

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

(LO 4259)

FEBRUARY 2019

Sub. Code: 4259

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

Q.P. Code: 564259

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Explain stainless steel as materials of plant construction.
b) Write about various industrial hazards and methods to prevent it.
2. a) Construct multiple effect evaporator neatly and explain the process with its merits and demerits.
b) Explain different zone of Rotary filter.

II. Write notes on:

(8 x 5 = 40)

1. Brief with a neat diagram working of diaphragm valve.
2. Write the various filter aids with examples.
3. Swenson walker crystallizer.
4. Explain the psychrometric chart.
5. Write the mechanisms of heat transfer.
6. Construction and working of fluid energy mill.
7. Types of fractionating columns in distillation.
8. Write the theory of mixing. Note on any one equipment used in solid solid mixing.

III. Short answers on:

(10 x 2 = 20)

1. Define corrosion.
2. What is wet bulb temperature?
3. Mechanism of nucleation of crystals.
4. Write the principle of centrifugation.
5. Define Raoult's law for vapor pressure.
6. What are Azeotropes?
7. Mechanisms of size reduction.
8. What is Reynolds number?
9. Principle of working of manometer.
10. Write any two factors affecting filtration.
