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

[LN 814] OCTOBER 2018 **Sub. Code: 3814**

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

Q.P. Code: 383814

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. Describe the theory of UV absorption spectroscopy and laws governing the deviation of laws.
2. Describe ICH guidelines in detail.
3. Discuss the underlying principle of Atomic Emission Spectrometry (AES). Describe the various components that are essentially involved in AES instrumentation with the help of a schematic diagram.
4. Write principle, stationary phase, mobile phase, development techniques and applications of thin layer chromatography.

II. Write notes on: **(6 x 5 = 30)**

1. What do you know about rotating platinum electrode? Give any two advantages and disadvantages.
2. What is luminescence and its types?
3. What are the basic components of a HPTLC instrument? Explain the advantages and application of HPTLC in pharmacy.
4. Write on construction, working principle and advantages of a flame ionization detector used in gas chromatography.
5. Describe the polarographic principle and factors affecting polarographic measurements.
6. Give the applications of NMR and ESR spectroscopy.

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