

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

[M.PHARM 0524]

MAY 2024
(APRIL 2024 EXAM SESSION)

Sub. Code: 2941

M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New Regulations 2016)
PHARMACEUTICAL CHEMISTRY - MPC
PAPER I – MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

Q.P. Code: 262941

Time Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. (a) Explain the theory and instrumentation of Mass Spectroscopy.
(b) Discuss the various ionization techniques in Mass Spectroscopy.
2. a) Explain the Principle, instrumentation and applications of Gas chromatography.
b) Write a note on the factors affecting resolution.

II. Write notes on:

(7 x 5 = 35)

1. Write about the detectors used in HPLC.
2. Write about the detection techniques in paper chromatography.
3. Define Fluorescence. Discuss the different electronic states in Fluorescence.
4. Write about potentiometric titrations and determination of end point by such tirations.
5. Write the principle and applications of TGA.
6. Explain the types of crystals in X-Ray crystallography.
7. Write about the sampling techniques in IR spectroscopy.
