

[LD 814]

OCTOBER 2013

Sub. Code: 3814

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**THIRD YEAR****PAPER II – PHARMACEUTICAL ANALYSIS***Q.P. Code: 383814***Time: Three Hours****Maximum: 70 marks****Answer All questions****I. Elaborate on:****(2 x 20 = 40)**

1. a) Explain the different electronic transitions involved in UV spectrophotometry with examples.
b) Describe the theory and instrumentation of DSC.
2. a) Explain the principle and instrumentation of IR spectroscopy with a neat diagram.
b) Describe the theory and instrumentation of atomic absorption spectrometry.

II. Write notes on:**(10 x 3 = 30)**

1. Write a brief note on theoretical aspects of mass spectra.
2. Give a brief account on ICH guidelines.
3. What is ion-exchange chromatography?
List the different types of ion exchange resins used in ion-exchange chromatography.
4. List the detectors used in GLC.
Explain the principle of any one.
5. What is plane polarized light?
Define optical rotatory dispersion and circular dichroism.
6. Explain any three factors affecting the fluorescence intensity.
7. Explain the working principle of hydrogen electrode with a neat diagram.
8. Write a brief note on conductometric titrations.
9. Write a note on chemical shift.
10. Explain briefly the applications of flame photometry.
