



BENGAL SCHOOL OF TECHNOLOGY

AUTONOMOUS

Estd. by Supreme Educational Development and Charitable Organization (SEDCO)

Recognised by UGC & included u/s 2(f) of UGC Act 1956

Approved by Pharmacy Council of India, New Delhi

Affiliated to: Maulana Abul Kalam Azad University of Technology (MAKAUT) &

West Bengal State Council of Technical and Vocational Education and Skill Development (WBST&VE&SD)

Accredited by NAAC with "A" Grade, NBA for B. Pharm & QCI

Lesson Plan

Class: B. Pharm

Session: 2026-27

Date of Commencement of Session: 30.07.26

Subject Name: Pharmaceutical Engineering

Subject code: PT-317 and PT-397

Faculty In charge: Ms. Debasmita Das

Schedule of allotted class work (w.e.f)

Days	Monday	Tuesday	Wednesday	Thursday	Friday
Time/period Section A	12.40pm. – 1.40pm.	11.40am. – 12.40pm.			
Section B	10.40am. - 11.40am.	9.40am. – 10.40am.			

Available Periods/week _____ 4 _____ Available periods in the total semester _____ 31 _____ Extra Classes _____ NA _____

Guest Lectures planned if any with justification _____ NA _____

Scope & Objective of the course:

- Examine every single unit activity carried out by pharma manufacturing.
- For the best use of resources, students should be able to know the relevance of plant layout design and the many techniques employed in the manufacturing process.
- To learn about several corrosion control preventive strategies for the pharmaceutical industry.
- Students will be able to learn about all the machinery utilized in the pharmaceutical industry after completing the pharmaceutical engineering practical course.

Reading materials:

A. Text Books

Sl. No.	Name of the Text Book(s)	Author	Edition	Publisher	Accession No.	Rack No
01	The textbook of 'Pharmaceutical Engineering'	CVS Subrahmanyam	2 nd Edition	Vallabh Prakashan	5237	7

B. Reference Books

Sl. No.	Name of the Text Book(s)	Author	Edition	Publisher	Accession No.	Rack No
01	Pharmaceutical Engineering	K. Sambamurthy	1 st Edition	New age international publishers	22	7

C. Journals / Website/Any other resources

Sl. No.	Name of the journal (s)/website/others	Source	Vol. no.	Month & Year
1	PHARMACEUTICAL ENGINEERING: - CORROSION. https://doi.org/10.13140/RG.2.2.16999.11686	ResearchGate	-	May 2023

Daily Teaching Schedule for UNIT-I

Sl. No.	Date	Day	Title to be covered	Teaching Pedagogy / T.L.P.	Suggested Knowledge Resources
1	08.09.26	Tuesday	Types of Manometer	PowerPoint Presentation (Smart Class)	A1
2	14.09.26	Monday	Reynold's experiment, Reynold's number and its significance	PowerPoint Presentation (Smart Class)	A1
3	15.09.26	Tuesday	Bernoulli's Theorem & it's applications and Energy Loses	PowerPoint Presentation (Smart Class)	A1

4	21.09.26	Monday	Orifice meter and Venturi meter	PowerPoint Presentation (Smart Class)	A1
5	22.09.26	Tuesday	Pilot Tube and Rotameter	PowerPoint Presentation (Smart Class)	A1
6	28.09.26	Monday	Objectives, Mechanisms & Laws governing size reduction	PowerPoint Presentation (Smart Class)	A1
7	29.10.26	Tuesday	Principles, construction, working, uses, merits, demerits of Hammer mill and Fluid Energy mill	PowerPoint Presentation (Smart Class)	A1
8	05.10.26	Monday	Principles, construction, working, uses, merits, demerits of Ball mill	PowerPoint Presentation (Smart Class)	A1
9	06.10.26	Tuesday	Principles, construction, working, uses, merits, demerits of Edge runner mill & end runner mill.	PowerPoint Presentation (Smart Class)	A1
10	12.10.26	Monday	Objectives, applications & mechanism of size separation,	PowerPoint Presentation (Smart Class)	A1
11	13.10.26	Tuesday	Official standards of powders, sieves and size separation	PowerPoint Presentation (Smart Class)	A1
12	27.10.26	Tuesday	Principles, construction, working, uses, merits, demerits of Sieve Shaker	PowerPoint Presentation (Smart Class)	A1
13	02.11.26	Monday	Principles, construction, working, uses, merits, demerits of Cyclone separator, Air separator	PowerPoint Presentation (Smart Class)	A1
14	03.11.26	Tuesday	Principles, construction, working, uses, merits, demerits of Bag filter and Elutriation tank.	PowerPoint Presentation (Smart Class)	A1

Daily Teaching Schedule for UNIT-IV

Sl. No.	Date	Day	Title to be covered	Teaching Pedagogy / T.L.P.	Suggested Knowledge Resources
1	03.08.26	Monday	Objectives, Applications of Filtration	PowerPoint Presentation (Smart Class)	A1
2	04.08.26	Tuesday	Theories of Filtration Factors influencing Filtration	PowerPoint Presentation (Smart Class)	A1
3	10.08.26	Monday	Filter aids, Filter medias	PowerPoint Presentation (Smart Class)	A1
4	11.08.26	Tuesday	Principle, Construction, Working, Uses, Merits and Demerits of Plate & Frame filter	PowerPoint Presentation (Smart Class)	A1
5	17.08.26	Monday	Principle, Construction, Working, Uses, Merits and Demerits of Rotary drum filter and Filter leaf	PowerPoint Presentation (Smart Class)	A1
6	18.08.26	Tuesday	Principle, Construction, Working, Uses, Merits and Demerits of Meta filter and Cartridge filter	PowerPoint Presentation (Smart Class)	A1
7	24.08.26	Monday	Principle, Construction, Working, Uses, Merits and Demerits of Membrane filters and Seidtz filter	PowerPoint Presentation (Smart Class)	A1
10	25.08.26	Tuesday	Objectives, Principle of Centrifugation	PowerPoint Presentation (Smart Class)	A1
12	31.09.26	Monday	Applications of Centrifugation, Classification of Centrifuge (additional)	PowerPoint Presentation (Smart Class)	A1
13	01.09.26	Tuesday	Principles, construction, working, uses, merits and demerits of Perforated basket centrifuge and Non-perforated basket centrifuge	PowerPoint Presentation (Smart Class)	A1
14	07.09.26	Monday	Principles, construction, working, uses, merits and demerits of Semi continuous centrifuge and Super centrifuge	PowerPoint Presentation (Smart Class)	A1

Daily Teaching Schedule for UNIT-V

Sl. No.	Date	Day	Title to be covered	Teaching Pedagogy / T.L.P.	Suggested Knowledge Resources
1	16.11.26	Monday	Factors affecting during materials selection for Pharmaceutical plant construction	PowerPoint Presentation (Smart Class)	A1

2	17.11.26	Tuesday	Types of corrosion and their Prevention	PowerPoint Presentation (Smart Class)	A1
3	23.11.26	Monday	Theories of corrosion (additional)	PowerPoint Presentation (Smart Class)	C1
Grand total number of classes planned for the semester = 31					

Daily Teaching Schedule for Practical

Sl. No.	Date	Day	Group	Title to be covered
1	30.07.26	Thursday	B	Lab safety
	31.07.26	Friday	C	
	03.08.26	Monday	D	
	05.08.26	Wednesday	A	
2	30.07.26	Thursday	B	Study the effect of concentration on rate of filtration
	31.07.26	Friday	C	
	03.08.26	Monday	D	
	05.08.26	Wednesday	A	
2	06.08.26	Thursday	B	Study the effect of surface area on rate of filtration.
	07.08.26	Friday	C	
	10.08.26	Monday	D	
	12.08.26	Wednesday	A	
3	13.08.26	Thursday	B	Study the effect of viscosity on rate of filtration
	14.08.26	Friday	C	
	17.08.26	Monday	D	
	19.08.26	Wednesday	A	
4	20.08.26	Thursday	B	Study the effect of pressure drop on rate of filtration
	21.08.26	Friday	C	
	24.08.26	Monday	D	
	02.09.26	Wednesday	A	
5	27.08.26	Thursday	B	Determination of rate of evaporation of given sample
	11.09.26	Friday	C	
	31.08.26	Monday	D	
	09.09.26	Wednesday	A	
6	03.09.26	Thursday	B	Study the effect of surface area on rate of evaporation of given sample
	18.09.26	Friday	C	
	07.09.26	Monday	D	
	16.09.26	Wednesday	A	
7	10.09.26	Thursday	B	Study the effect of temperature difference on rate of evaporation
	25.09.26	Friday	C	
	14.09.26	Monday	D	
	23.09.26	Wednesday	A	
8	17.09.26	Thursday	B	Experiment on batch scale tray dryer to study drying characteristics of given sample
	09.10.26	Friday	C	
	21.09.26	Monday	D	
	30.09.26	Wednesday	A	
9	24.09.26	Thursday	B	Determination of Moisture Content and Loss on Drying of given sample
	30.09.26	Friday	C	
	28.09.26	Monday	D	
	07.10.26	Wednesday	A	
10	01.10.26	Thursday	B	Determination of Critical Speed and grinding efficiency of ball mill
	06.11.26	Friday	C	
	05.10.26	Monday	D	
	14.10.26	Wednesday	A	
11	01.10.26	Thursday	B	Size distribution analysis by sieving method
	06.11.26	Friday	C	
	05.10.26	Monday	D	
	14.10.26	Wednesday	A	
12	08.10.26	Thursday	B	Determination of heat loss by natural convection & radiation through unpainted glass
	13.11.26	Friday	C	
	12.10.26	Monday	D	
	28.10.26	Wednesday	A	
13	08.10.26	Thursday	B	Study of overall heat transfer coefficient by heat exchanger
	13.11.26	Friday	C	
	12.10.26	Monday	D	
	28.10.26	Wednesday	A	
14	29.10.26	Thursday	B	Determination of Humidity using Dry bulb, wet bulb, and dew point method
	20.11.26	Friday	C	
	02.11.26	Monday	D	

	18.11.26	Wednesday	A	
15	29.10.26	Thursday	B	Determination of efficiency of steam distillation
	20.11.26	Friday	C	
	02.11.26	Monday	D	
	18.11.26	Wednesday	A	
16	05.11.26	Thursday	B	Demonstration of colloidal mill, Planetary Mixture, Fluidized bed Dryer and other major equipment
	27.11.26	Friday	C	
	09.11.26	Monday	D	
	25.11.26	Wednesday	A	
17	05.11.26	Thursday	B	Demonstration of various types of equipment used in laboratory
	27.11.26	Friday	C	
	09.11.26	Monday	D	
	25.11.26	Wednesday	A	

Signature of Faculty: 