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Printed Pages: 2 PH – 485

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID: 5066

Roll No.

### 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:  $4\times4=16$ 
  - (a) Compare Nephelometry with turbidometry.
  - (b) Narrate the limitations of uv spectrophotometry and how are these overcome?
  - (c) Write a note on source and delector'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: 4x4
  - (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 spectropholometry.
- (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 :

 $4\times4$ 

- (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.