

[LH 814]

OCTOBER 2015

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. With a neat labeled diagram, explain the working principle and instrumentation of HPLC.
2. Explain the principle and instrumentation of AAS.
3. Write in detail the theoretical aspects and applications of NMR.
4. What is thermal analysis? Explain the principle and instrumentation of DSC.

**II. Write notes on :**

**(6 x 5 = 30)**

1. Explain in detail the various factors affecting fluorescence.
2. Write a note on monochromator and detectors used in UV spectrophotometer.
3. Describe the principle and applications of X-ray diffraction.
4. What are the basic components of HPTLC? Write the advantages and applications of HPTLC.
5. Write a note on optical rotator dispersion and circular dichroism.
6. Explain the various sample handling techniques adopted in IR spectroscopy.

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