

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

[LO 341]

MAY 2019

Sub. Code: 2902

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH I – PHARMACEUTICS
PAPER II – INDUSTRIAL PHARMACY**

Q.P. Code: 262902

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail about optimization techniques in pharmaceutical formulation and processing.
2. Discuss about the large scale manufacturing techniques of tablets and liquid orals and write about the significance of pilot plant scale up study.

II. Write notes on:

(10 x 6 = 60)

1. Intellectual property rights.
2. Overages and ICH guidelines.
3. Sterilization of various injectables.
4. Effect of particle size, moisture content and lubrication on strength of tablets.
5. ISO 9000 series.
6. Multiple Emulsions.
7. Material management in Pharma Industry.
8. GATT and TRIPS.
9. Process validation.
10. Techniques for the study of inventory management.
