



Sessional II (Odd) Semester Examination, October 2025

Roll no.....

Name of the Course: B. Pharm.

Semester: III sem

Name of the Paper: Pharmaceutical Engineering

Paper Code: BP-304T

Time: 1.5-hour

Maximum Marks: 30

Note:

- (i) This question paper contains three sections.
- (ii) All the questions are compulsory.

Section-A

Q1. Multiple Choice Questions – Attempt all questions	(10 X 1 = 10 Marks)
a. Emulsions can be blended with the help of	CO-3
a. Sigma Blender	
b. Ribbon Blender	
c. Siverson Emulsifier	
d. Double cone blender	
b. The temperature and pressure conditions of the freeze dryer should be.....	CO-3
a. Above triple point	
b. Below the triple point	
c. critical temperature	
d. Equilibrium temperature	
c. Filter bags are employed in the spray dryer to.....	CO-3
a. Entrap the fines	
b. Effective drying	
c. Uniform distribution of hot air	
d. Collect the filtrate	
d. The simplest and commonly used dryer is.....	CO-3
a. Tray Dryer	
b. Spray Dryer	
c. FBD	
d. Freeze dryer	
e. Principle of mixing of the Double cone blender.....	CO-3
a. Shearing	
b. Tumbling	
c. Transition	
d. Attrition	
f. Filter leaf works on the principle of Filtration.	CO-4
a. Depth	
b. Surface	

- c. Bulk
 - d. Adsorption
- g. The solids collected on the filter media is called.....** CO-4
- a. Filter cake
 - b. Slurry
 - c. Filter aid
 - d. Filtrate
- h. If the surface area of the filter media increases, the rate of filtration.....** CO-4
- a. Decreases
 - b. Increases
 - c. Constant
 - d. None
- i. The process where a solid changes directly to a gas is called.....** CO-4
- a. Evaporation
 - b. Sublimation
 - c. Distillation
 - d. Drying
- j. Principle of filtration of rotary drum dryer is.....** CO-4
- a. Surface filtration
 - b. Impingement
 - c. Bulk filtration
 - d. Adsorption

Section B

Q. 2 Short Questions: Attempt any two questions (2X 5 = 10 Marks)

- a. Explain the principle, construction, and working of the Fluidized Bed Dryer. CO-3
- b. Describe the principle, construction, and working of a Ribbon Blender. CO-3
- c. Discuss the factors affecting the rate of Filtration. CO-4

Section C

Q. 3 Long questions: Attempt any one question (1X10 = 10 Marks)

- a. Write short notes on:
 - 1. Filter leaf
 - 2. Rotary drum filterCO-4
- b. Discuss the principle, construction, working, and applications of the Freeze dryer. CO-3