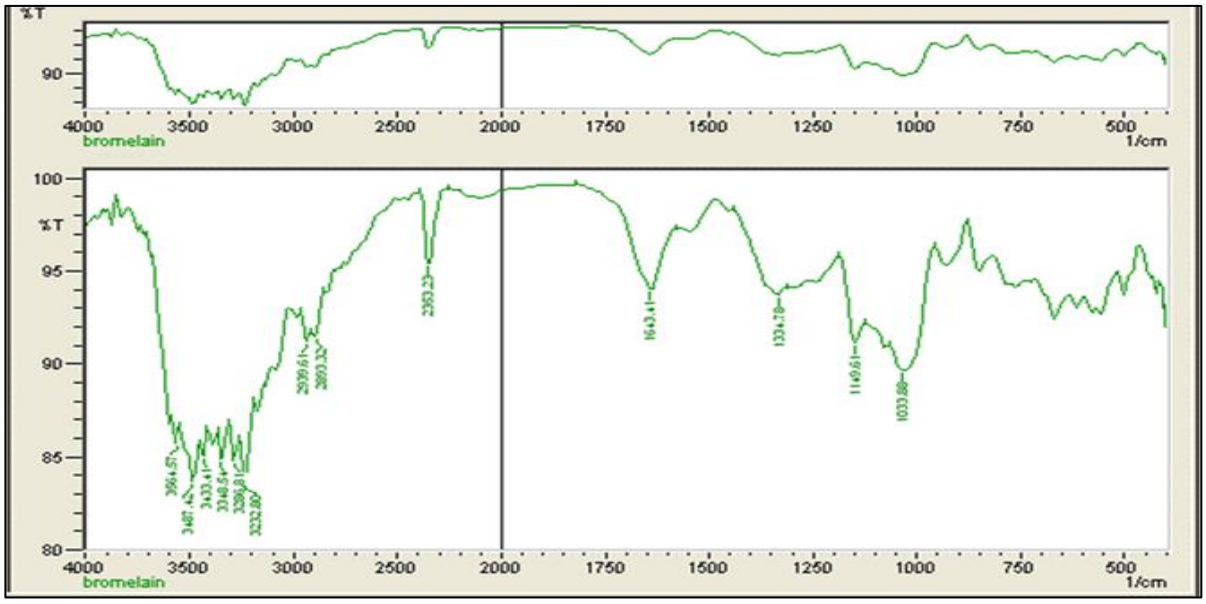

Figure 3: FTIR Studies of Bromelain

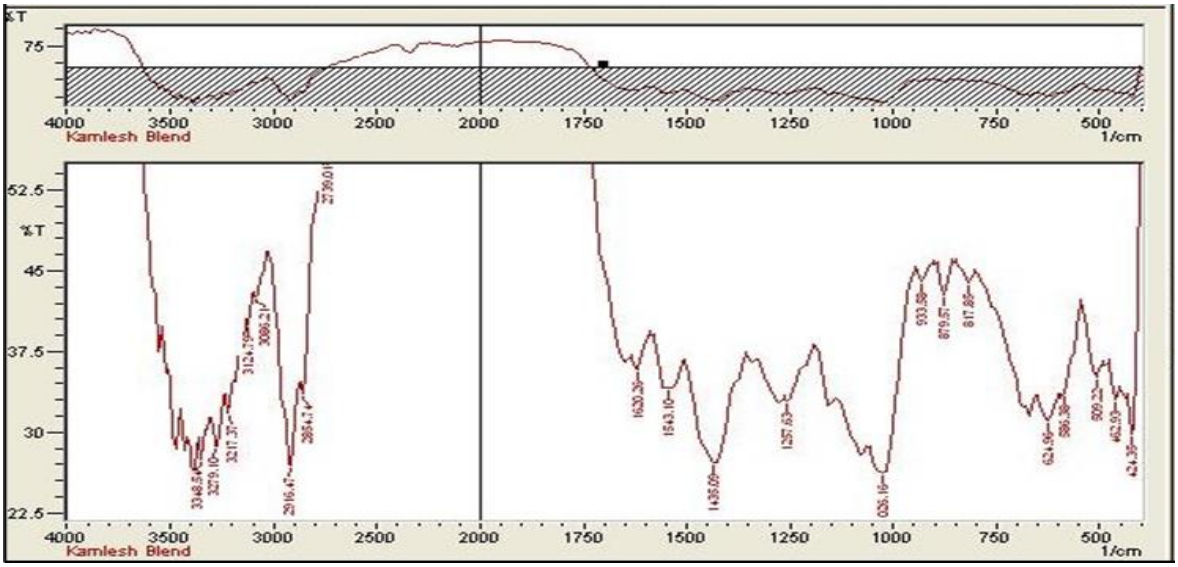

Figure 4: FTIR Studies of Bromelain Tablet Blend

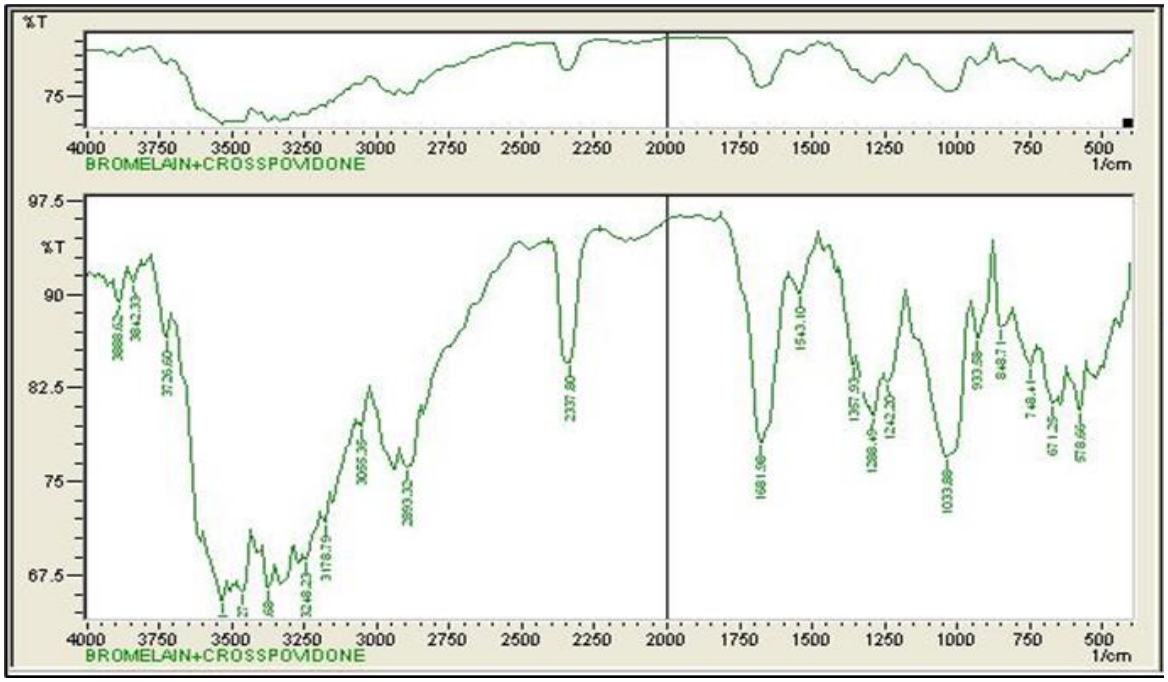

Figure 5: FTIR Studies of Bromelain + Crospovidone

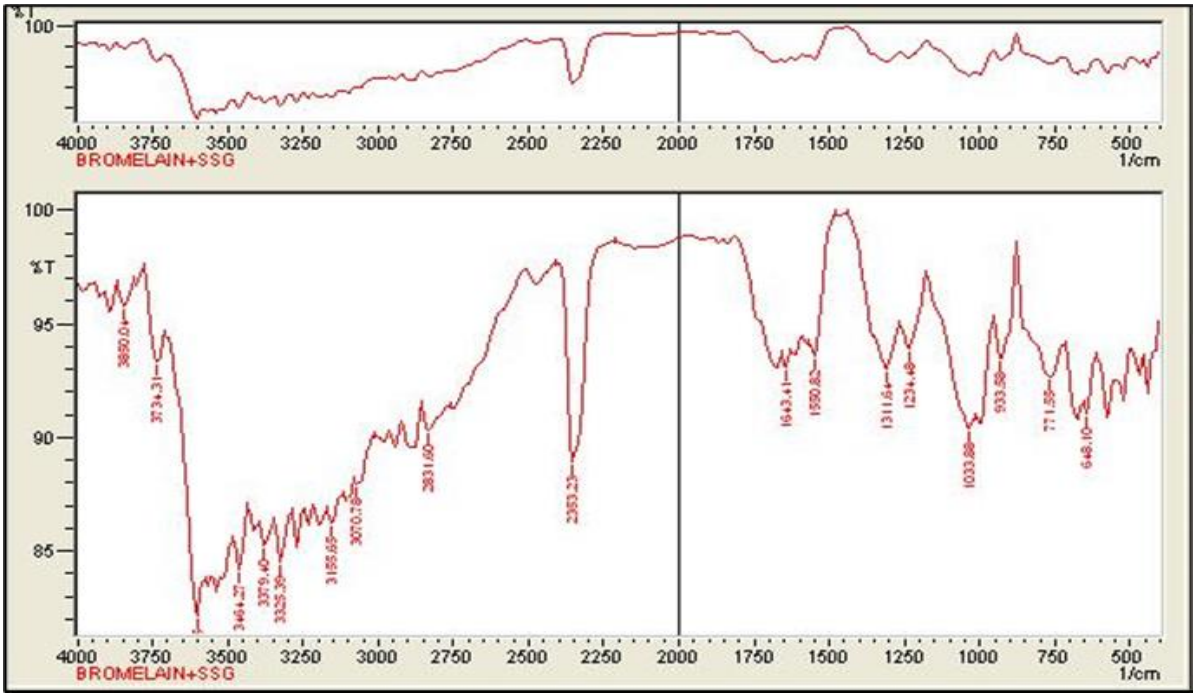

Figure 6: FTIR Studies of Bromelain + SSG

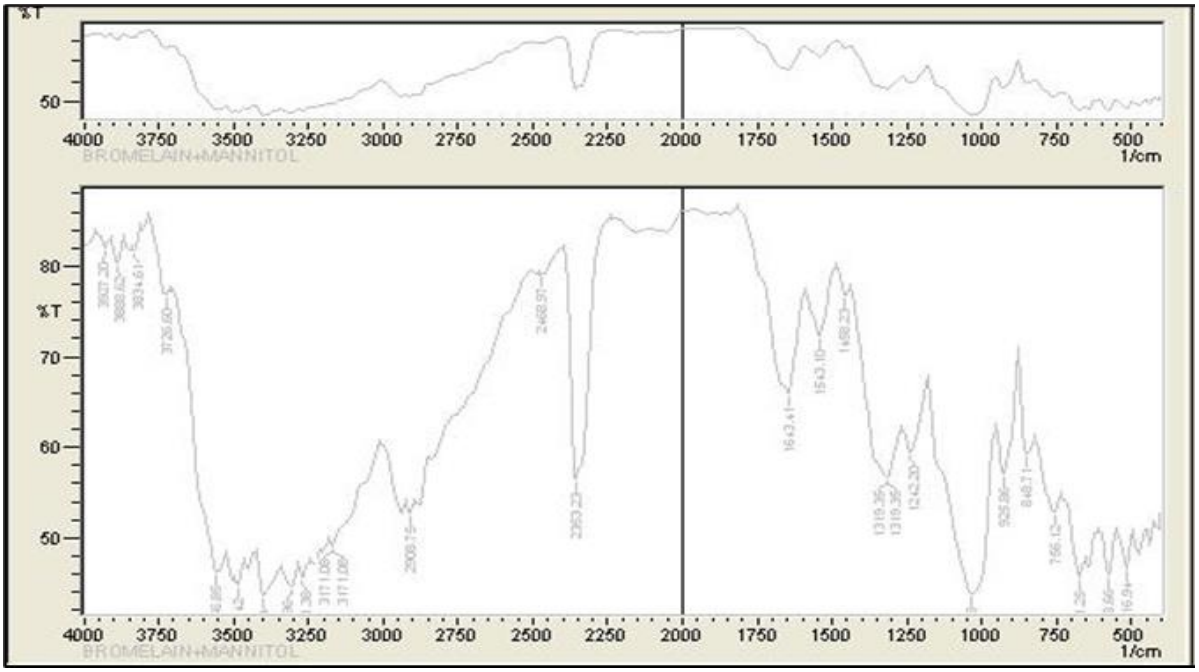

Figure 7: FTIR Studies of Bromelain + Mannitol

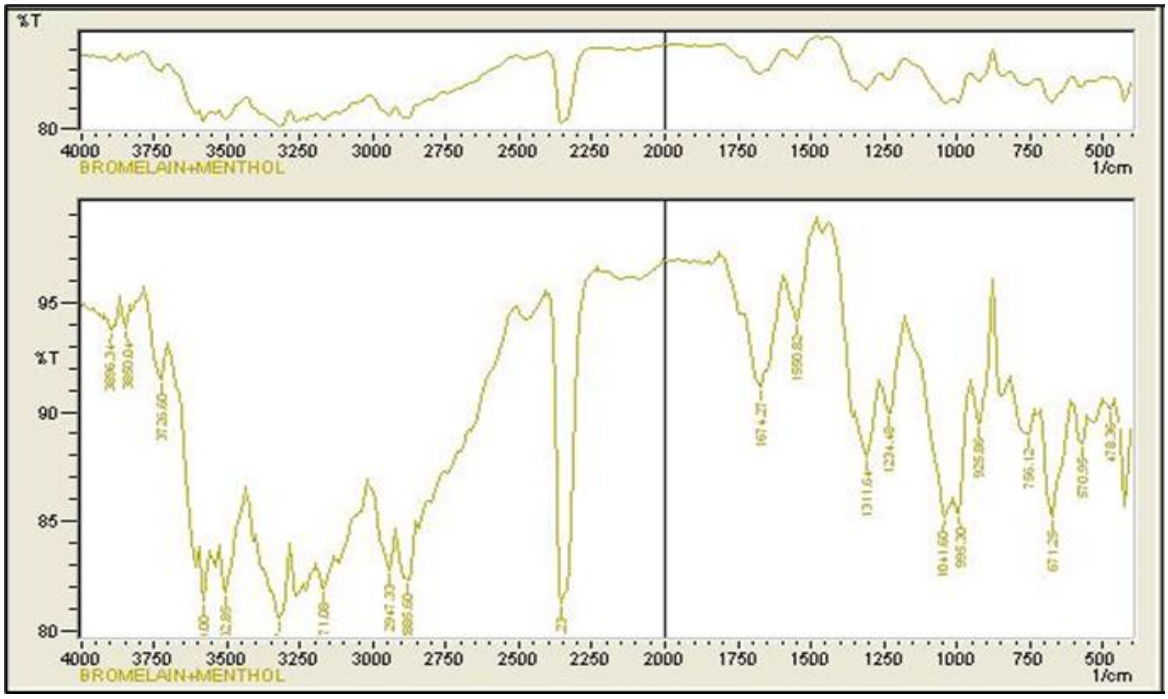

Figure 8: FTIR Studies of Bromelain + Menthol

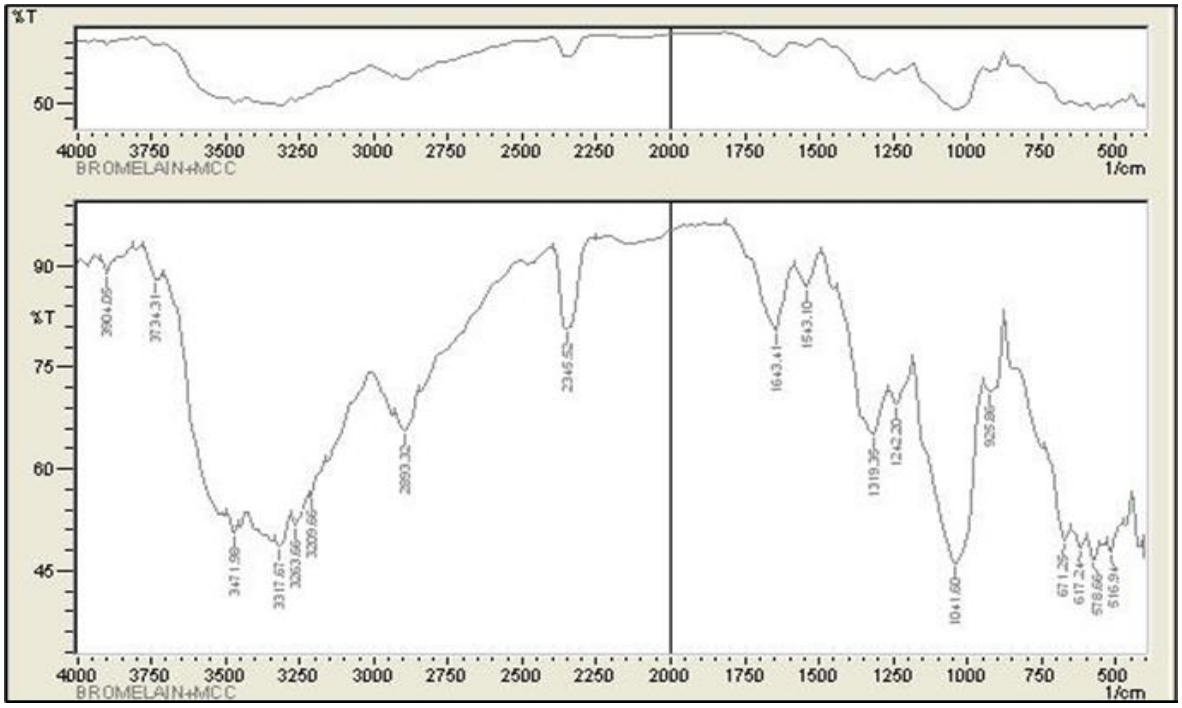

Figure 9: FTIR Studies of Bromelain + MCC

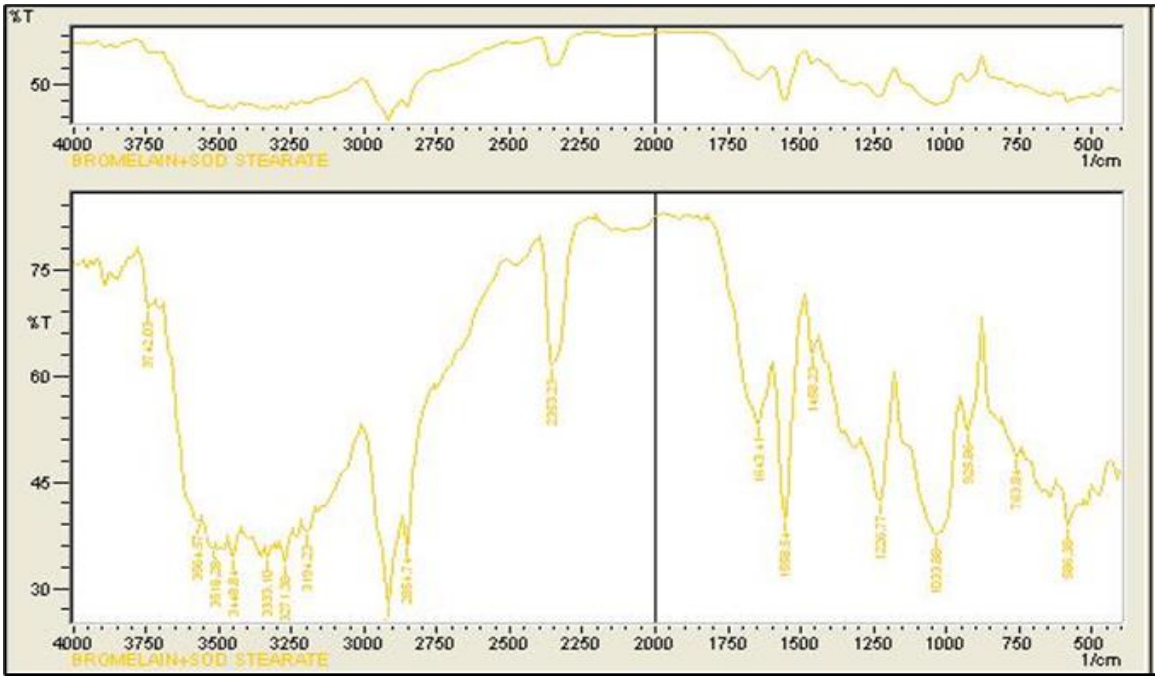

Figure 10: FTIR Studies of Bromelain + Sodium Stearate

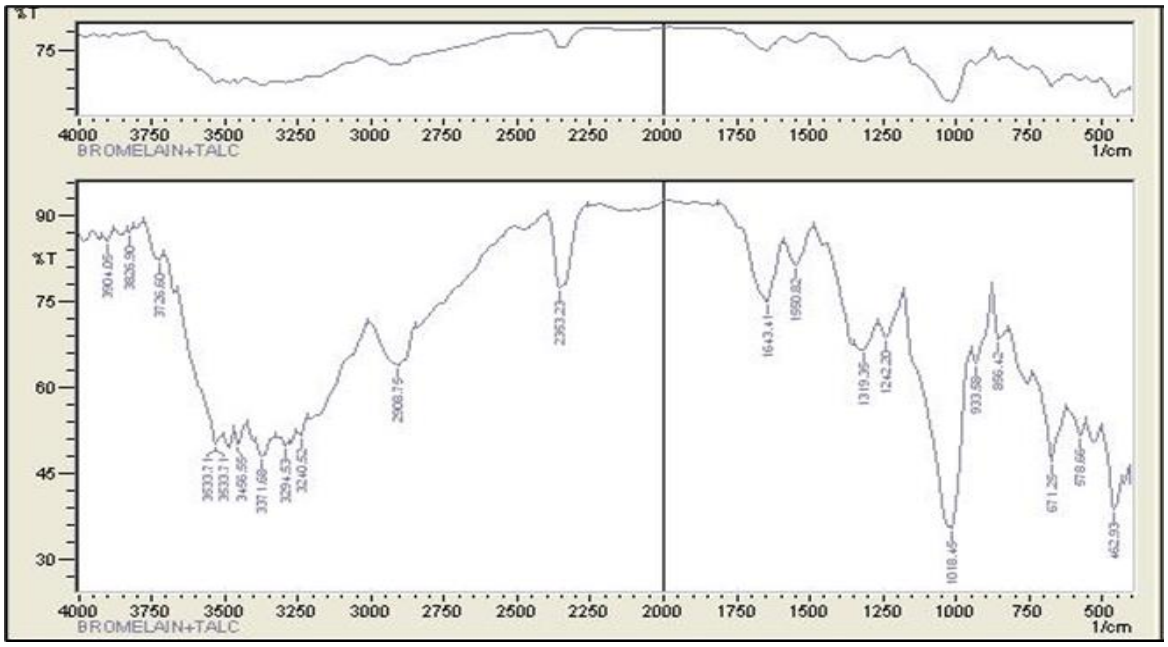

Figure 11: FTIR Studies of Bromelain + Talc

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

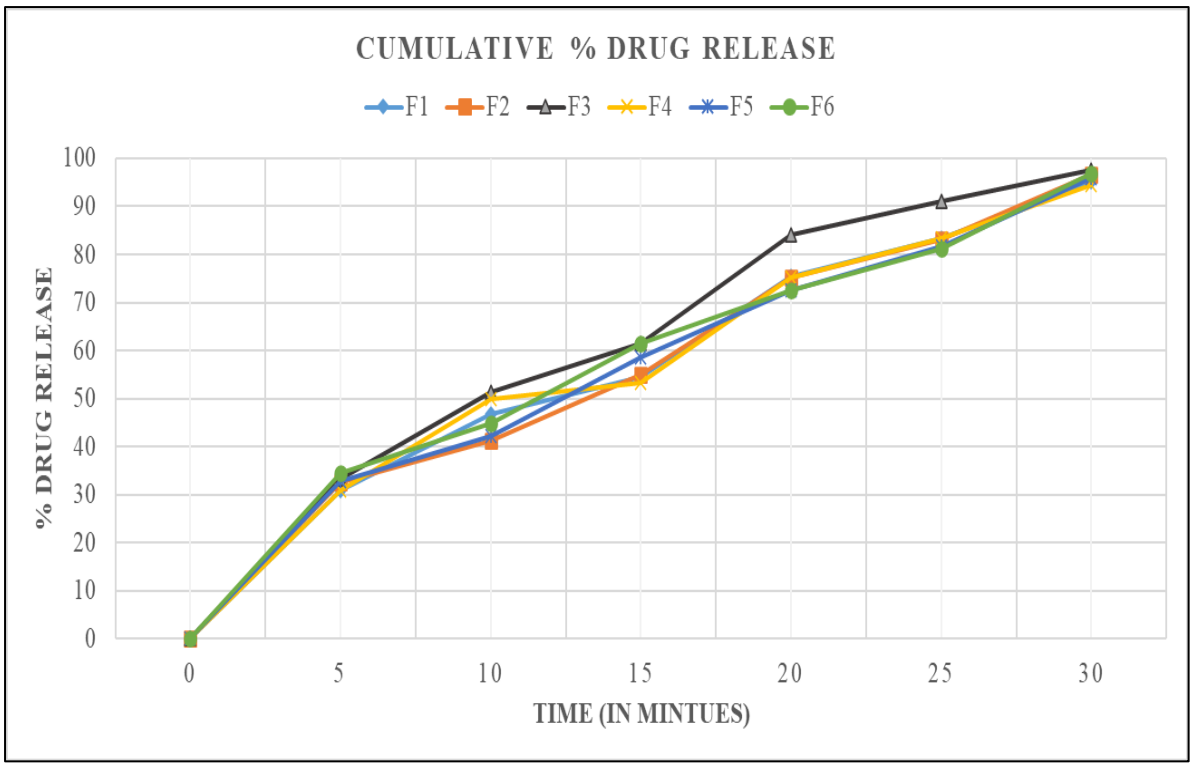

Figure 12: Cumulative % Drug Release

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.

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CONFLICT OF INTEREST

All authors declared no conflicts of interest.

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DEVELOPMENT OF FORCED DEGRADATION STUDY

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INTRODUCTION

Lamivudine,(2R-cis)-4-amino-1-[2-(hydroxymethyl)-1,3-oxathiolan-5-yl]-2(1H)-pyrimidinone,[1] is a synthetic nucleoside analogue with activity against the human immunodeficiency virus (HIV) and hepatitis B virus (HBV).[2] The molecule has two chiral centers and is manufactured as the pure 2R, cis(−)-enantiomer. The racemic mixture from which lamivudine originates has antiretroviral activity but is less potent and substantially more toxic than the pure (−)-enantiomer. Compared with the (+)-enantiomer, the phosphorylated (−)-enantiomer is more resistant to cleavage from nascent RNA/DNA duplexes by cellular 3'-5' exonucleases, which may contribute to its greater potency. Lamivudine is either formulated alone as a tablet/oral formulation or in combination with zidovudine. The spectroscopic method for assay of lamivudine is not official in any pharmacopoeia .A few high-performance thin-layer chromatography (HPTLC) and high-performance liquid chromatography (HPLC) techniques have been suggested for analysis of the formulation. HPLC is the most widely used technique for the estimation of lamivudine in human plasma, saliva, cerebrospinal fluid, and human blood cells, as well as for studying the drug metabolites in the urine.[8] The suggested HPTLC and HPLC methods for assay of lamivudine are expensive and need complex and sophisticated instrumentation. Lamivudine can also be determined by Reverse Phase-HPLC method with lesser runtime, but the aforementioned drawback still persists. One of the first methods for visible spectrophotometric determination of lamivudine was based on the colored condensation products of aromatic aldehydes; this method suffers from a drawback as the interference from the excipients is more since the determination is carried out at much shorter wavelengths. It is also reported that lamivudine can also be assayed by titrimetric methods based on diazo coupling, redox reaction using Folin- Ciocalteu reagent, and redox-complexation reaction using ferric chloride-ortho phenanthroline .However, the above mentioned titrimetric methods are reported to suffer from disadvantages like unstability of the reagents, high cost of the chemicals, reduced sensitivity, etc. The present research work describes a UV spectrophotometric method for estimation of lamivudine in API and its pharmaceutical preparation.

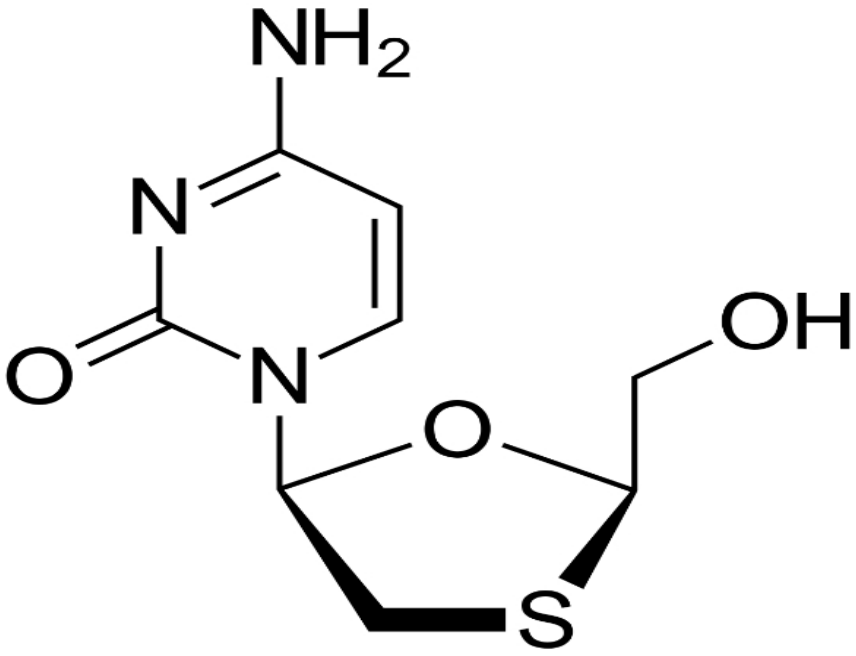


Fig:- Structure of lamivudine

Lamivudine is a monothioacetal that consists of cytosine having a (2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl moiety attached at position 1. An inhibitor of HIV-1 reverse transcriptase, it is used as an antiretroviral in the treatment of AIDS and hepatitis B.

Forced degradation studies provide the approach to analyses the stability of drug samples in pharmaceutical industries. Drug product safety and efficacy is affected by the chemical stability of the molecule. Stability of molecule information provides the data for selecting proper formulation, package, proper storage conditions and shelf life. These data also play a significant role which is required in the regulatory documentation. Before filling registration dossier, it is obligatory to execute stability studies of new drug molecules.

A forced degradation study investigates the stability of a chemical or pharmaceutical product under stressful conditions (forced degradation research is also known as stress testing). “Stress” in this case means any physical or environmental conditions that a product will encounter that could cause a chemical change. Key learning outcomes of forced degradation testing include:

- Establishing likely degradation pathways and products.
- Evaluating the stability of the molecule.
- Validating the analytical methods used to assess chemical stability.
- Gaining insight into drug packaging and storage.

Forced degradation studies can be performed for any chemical, but it is essential in pharmaceutical development. Active pharmaceutical ingredients (APIs) are carefully designed and dosed to deliver a specific pharmaceutical effect. Chemical changes can compromise the drug’s efficacy or cause harmful side effects.

Objectives for forced degradation :-

- To develop a degradation pathways of drug substances and drug products.
- To recognize the chemical properties of drug molecules.
- To resolve stability related problems.
- To establish the intrinsic stability of a drug substance in the formulation.
- To reveal the degradation mechanism of drug substance and drug products.
- To generate stability indicating nature of a developed method.
- To produce more stable formulations. It also helps in determining the expiry date of particular formulation.

- To generate a degradation profile similar to that of what would be observed in a formal stability study under ICH conditions.
- To distinguish degradation products that is related to the drug products from those that are generated from non-drug product in a formulation.

METHODS AND MATERIALS :-

Chemicals:

Lamivudine drug was obtained from lamivudine tablets. These tablets of 100 mg were purchased from local markers. The purity of lamivudine was confirmed by uv-visible spectroscopy analysis.

Apparatus:

UV visible wavelength detector, UV spectrophotometer (V-730ST), conical flask, RBF, cuvettes, condenser, measuring cylinder, burner, Bunsen burner stand.

Standard and Sample Preparation:-

Standard Preparation:

A stock standard solution of lamivudine was prepared by dissolving 100 mg of lamivudine drug dissolving in 100 ml of volumetric flask containing 25 ml methanol. It was sonicated for about 5 min to dissolve drug. Then resultant solution diluted to 100 ml methanol. 10 ml from this , transfer in another volumetric flask and diluted with 100 ml methanol. The concentration use to asses lamivudine content is 10 mg/ml.

Sample Preparation:

To prepare the stock sample solution 10 tablets of lamivudine were accurately weighted pulverized and mixed using mortar and pestle. An amount of tablets power equivalent to 100 mg of lamivudine was weighted and transfer into 100 ml of volumetric flask containing 25 ml of methanol. It was sonicated for about 5 min to increase dissolution. 10 ml of supernatant solution taken and diluted to 100 ml with methanol.

FORCED DEGRADATION STUDY:-

1] Acidic degradation:-

The procedure of degradation studies was conducted in agreement with ich guide to stability studies. The sample solution were prepared at concentration of 10mg/ml in methanol, 0.5 M HCL and 0.5 M NaOH at 80c for 24 hours. At this condition lamivudine drug was found to be stable.

While two degradation product was found to be from 2 M HCL at 80c for 72 hours. In this degradation study result was found to be bad smell and yellow color.

In 2 M NaOH at neutral condition lamivudine drug was found to be stable.

Fig. Before acidic degradation

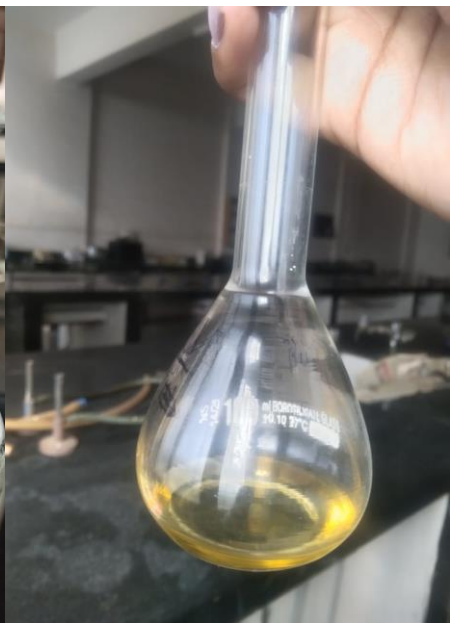


Fig. After acidic degradation

2] Thermal degradation:-

Thermal behaviour and decomposition kinetics studied by thermal analysis techniques by Differential Scanning Calorimetry (DSC) and Thermo Gravimetric Analyse (TGA)

Different heating rates were applied to study the DSC behaviour of drug sample in order to compute their thermo kinetic and thermodynamic parameter by non-isothermal kinetic methods.

DSC In this method heat is applied to sample and observed physical and chemical change whether heat is loss or gain, DSC curves used for thermo kinetic parameter.

TGA In this method accurate weight of lamivudine drug are taken and applied the heat then observe change in mass. Decomposition at several heating rates was observed.

3] Photolytic degradation:-

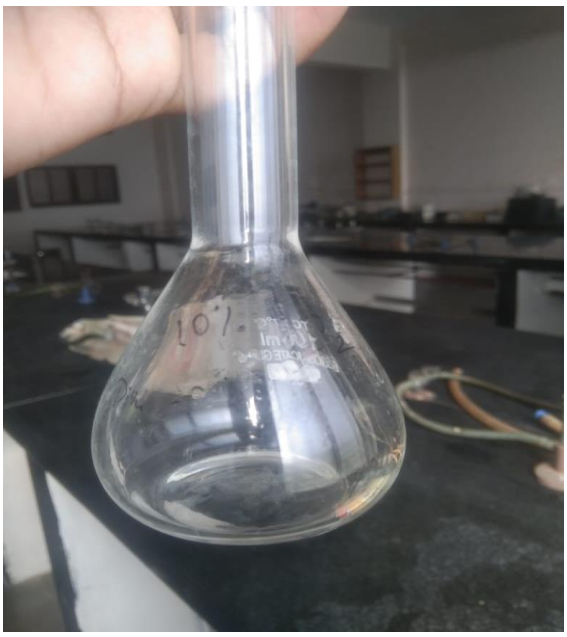
It consists of photo stability chamber which include 2 UV lamp sand 4 fluorescence lamp. The photolytic degradation of lamivudine drug detected in pure water, natural water and fresh water.

4] Hydrolytic degradation:-

Identification and characterization of lamivudine drug degradation was studied by using liquid chromatography-mass spectroscopy (LC-MS) in combination with high resolution mass spectroscopy useful in development of stable formulation.

5] Oxidative degradation: -

Stock solution of lamivudine drug diluted with 10% H202 and kept at room temp for 10 hrs. for oxidative degradation. In this condition lamivudine drug was found to be stable.



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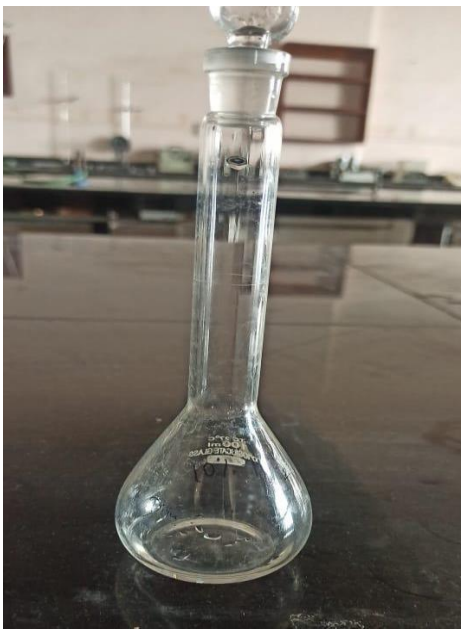

(2)

Fig. Oxidative degradation

CONCLUSION:-

A stability indicating HPLC related compounds method was developed for the quantification of Lamivudine and its potential impurities in active pharmaceutical ingredients and its dosage forms. The developed method is specific, precise, accurate, linear and robust for Lamivudine and its impurities. Degradation products formed during forced decomposition studies were very well separated from analyte peak, which demonstrates that the developed method was specific and stability indicating .This method can be used to carry out the analysis of Lamivudine drug product in regular quality check and stability samples.

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