

**QP Code: 324006**

**Reg. No.....**

**Third Semester B. Pharm Degree Supplementary Examinations  
September 2025  
Pharmaceutical Engineering  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays**

**(2x10=20)**

1. Explain the objectives and types of distillation. Describe in brief about distillation under reduced pressure
2. Write the principle, working, construction, advantages, disadvantages and applications of Climbing film evaporator

**Short Notes**

**(7x5=35)**

3. Explain about differential manometer with a neat diagram
4. Write the principle, working and construction of fluid energy mill
5. Mechanism of heat transfer
6. Explain factors influencing evaporation
7. Explain the rate of drying curve
8. Write about the theories of filtration
9. Explain the principle, working and construction of Super centrifuge

**Answer Briefly**

**(10x2=20)**

10. Explain the mechanism of size separation
11. Write the significance of Bernoulli's theorem
12. Define Fourier's law
13. Economy of Multiple effect evaporator
14. Define bound and unbound water
15. Equilibrium Moisture Content
16. Define Centrifugation
17. State about Vortex formation
18. Write the various types of Glasses
19. Classification of materials for plant construction

\*\*\*\*\*