

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

[M.PHARM 0922]

**SEPTEMBER 2022
(APRIL 2022 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) Explain crystallization from aqueous and non aqueous solution.
b) Discuss the Factors affecting Crystallization.
2. Describe about the Nitrating agents, aromatic nitration, kinetics and mechanism of Aromatic nitration in detail.

II. Write notes on:

(7 X 5 = 35)

1. Explain about the production of Vitamin B₁₂ by fermentation.
2. Describe about Personal Protection Equipment (PPE).
3. Discuss about the Characteristic of expedient routes and cost effective routes.
4. What are Non metallic oxidizing agents? And discuss about Sodium hypochlorite.
5. Briefly explain about the counter current extraction.
6. What are Fire Hazards? Explain the types of Fire extinguishers in detail.
7. Write about the In - process control and validation of large scale process.
