

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

[BPHARM 0522]

**MAY 2022
(FEBRUARY 2022 EXAM SESSION)**

Sub. Code: 4270

**B. PHARMACY DEGREE EXAMINATION
FOURTH (FINAL) YEAR – (NON-SEMESTER)
PAPER IV – MODERN METHODS OF PHARMACEUTICAL ANALYSIS
Q.P. Code: 564270**

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Explain different types of Electronic Transitions.
b) Define Auxochrome and Chromophore with examples.
c) Compare Double beam and Single beam Spectrophotometer.
2. Explain in detail the method of development and validation parameters in HPLC.

II. Write notes on:

(8 x 5 = 40)

1. Mass Spectrometry.
2. Electrophoresis.
3. Write notes on Monochromator.
4. Write notes on TQM.
5. Write notes on Validation.
6. Explain the term Quenching.
7. Write notes on “Dead stop End Point” Titration.
8. Write notes on Rheodyne.

III. Short answers on:

(10 x 2 = 20)

1. State Bragg's Law.
2. Write Nernst equation.
3. Define Zeta Potential.
4. Expand ELISA.
5. Define Gel Electrophoresis.
6. Write Ilkovic equation.
7. Define Conductivity.
8. Define the term Luminescence.
9. What is Reverse Phase Chromatography?
10. Define equivalent conductance.
