

[LK 814] MAY 2017 Sub. Code: 3814

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

O.P. Code: 383814

Time: Three hours Maximum: 70 Marks

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

- 1. Explain the principle and instrumentation of Infrared Spectrophotometer with a neat diagram.
- 2. Describe the principle and various components of AAS with a neat diagram.
- 3. Explain the principle and instrumentation of Spectrofluorimeter with a neat diagram.
- 4. What is Electrode Potential? Describe the construction and working of hydrogen electrode and glass electrode.

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

- 1. Write short notes on the various factors affecting the Fluorescence intensity.
- 2. Explain the principle and applications of Ion exchange Chromatography.
- 3. Write a note on the theoretical aspects of NMR and ESR.
- 4. Explain the following terms:
 - a) Chromophore b) Blue shift c) R_f value
- 5. Explain the various development techniques and applications of paper Chromatography.
- 6. Write brief note on Conductometric titrations.
