

# **2012 Scheme**

**QP CODE: 216006**

**Reg. No: .....**

**Second Year B.Pharm Degree Supplementary Examinations July 2023**

## **Pharmaceutical Technology**

**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*
- *Draw table/diagrams/flow charts wherever necessary*

### **Essay**

**(3x10=30)**

1. Define drying. Explain the drying curve.
2. Define evaporation. Explain the factors affecting evaporation. Discuss the principle and working of film evaporators.
3. Explain the principle, construction, working, merits and demerits of Fractional Distillation with a neat labelled diagram.

### **Short notes**

**(14x5=70)**

4. How are liquids handled in pharmaceutical industry. Discuss different types of pumps used.
5. Explain briefly the various mechanisms of heat flow.
6. Classify filters. Explain filter leaf.
7. Define distillation. Discuss the principles of steam distillation.
8. Classify different dryers. Discuss the vacuum dryer with its advantages.
9. What is humidity chart. Describe the methods of measuring humidity.
10. Discuss the general composition, types and properties of Stainless steel
11. Discuss in brief about overall heat transfer coefficient.
12. Discuss various mechanical hazards and the possible methods to prevent them.
13. What are heat exchangers. Discuss their role and applications in pharmaceutical industry.
14. Describe the principles of centrifugation.
15. What is dehumidification. Describe its importance. Add a note on equipment for dehumidification.
16. Differentiate between azeotropic and extractive distillation.
17. Discuss about Electrical hazards and safety precautions for preventing them.

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