

Second B.Pharm (Ayurveda) Degree Examinations, October 2017

Pharmaceutical Engineering

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. Define evaporation. Classify evaporators and explain the construction and working of forced circulation evaporator
2. Explain the principles of centrifuge. Discuss the construction, working, advantages and disadvantages of industrial centrifugal.

Answer briefly:

(10x5=50)

3. Reynold's number and its application
4. Overall heat transfer coefficient
5. Construction and working of ball mill
6. Principles of rectification
7. Explain drying rate curve
8. Construction and working of Swenson Walker crystallizer
9. Theories of filtration
10. The types and applications of glass in pharma industry
11. Humidity chart and its application
12. Factors affecting size reduction

Short notes:

(10x3=30)

13. Define bound moisture and equilibrium moisture content
14. Define Raoult's law and volatility
15. Kick's theory
16. Working of drum dryer
17. Differentiate forced convection and natural convection
18. Types of corrosion
19. Prevention of caking of crystals
20. Diaphragm pump
21. Working of screw conveyor
22. Kirchoff's law
