



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: CO-4
 - 1. Filter leaf
 - 2. Rotary drum filter
- b. Discuss the principle, construction, working, and applications of the Freeze dryer. CO-3