

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

[M.PHARM 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2948

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACEUTICAL CHEMISTRY - MPC
PAPER IV – PHARMACEUTICAL PROCESS CHEMISTRY**

Q.P. Code: 262948

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Discuss in detail about reduction by heterogeneous catalyst.
b) Explain briefly about the procedure for the production of Streptomycin.
2. a) Discuss in brief about process equipment for technical nitration.
b) Write about the types of oxidative reactions and liquid phase oxidation with oxidizing agents.

II. Write notes on:

(7 x 5 = 35)

1. Material Safety data sheet.
2. Steam distillation.
3. Families of reagents useful for scale-up.
4. Counter current extraction.
5. In process control and validation of large scale process.
6. Effluents and its management.
7. Factors affecting crystallization.
