

[LD 340]

OCTOBER 2013
M.PHARM. DEGREE EXAMS
FIRST YEAR

Sub. Code: 2901

PAPER I – MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES
(Common to all Branches)

Q.P. Code : 262901

Time : 3 hours

Maximum : 100 marks

I. Elaborate on :

(2x20=40)

1. a) Explain the principle and methodology of Differential Scanning Calorimetry (DSC).
b) Discuss the working principle and instrumentation of HPLC (High Performance Liquid Chromatography).
2. a) Discuss the principle and instrumentation of mass spectroscopy.
b) Enumerate the interfaces used in mass spectrometry and explain any one in detail.

II. Write notes on :

(10x6=60)

1. Write a note on the principle of Radio Immuno Assay.
2. Discuss the following and mention the merits
 - a) Ion exchange chromatography
 - b) Affinity chromatography
3. Write a note on Chi-square test.
4. Give an account on sampling techniques in Infrared spectroscopy.
5. Discuss briefly Simultaneous equation method.
6. Write an account on
 - a) Thermal conductivity detector.
 - b) Argon ionisation detector.
7. Give an account on the instrumentation of Atomic Absorption Spectroscopy.
8. Write a note on Coupling constant and the factors influencing the value of coupling constant.
9. Discuss about detectors in IR spectroscopy.
10. Give an account on scientific writing of paper.
