

**Second B.Pharm (Ayurveda) Degree Supplementary Examinations
April 2019**

Pharmaceutical Engineering

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. Define distillation. Discuss simple distillation in detail.
2. What is filtration. Explain rotary drum filter.

Answer briefly:

(10x5=50)

3. Explain principle, construction, advantages and disadvantages of hammer mill.
4. Principle of freeze drying.
5. Mier's super saturation theory.
6. Basic equations of fluid flow.
7. Overall heat transfer coefficient.
8. Factors affecting evaporation.
9. Any one equipment used for mixing pastes.
10. Stainless steel as a material of construction.
11. Explain orifice meter for measurement of fluid flow.
12. Black body and gray body

Short notes:

(10x3=30)

13. Define critical moisture content equilibrium moisture content.
14. Fractionating columns.
15. Importance of crystallization in pharmacy.
16. Define centrifugation and classified based on their mechanism.
17. Rittinger's theory
18. Define volatility and relative volatility.
19. Wet bulb temperature
20. Types of corrosion
21. Prevention of chemical hazards.
22. Draw a labeled diagram of Pitot tube and explain the working of same
