

**Second B. Pharm (Ayurveda) Degree Regular/Supplementary
Examinations March 2023**

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. Define drying and explain the mechanism of drying. Explain the principle and working of vacuum dryer.
2. Explain the principle, construction, working, advantages and disadvantages of ball mill.

Answer briefly:

(10x5=50)

3. What are blowers and compressors. Add a note on any one compressor.
4. Explain the principle and working of super centrifuge.
5. Describe the working of plate and frame filter press.
6. Explain the principle and working of climbing film evaporator.
7. Add a note on simple distillation.
8. Explain principle, construction and working of agitated batch crystallizer.
9. Add a note on any one equipment used for liquid mixing.
10. Describe stainless steel as material of construction.
11. Add a note on simple manometer.
12. Explain any two methods for the measurement of humidity.

Short notes:

(10x3=30)

13. Reynold's number and its significance.
14. Black body.
15. Construction of short tube evaporator.
16. Extractive distillation.
17. Rittinger's theory.
18. Working of filter leaf.
19. Principle of fluidized bed dryer.
20. Industrial hazards.
21. Caking of crystals.
22. Accident records.