

**Second B.Pharm (Ayurveda) Degree Supplementary Examinations
April 2018**

Pharmaceutical Engineering

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. How do you classify dryers. Describe fluidized bed dryer in detail.
2. Explain principle of centrifugation. Add a note on filtration centrifuge.

Answer briefly:

(10x5=50)

3. Construction and working of any one type of film evaporator.
4. Reynold's number and its application.
5. Discuss principle and construction of flash distillation.
6. Objectives of size reduction.
7. What is corrosion and state how corrosion can be prevented
8. Principle of crystallization.
9. What are possible industrial hazards and how they can be controlled
10. Theories of filtration.
11. Principle of pneumatic conveyor with a labeled diagram.
12. Fourier's law of heat conduction

Short notes:

(10x3=30)

13. Define Raoult's law and Dalton's law.
14. Crystal growth
15. Bond's theory
16. Define humidity, humid volume, dew point
17. Working of screw conveyor
18. Diaphragm pump
19. Differentiate forced convection and natural convection.
20. Classify manometers and flow meters.
21. Concept of boundary layer.
22. Filter media
