THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0921]

SEPTEMBER 2021 (FEBRUARY 2021 EXAM SESSION)

Sub. Code: 4259

B. PHARMACY DEGREE EXAMINATION SECOND YEAR – (NON-SEMESTER) PAPER IV – PHARMACEUTICAL TECHNOLOGY

Q.P. Code: 564259

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

Time: Three hours

- 1. Describe the principle, construction, working, application, merits and demerits of Freeze drying.
- 2. Classify Evaporators. Describe construction and working of a film evaporator.

II. Write notes on:

- 1. Swenson walker crystallizer.
- 2. Stainless steel as materials of plant construction.
- 3. List out types of Valves and explain any one.
- 4. Explain Raoult's law of distillation.
- 5. Solubility curve.
- 6. Sources of Heat.
- 7. Enumerate mechanism involved in size reduction with suitable examples.
- 8. Write a note on chemical hazards.

III. Short answers on:

- 1. Classify dryers.
- 2. Define Crystal.
- 3. Write advantages of glass as plant construction.
- 4. Triple Roller mill mechanism.
- 5. Filter media.
- 6. Steam distillation.
- 7. Reynolds number.
- 8. Define heat transfer.
- 9. Mechanisms of liquid mixing.
- 10. Define Centrifugation.

$(8 \times 5 = 40)$

 $(10 \times 2 = 20)$

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 $(2 \times 20 = 40)$