

M.Pharm I Semester EXAMINATION-December 2005
(Modern Analytical Technique)

Time : Three Hours

Maximum Marks : 75

Minimum Pass Marks : 38

Note: Attempt any five questions. All questions carry equal marks.

- Q.1 Explain the terms 'Chemical Shift' and spin spin coupling and their importance in structure elucidation discuss the expected PMQ spectre of (a) Acetaldehyde (b) ethyl benzoate (c) 1,1,2 - trichloro propane.
- Q.2 What are different vibrations modes in inferared spectroscopy? Describe the instrumentation and working of Ft -IR sectrophotometer . Give its merits and demerits compared to convention infrared spectroscopy.
- Q.3 Explain the principle of mass spectrometry. Describe the pragmentaton rules which help in the in pretetion of mass spectrum .
- Q.4 Discuss the principle , instrumentation and application of high performance liquid chromatography.
- Q.5 (a) Discuss the theoretical background for obtaining fluroscene. Describe the factors which affect the florescent efficiency.
(b) Give the instrumentation and application of atomic absorption spectroscopy.
- Q.6 What is radioimmuno assay technique?
Give the pharmaceutical applications and limitations. of this technique.
- Q.7 Write short on any Two
- (a) Ion pair Chromatography
(b) Differential thermal analysis.
(c) X - Ray Crystallography.