B. PHARM.

(SEM. VIII) EXAMINATION. 2006-07

PHARMACEUTICAL ANALYSIS - III

Time : 3 Hours] [Total Marks : 80

Note : Answer all the questions. All questions carry equal marks.

1. Attempt any four parts of the following : 4×4=16
   (a) Compare Nephelometry with turbidometry.
   (b) Narrate the limitations of uv spectrophotometry and how are these overcome?
   (c) Write a note on source and detector’s in UV spectrophotometer.
   (d) What is a monochromator? Comment on its applicability.
   (e) Write short note on colorimeter.

2. Answer any four parts of the following : 4×4
   (a) Discuss the theory of fluorimetric analyses.
   (b) Comment on the relation between fluorescence and molecular structure.
   (c) Using IR how can you differentiate between :
       (i) alcohol and phenol
       (ii) ether and anhydride.

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(d) How does optical parts differ in an UV and IR spectrophotometry.
(e) Write a note on quantitation of samples by IR spectrophotometry

3 Write notes on :
   (i) Molecular ion peak
   (ii) M+1 and M+2 peak
   (iii) Meta stable ion.

4 Answer any four questions : 4x4
   (a) What is chemical shift and its importance?
   (b) Explain with a line diagram the different parts of a NMR spectrometer.
   (c) Discuss the spectral pattern of ethanol and chloromethane.
   (d) What is coupling constant?
   (e) What are the different internal standards used in NMR spectroscopy.

5 Answer any two questions : 8+8
   (a) Write a note on detector in atomic emission spectrometer.
   (b) Discuss various applications of Atomic Absorption spectroscopy.
   (c) How can sodium or potassium be estimated using a flame photometer.