

**Second B. Pharm (Ayurveda) Degree Supplementary Examinations
August 2024**

Pharmaceutical Engineering

Time: 3 Hours

Total Marks: 100

- *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*

Essays:

(2x10=20)

1. Explain freeze drying in detail
2. Discuss about electrical and mechanical hazards and their prevention in detail

Answer briefly:

(10x5=50)

3. Explain the construction and working of diaphragm pump
4. Describe Fourier's law of heat conduction through a hollow sphere
5. Construction and working of Rotary drum filter.
6. Add a note on any one manometer
7. Explain the process of crystal growth
8. Discuss about climbing film evaporator
9. Explain the principle and working of flash distillation
10. Describe humidity chart and measurement of humidity using humidity chart
11. Discuss any one liquid mixer
12. Explain the principle and working of hammer mill

Short notes:

(10x3=30)

13. Advantages of glass as a material of construction
14. Classify pumps.
15. Distinguish between Sedimentation centrifuge and filtration centrifuge.
16. Objectives of size reduction
17. Accident records
18. Raoult's law
19. Construction of double cone blender
20. Kirchhoff's law of radiation
21. Rittinger's law of size reduction
22. Add a short note on paddles
