

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

(LP 4259)

AUGUST 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) Discuss the Mier's super-saturation theory of crystallization. What are the limitations of the Mier's theory?
b) Explain the principle, working and applications of Krystal crystallizer.
2. Explain the construction, working, advantages and disadvantages of Fluidised bed dryer.

II. Write notes on:

(8 x 5 = 40)

1. Explain the construction and working of a ball mill.
2. Describe the construction and working of a silverson mixer.
3. Describe the construction and working of leaf filters.
4. Classify industrial centrifuges. Write construction and working of a perforated basket centrifuge.
5. Write the pharmaceutical applications of distillation.
6. What are possible industrial hazards? How can they be controlled?
7. Describe various types of iron as materials of construction.
8. Explain the construction and working of a multiple effect evaporator.

III. Short answers on:

(10 x 2 = 20)

1. Define valves.
2. Mechanisms of heat transfer.
3. Define pulverisation.
4. Applications of size reduction.
5. Types of sieves.
6. Dry and wet bulb temperature.
7. Define dry distillation.
8. What is the use of florentine receiver?
9. Define slurry.
10. Define chemical Hazards.
