

Second B.Pharm (Ayurveda) Degree Examinations October 2018

Pharmaceutical Engineering

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. Define crystallization. Explain Swenson Walker crystallizer.
2. What is evaporation. Classify evaporators and explain falling film evaporator.

Answer briefly:

(10x5=50)

3. Mc-Cube Thiele method for calculation of number of theoretical plates.
4. Nucleation mechanism of crystal formation.
5. Discuss principle and construction of fluid energy mill.
6. Concept of individual film heat transfer coefficient.
7. What are filter aids and explain with examples.
8. Humidity chart and its application
9. The types and application of glass in pharma industry.
10. Explain drying rate curve.
11. Factors affecting size reduction.
12. Reciprocating pump

Short notes:

(10x3=30)

13. Define % loss on drying and % moisture content.
14. Kick's theory
15. Classify industrial centrifuges with examples.
16. Compressors and blowers
17. Define conduction, convection and radiation.
18. Prevention of mechanical hazards
19. Define evaporation and mention the effect of vapor pressure on evaporation.
20. Narrate mixers for powder and liquids.
21. Distinguish between drying and distillation. Mention two applications of distillation.
22. Working of drum dryer
