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

[PHARMD 1023]

OCTOBER 2023

Sub. Code: 3814

PHARM. 'D' DEGREE EXAMINATION THIRD YEAR (2009-2010 Regulation) PAPER II – PHARMACEUTICAL ANALYSIS

Q.P. Code: 383814

Time: Three hours Maximum: 70 Marks

I. Elaborate on: $(4 \times 10 = 40)$

1. Define Electrophoresis. Write the principle of separation, apparatus and types of Gel Electrophoresis.

- 2. Write the principle, working, apparatus used and applications of Polarography.
- 3. (a) Explain the sampling techniques in IR Spectrophotometry.
 - (b) Write the detectors used in IR Spectrophotometry. Explain about any one of them.
- 4. (a) Write a note on Optical Rotary Dispersion.
 - (b) Write about developmental techniques in TLC.

II. Write notes on: $(6 \times 5 = 30)$

- 1. Write a note on ISO 9000.
- 2. Write the applications of Ion exchange chromatography with suitable examples.
- 3. How will you determine the moisture content present in the given sample by using Karl Fischer titration?
- 4. Define Monochromators. Explain its types.
- 5. Write a note on Gel filtration chromatography.
- 6. Write the principle and applications of NMR spectroscopy.
