

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

[PHARMD 0423]

APRIL 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 x 10 = 40)

1. Explain the types of currents and applications of polarography.
2. What are the fundamental vibrations in infrared spectroscopy and write the applications of IR spectroscopy.
3. Describe the instrumentation and applications of gas chromatography.
4. Explain the principle involved in fluorimetric analysis and write the instrumentation of spectrofluorimeter.

II. Write notes on:

(6 x 5 = 30)

1. Write the principle and applications of X-ray diffraction.
2. Explain the different detectors involved in UV spectrometry with examples.
3. Mention the common adsorbents and mobile phases used in TLC and activation procedure of TLC plates.
4. Explain in detail the construction and working of glass electrode.
5. Write short notes on ICH.
6. Give the principle and applications of Column chromatography.
