

BP-304T

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ODD SEMESTER EXAMINATION, 2022-23

COURSE NAME: -B. PHARM

SEMESTER- III

SUBJECT: -PHARMACEUTICAL ENGINEERING

TIME: 3 HOURS

MAX MARKS:75

NOTE: Attempt all parts.

PART A

(QUESTION No. 1 TO 10 ATTEMPT) (2x10)

1. What significant value does Reynolds number have in the pharmaceutical engineering?
2. List the critical condition for drying of various substance.
3. Distinguish between drying and evaporation.
4. Why is mercury used as liquid in manometer.
5. Define filter aid with example.
6. What is molecular distillation.
7. Give the types of corrosion.
8. Mention the equipment suitable for solid mixing.
9. Give the properties of Chromium and Nickel.
10. Give some examples of heat transfer process.

PART B

(QUESTION No. 11 TO 13 ATTEMPT ANY 2) (2x10)

11. Describe the principle with the help of a labeled diagram of fluidized bed dryer.

12. Explain the factor affecting selection of material for pharmaceutical plant construction.
13. Classify evaporators. Elaborate the answer with a neat sketch of filmevaporator. List the Merits and demerits of film evaporator system.

PART C

(QUESTION NO. 17 TO 25 ATTEMPT ANY 7)

(7x5)

14. Define evaporation. Give principle and operation of forced circulation evaporator.
15. What is the importance of powder flow in solid dosage form formulation.
16. Write a note on Silverson Emulsifier.
17. How does the speed of ball mill effect in reduction. Explain it.
18. Discuss the factors affecting rate of filtration.
19. Explain the construction, working, and principle of Spray dryer.
20. Write the factors to be considered for the selection of centrifuge.
21. Discuss the processor of Lyophilization.
22. Give the theory of Galvanic corrosion and write the method to prevent it.