

[LO 814] MAY 2019 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:  $(4 \times 10 = 40)$ 

1. With a neat schematic diagram, explain the types of Pumps, Solvent Degassing system and detectors of HPLC.

- 2. What is electrophoresis? Explain the various methods of paper electrophoresis.
- 3. Explain the principle of liquid-liquid partition chromatography and write about the detection techniques in TLC.
- 4. State Beer's and Lambert's law. Explain the effect of solvent on absorption spectra. Define Auxochrome and hypsochromic shift.

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

- 1. What are the differences between atomic absorption and flame emission spectroscopy?
- 2. Write the theory of NMR Spectroscopy.
- 3. What is group frequency and finger print region in IR Spectroscopy?
- 4. What is quenching? Write about the different types of quenching?
- 5. Distinguish between polarography and amperometry.
- 6. Explain the principle and instrumentation of polarimeter.

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