




**SCHOOL OF PHARMACY
CIRCULAR**

No: AJU/SP/022/23

Date 28.01.2023

It is hereby notified that a 30 hours Short Term Training Course On "THEORETICAL AND PRACTICAL APPROACH TO VARIOUS UNIT OPERATIONS IN PHARMACEUTICAL ENGINEERING" will be conducted 27th February 2023-03rd April 2023. Students of ARKA JAIN University with Science back ground in senior secondary level can avail the opportunity. For registration interested eligible candidates need to contact Mr. Asutosh Parida (Lab Technician), School of Pharmacy. Registration amount is Rs100/- only. Registered candidates herewith notified to attend the course without failing. Coordinators need to submit the evaluated assessment papers by 6th April 2023. For details can go through the brochure available with website of School of Pharmacy, ARKA JAIN University.

ANNEXURE-1- Course Content


Dean
Dean School of Pharmacy
School of Pharmacy
ARKA JAIN University Jharkhand

Copy to


Vice Chancellor
Office of the Registrar
IQAC
Head of the Departments
Dean of Different Schools
In-charge ERP Coordinator
ERP In-charge
Website In-charge
Office file
Student Whatsapp group

ANNEXURE-1- Course Content

Course Content

Day	Date	Session to be instructed
1	27 th Feb 2023	Discussion on various unit operations and its importance
2	28 th Feb 2023	Discussion on Dimensions, Units and their Inter-conversion
3	1 st March 2023	Demonstration on plotting of graph using provided data and determination of Slope and to find out concentration by given absorbance.
4	2 nd March 2023	Pharmaceutical Importance of Size Reduction a discussion
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11	9 th March 2023	Demonstration of Reynolds Experiment and deduction of Reynolds number
12	10 th March 2023	Pharmaceutical Importance of Size separation a discussion
13	11 th March 2023	Principle, Construction and Working of various units implemented for size separation a discussion
14	13 th March 2023	Pharmacopoeial standard sieve, size separation and particle size determination
15	14 th March 2023	Theories of Humidification and dehumidification, behaviour of solids in presence of moisture a pharmaceutical importance, introduction to psychrometric chart
16	15 th March 2023	Determination of humidity by dew point metho
17	16 th March 2023	Determination of humidity by psychrometer
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19	20 th March 2023	A practical approach to explain various factors affecting filtration
20	21 st March 2023	Fundamentals of centrifugation, pharmaceutical significance, theories a discussion
21	22 nd March 2023	Various factors affecting centrifugation a practical approach
22	23 rd March 2023	Significance of mixing for different pharmaceutical dosage forms, units implemented in pharmaceutical industries for solid-solid, solid-liquid and other formulations, their mechanisms a discussion
23	24 th March 2023	A practical approach to study the solubility rate of soluble solids with solvent introducing propeller in different positions
24	25 st March 2023	Moisture content and mechanism of drying and different kinds of dryers used to dry different kinds of materials and their pharmaceutical significance a discussion
25	27 th March 2023	Construction of a drying curve using calcium carbonate and hot air oven a practical approach
26	28 th March 2023	Theories of crystallization, pharmaceutical application, characteristics a discussion
27	29 th March 2023	Study the effect of time on rate of crystallization by shock cooling method a practical approach
28	31 st March 2023	Preparation of absolute alcohol by azeotropic distillation a practical approach
29	1 st April 2023	Efficiency of steam distillation using sodium chloride and nitrobenzene a practical approach
30	3 rd April 2023	Pharmaceutical importance of evaporation, various factors affecting evaporation and different kinds of evaporators used in Pharmaceutical industries a discussion
31	4 th April 2023	Assessment


 Dean
 School of Pharmacy
 ARKA JAIN University Jharkhand



SCHOOL OF PHARMACY CIRCULAR

No: AJU/SP/040/23

Date 22.02.2023

It is hereby notified that the assessment for the 30 hours Short Term Training Course On "THEORETICAL AND PRACTICAL APPROACH TO VARIOUS UNIT OPERATIONS IN PHARMACEUTICAL ENGINEERING" will be conducted on 4th April 2023. Registered students need to appear the assessment from 4:30 PM.



Dean
School of Pharmacy
ARKA JAIN University Jharkhand

Dean

School of Pharmacy

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Website In-charge
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Student WhatsApp group



SCHOOL OF PHARMACY CIRCULAR

No: AJU/SP/043/23

Date 22.02.2023

It is hereby notified that following are the students who have registered for a 30 hours Short Term Training Course On "THEORETICAL AND PRACTICAL APPROACH TO VARIOUS UNIT OPERATIONS IN PHARMACEUTICAL ENGINEERING" which will be conducted 27th February 2023-03rd April 2023.


Dean
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ARKA JAIN University Jharkhand

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Dean of Different Schools
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Sl. No.	Name of Student	Enrolment No.
1	Mr Roshan Mahato	200462
2	Miss Silky Kumari	200871
3	Miss Nikita Pradhan	200873
4	Nilesh Kumar Singh	200397
5	Anarajita Banerjee	200486
6	Ajwarg kumar	200846
7	Miss Anshuman Gupta	190393
8	Miss Anjali Gupta	190176
9	Miss Sushri Shreya	210204


Dean
School of Pharmacy
ARKA JAIN University Jharkhand

“Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)

Date of Event	27th February 2023-03rd April 2023
Name of the Event	“Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)
Type of the Event	Value added Course/Slow Learner/ Advance Learner (2.2.1)
Conducted by	School of Pharmacy
No. Of Participant	09

OBJECTIVE Pharmaceutical engineering involves the research, development, creation, and manufacturing of bulk drugs as well as formulations. To ensure the safety, efficiency and optimisation of manufacturing processes, process engineers in pharma pave the way for vital medications, and drugs to reach the market, and support patients.

DETAILS: Pharmaceutical Processing is the process of drug manufacturing and can be broken down into a range of unit operations, such as blending, granulation, milling, coating, tablet pressing, filling, and others. The Pharmaceutical manufacturing process has precise requirements and manufacturing guidelines for quality. Pharmaceutical industry unit operations are a subset of the unit operations that are encountered in the chemical process industry. Although the materials being processed are different between the two industries, the underlying physical first principles are the same. Understandings of these operating principles are the key to designing a robust drug product manufacturing process. Pharmaceutical engineering principles can come in handy in the design, development, and scale-up for the best practices to monitor, control, and evaluate these individual unit operations and the quality Briefing by Dr Jyotirmaya Sahoo “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course) of the material produced from them. To develop the expertise among the 27th February 2023.

The course was jointly instructed by Dr. Jyotirmaya Sahoo (Professor and Dean of School of Pharmacy), Mr. Alok Kumar Moharana and Mr. Sumanta Sen (Associate Professor). Various theoretical and practical aspects relevant to the topic was discussed and performed during the conduction of the course. Finally the assessment was conducted. Successful candidates were provided with certificates of successful completion.

On completion of the course students able to learn

- About the various unit operations in pharmaceutical industries.
- To appreciate and comprehend significance of plant lay out design for optimum use of resources.
- How to handle the materials in a pharmaceutical industry and their techniques.
- To perform various processes involved in pharmaceutical manufacturing process.

MINUTE OF MEETING

Agenda 1: Welcome by Dr. Jyotirmaya Sahoo, Dean of School of Pharmacy

Discussion: Dr. Jyotirmaya Sahoo, Dean of School of Pharmacy welcome all the members present with the meeting.

Agenda 2: Title of the STCC and schemes for assessment.

Discussion: Keeping the importance of various units operated in the Pharmaceutical Industries in view the title of the STCC is decided to keep "Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering". The course will be of 30 days (30 hours). Curriculum designing will be done by course developer with assignments and assessments. The schemes for assessment will be as one Assignment of 10 marks, Viva of 10 marks, Attendance of 5 marks, and one assessment of 50 marks. Total marks will be of 75 marks. Assessment is of 1.5 hour in offline mode.

Agenda 3: Scheduling and Permission from Vice Chancellor

Discussion: It is decided to schedule the course from 27th February 2023. Notice need to be circulated among the students and faculty members after the approval of Vice Chancellor of the University. However, keeping the University activities on view if date need to be revised then on immediate effect notice need to be circulated. Information in this regard, needs to be intimated to the Member Secretary of BOS for the approval/ ratification.

Agenda 4: Budget planning

Discussion: It is decided to register the course by the interested candidates by paying an amount of only 100.00 rupees.

Agenda 5: Information to students

Discussion: Students and staffs to be informed through their whatsapp group, website notice board to participate the STCC. All participants need to attend the course with their uniform and lab coat whenever necessary.

Agenda 6: Promotion

Discussion: Posters and brochure need to be designed by University designers and circulated as well as need to be uploaded with the website. Photographs will be with geo tag.

OUTCOMES:

- Able to develop the basic understanding about the various extraction methods of herbal drugs.
- Able to identify of the secondary metabolites.
- Able to detect the impurities in the crude drugs by physical identification tests.

Agenda 7: Report preparation and submission to In-charge Website and official documentation and Press Release

Discussion: Report to be prepared and submitted to In-charge Website immediate after completion of the course and also need to be submitted with key highlights and monthly NAAC report to IQAC.

Agenda 8: Record the report by the Website update & Press and Media Committee of School of Pharmacy

Discussion: The report need to be recorded with the School of Pharmacy. The Meeting for the Short Term Training Course was closed with vote of thanks to the present members.

Poster of the Event



JGI ARKA JAIN
University
Jharkhand

SCHOOL OF PHARMACY
ARKA JAIN UNIVERSITY,
JHARKHAND
CONDUCTS
**30 Hours Short Term
Training Course**
ON
THEORETICAL & PRACTICAL APPROACH
TO VARIOUS UNIT OPERATIONS IN
PHARMACEUTICAL ENGINEERING

Date : 27th February - 03rd April 2023

Venue : SUSHRUTA

INSTRUCTORS
Professor Dr. Jyotirmaya Sahoo, Dean
School of Pharmacy, ARKA JAIN University.
Mr. Sumanta Sen, Associate Professor,
School of Pharmacy, ARKA JAIN University.
Mr. Alok Kumar Moharana, Associate Professor,
School of Pharmacy, ARKA JAIN University.

Contact Point :
dr.jyotirmaya@arkajainuniversity.ac.in
Mobile : 8249108741

www.arkajainuniversity.ac.in Toll Free : 1800-1200-200

Figure 1: Poster of the Event – 30 Hours Short Term Training Course on Theoretical & Practical Approach to Various unit operations in Pharmaceutical Engineering.

BROCHURE


23	24th March 2023	A practical approach to study the solubility rate of soluble solids with solvent introducing propeller in different positions.
24	25th March 2023	Moisture content and mechanism of drying and different kinds of dryers used to dry different kinds of materials and their pharmaceutical significance a discussion.
25	27th March 2023	Construction of a drying curve using calcium carbonate and hot air oven a practical approach.
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About The Course:
Pharmaceutical engineering is a branch of engineering focused on discovering, formulating, and manufacturing medication, analytical and quality control processes, and on designing, building, and improving manufacturing sites that produce drugs. Various industrial processes required to convert raw material into value added pharmaceuticals like drugs and additives. Subject is important for UG level pharmacy students prior to their journey to pharmaceutical industry as a researcher or manufacturer. Here they will get the opportunity for a rapid workout on fluid flow, comminution, size separation, filtration, evaporation, distillation, crystallization, centrifugation, mixing, humidification and drying.

The learning Objective of the Course:
Pharmaceutical engineering involves the research, development, creation, and manufacturing of bulk drugs as well as formulations. To ensure the safety, efficiency and optimisation of manufacturing processes, process engineers in pharma pave the way for vital medications, and drugs to reach the market, and support patients.

By the end of the course, participants may be able to:

- To gain the idea about the various unit operations in pharmaceutical industries.
- To appreciate and comprehend significance of plant layout design for optimum use of resources.
- How to handle the materials in a pharmaceutical industry and their techniques.
- To perform various processes involved in pharmaceutical manufacturing process



ARKA JAIN University
Jharkhand

School of Pharmacy
ARKA JAIN University, Jharkhand
Conducts

30 hours Short Term Training Course

**THEORETICAL AND PRACTICAL
APPROACH TO VARIOUS UNIT OPERATIONS
IN PHARMACEUTICAL ENGINEERING**

Resource Person

Professor Dr. Jyotirmaya Sahoo
Dean, School of Pharmacy, ARKA JAIN University

Mr. Sumanta Sen
Associate Professor, School of Pharmacy, ARKA JAIN University

Mr. Alok Kumar Moharana
Associate Professor, School of Pharmacy, ARKA JAIN University

Course Developer

Professor Dr. Jyotirmaya Sahoo
Dean, School of Pharmacy, ARKA JAIN University

Mr. Sumanta Sen
Associate Professor, School of Pharmacy, ARKA JAIN University

Mr. Alok Kumar Moharana
Associate Professor, School of Pharmacy, ARKA JAIN University

Course Duration

30 Days (30 Hours)
Time: 4:30 pm - 5:30 pm

Commencement Date

From 27th February 2023

Who Can Apply?

Students of ARKA JAIN University with Science back ground in senior secondary level

Process of Enrolment and Certification

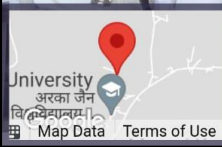
- Interested candidates can fill the registration from through the link provided below.
- Registration: Offline mode, Mr. Asutosh Parida (Lab Technician), School of Pharmacy
- Registration Charges: Rs.100 Offline mode, Mr. Asutosh Parida (Lab Technician), School of Pharmacy
- Last date of Registration: 20th February 2023.
- The selected students will attend the thirty days course in which attendance is mandatory for all the thirty days and also Assignments and assessments forgetting the certificate

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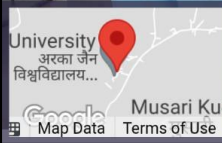
Figure 2: Brochure of the Event – 30 Hours Short Term Training Course on Theoretical & Practical Approach to Various unit operations in Pharmaceutical Engineering.

Photos of the Event



R4X2+2WH, Mohanpur, Jharkhand 832108, India
lat: 22.847775 long: 86.103123 alt: 165

Figure 3: Orientation on “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course “



R4V2+8XQ, Mohanpur, Jharkhand 832108, India
lat: 22.843678 long: 86.102805 alt: 164

Figure 4: Briefing by Dr Jyotirmaya Sahoo “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course’

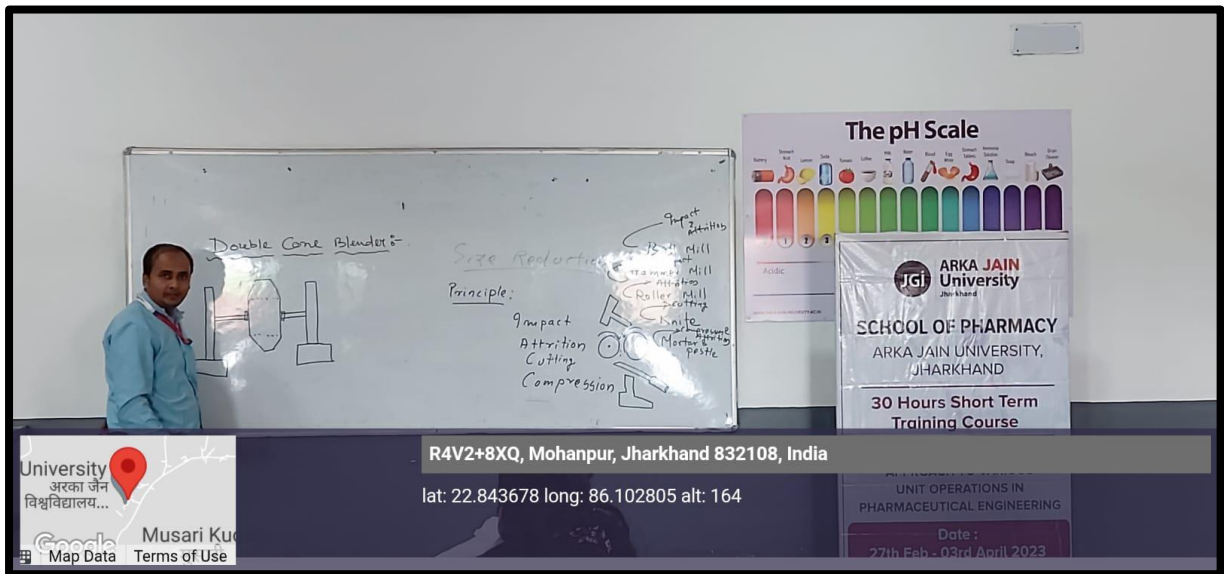


Figure 5: Briefing Mr Sumanta Sen “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)

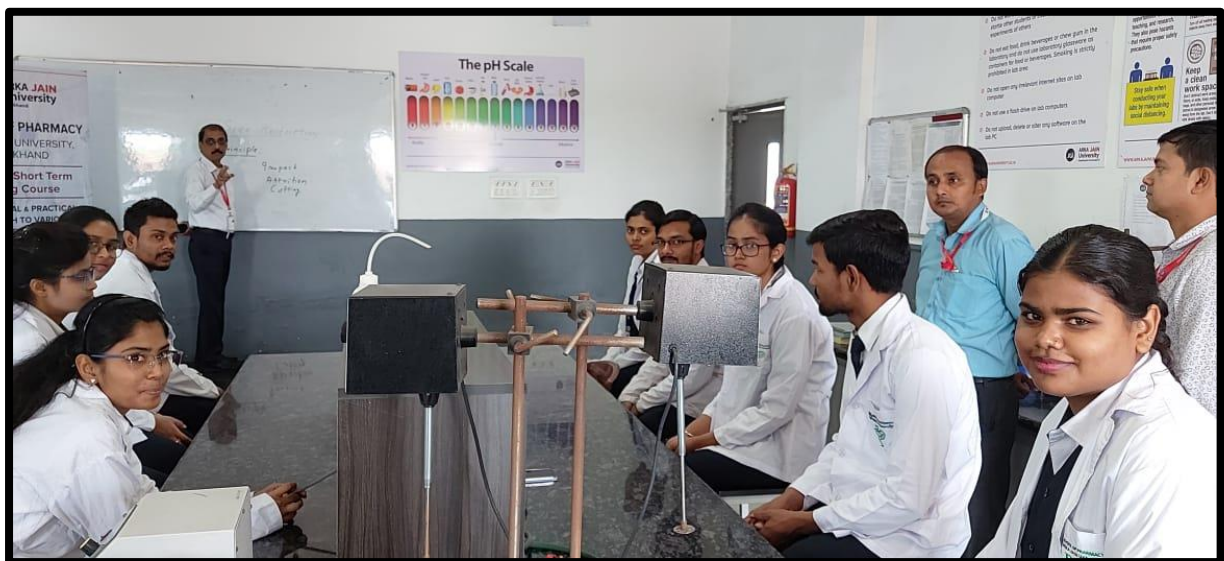


Figure 6: Instructor explained about deformation of particle size “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)



Figure 7: Instructor explaining the principle, construction and working instrument “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)



Figure 8: Disassembling of ball mill “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)



Figure 9: Executing the balls from ball mill in “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)



Figure 10: Demonstrating how to assemble the dissembled of ball mill showed by the instructor “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” (30 Hours Short Term Training Course)



Figure 11: Student assembling the disassembled of ball mill under the supervision of instructor “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 12: Instructor explaining the principle, construction and working of double cone blender “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 13: Instructor explaining the how to operate the double cone blender “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 14: Instructors demonstrating the dissembling of double cone blender “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 15: Only intention of training is clear explaining for confident understanding “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 16: Trained the students how to load the blender “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 17: Students assembling the dissembled of blender under the supervision of instructors “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 18: Instructors watching the session worked by the students “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 19: Final interaction among students and Instructors at the end of an unit operation “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 20: Instructors explaining the operation of Multy-mill



Figure 21: Conducting Assessment for “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”



Figure 22: “Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering” Assessment



Figure 23: Student Received Certificate after Successful Completion of the STTC Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering



Figure 24: Student Awarded with Certificate after Successful Completion of the STTC Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering



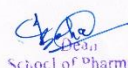
Figure 25: Participant received the certificate after Successful Completion of the STTC Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering




Figure 26: Participants and Instructors of the STTC Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering

STUDENTS ATTENDANCE

Attendance Sheet : THEORETICAL AND PRACTICAL APPROACH TO VARIOUS UNIT OPERATIONS IN PHARM									
Course Code:		Date: (DD/MM/YYYY)		27th Feb 2023	28th Feb 2023	1st March 2023	2nd March 2023	February	
		Month:							
		Subject:							
S. No.	Enrollment No.	Semester	Name of the Student	Total/Class Attended	Attendance %	1	2	3	4
1	AJU1900462	VI	Roshan Mahato	30	100%	Present	Present	Present	Present
2	AJU1900391	VI	Silky	30	100%	Silky	Silky	Silky	Silky
3	AJU1900435	VI	Nikhita Pradhan	30	100%	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan
4	AJU1900397	VI	Nishita Ma Bhandari	30	100%	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari
5	AJU1900486	VI	Aparajita Basumaty	30	100%	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty
6	AJU1900341	VI	Aparajita Kumar	30	100%	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar
7	AJU1900393	VI	Vousindavi Gupta	30	100%	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta
8	AJU1900176	VII	Shyama Gupta	30	100%	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta
9	AJU1900229	VI	Susmita Shrivastava	30	100%	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava
Signature				-	-	Dr	Dr	Dr	Dr
Faculty				-	-	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo


 School of Pharmaceutics
 ARKA JAIN University, Jharkhand

ACADEMICAL ENGINEERING													
3rd March 2023	4th March 2023	5th March 2023	6th March 2023	7th March 2023	8th March 2023	9th March 2023	10th March 2023	11th March 2023	13th March 2023	14th March 2023	15th March 2023	16th March 2023	17th March 2023
y April Month Attendance													
THEORETICAL AND PRACTICAL APPROACH TO VARIOUS UNIT OPERATIONS IN PHARM													
5	6	7	8	9	10	11	12	13	14	15	16	17	18
Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Silky	Silky	Silky	Silky	Silky	Silky	Silky	Silky	Silky	Silky	Silky	Silky	Silky	Silky
Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan	Nikhita Pradhan
Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari	Nishita Ma Bhandari
Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty	Aparajita Basumaty
Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar	Aparajita Kumar
Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta	Vousindavi Gupta
Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta	Shyama Gupta
Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava	Susmita Shrivastava
Dr	Dr	Dr	Dr	Dr	Dr	Dr	Dr	Dr	Mr	Mr	Mr	Mr	Mr
Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Dr J Sahoo	Sumanta	Sumanta	Sumanta	Sumanta	Sumanta


 School of Pharmaceutics
 ARKA JAIN University, Jharkhand

20th March 2023	21st March 2023	22nd March 2023	23rd March 2023	24th March 2023	25th March 2023	27th March 2023	28th March 2023	29th March 2023	31st March 2023	1st April 2023	3rd April 2023
PHARMACEUTICAL ENGINEERING											
19	20	21	22	23	24	25	26	27	28	29	30
Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali	Rehan/Neelke Sikky Nisha Nisha Nisha Anjali Anjali Anjali Anjali Anjali Anjali Anjali
Mr Sumanta	Mr Sumanta	Mr Sumanta	Mr Sumanta	Mr Alok K Moharana	Mr Alok K Moharana	Mr Alok K Moharana	Mr Alok K Moharana	Mr Alok K Moharana	Mr Alok K Moharana	Mr Alok K Moharana	Mr Alok K Moharana

(Signature)
Dean
School of Pharmacy
ARKA JAIN University, Jharkhand



ARKA JAIN
University
Jharkhand

SCHOOL OF PHARMACY

“Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering”

30 hours Short Term Training Course

4th April 2023

ASSESSMENT ATTENDANCE

Sl. No.	Name of Student	Enrolment No.	Assessment Attendance Signature
1	Rashan Mahato	200467	Rashan Mahato
2	Silky Konari	200871	Silky
3	Nikita Pradhan	200875	Nikita Pradhan
4	Nilesh Kumar Singh	200897	Nilesh Kumar Singh
5	Aparajita Banerjee	200955	Aparajita Banerjee
6	Anurag Kumar	200846	Anurag Kumar
7	Vaishnavi Gupta	190593	Vaishnavi Gupta
8	Tanjali Gupta	19176	Tanjali Gupta
9	Srishti Shreya	210204	Srishti Shreya
10	-	-	-



Dr. Jyotirmaya Sahoo

Mr Sumanta Sen

Mr Alok Kumar Moharana

FEEDBACK ANALYSIS



SCHOOL OF PHARMACY

**“Theoretical and Practical Approach to Various Unit Operations in
Pharmaceutical Engineering”**

**27th February 2023-3rd April 2023
30 Hours Short Term Training Course**

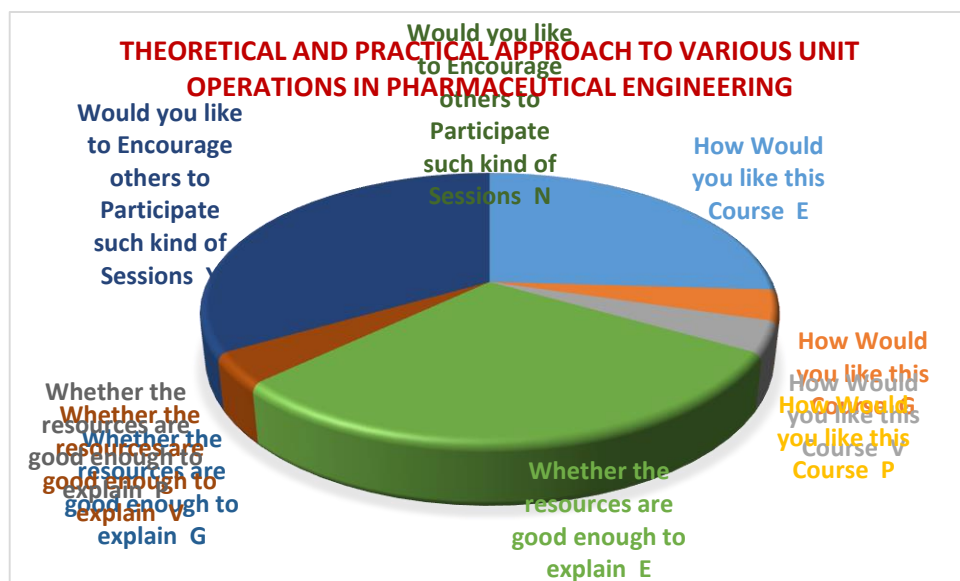
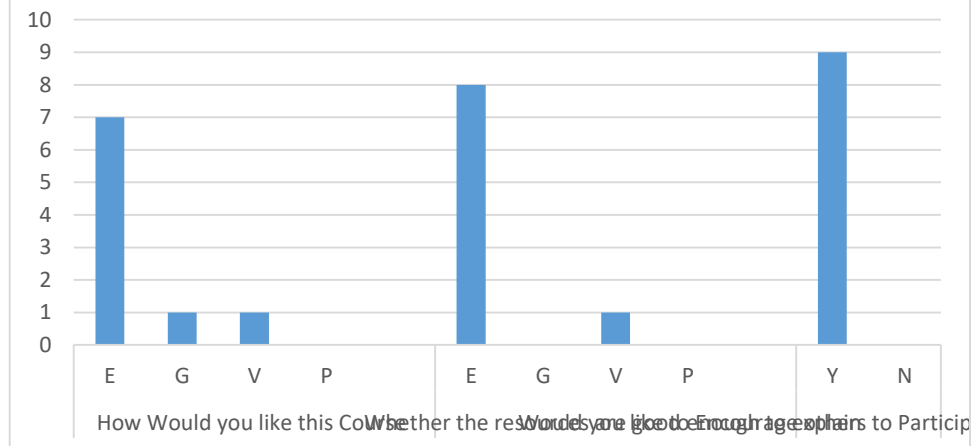
FEEDBACK

Sl. No.	Name of Candidate	Enrolment Number	How Would you like this Course (E/G/V/P)	Whether the resources are good enough to explain (E/G/V/P)	Would you like to Encourage others to Participate such kind of Sessions (Y/N)	Would you like to attend such kind of Sessions in future (Y/N)
1	Roshan Mahato	200462	E	E	Y	Y
2	Silky Kumari	200871	E	E	Y	Y
3	Nikita Pradhan	200875	V	E	Y	Y
4	Mr Nilesh Kumar Singh	200397	E	E	Y	Y
5	Mr Aparajita Banerjee	200486	G	V	Y	Y
6	Mr Anurag Kumar	200846	E	E	Y	Y
7	Miss Vaishnavi Gupta	190393	E	E	Y	Y
8	Miss Anjali Gupta	190176	E	E	Y	Y
9	Miss Srishthi Shreya	210204	E	E	Y	Y

E=Excellent, G=Good, V=Very good, P=Poor, Y=Yes, N=No


 Feedback Collected by Mr. Akh Kumar Moharana

Theoretical and Practical Approach to Various Unit Operations in Pharmaceutical Engineering



CERTIFICATES AWARDED

