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

(LM 4259)

FEBRUARY 2018

Sub. Code: 4259

B.PHARM. DEGREE EXAMINATION SECOND YEAR PAPER IV – PHARMACEUTICAL TECHNOLOGY

Q.P. Code: 564259

Time: Three hours

I. Elaborate on:

- 1. Describe the construction, working principle, efficiency, merits and demerits of Fractional Distillation.
- 2. a) Explain the principle, construction, working of Krystal crystallizer.b) Write in detail about factors affecting caking of Crystals.

II. Write notes on:

- 1. Factors influencing evaporation.
- 2. Solubility curve.
- 3. Materials used for plant construction.
- 4. Fourier's law and its application.
- 5. Theories of filtration.
- 6. Super centrifuge.
- 7. Fluidized bed dryer.
- 8. Humidity chart and its uses.

III. Short answers on:

- 1. Dew point.
- 2. Types of sieves.
- 3. Refrigeration load.
- 4. Manometer.
- 5. Equilibrium moisture content.
- 6. Volatility and relative volatility.
- 7. Lyophilization.
- 8. Radiation.
- 9. Turbulent Flow.
- 10. Raoult's Law.

 $(10 \times 2 = 20)$

 $(2 \times 20 = 40)$

Maximum: 100 Marks

$(8 \times 5 = 40)$