

**FINAL YEAR B.PHARM. SEMESTER-VII (2011 Course) :**

**SUMMER - 2019**

**SUBJECT : PHARMACEUTICAL ANALYSIS – V**

Day : Saturday  
Date : 27/04/2019

**S2019-4456**

Time : 02.00 PM TO 05.00 PM  
Max. Marks : 80

**N.B.:**

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of the remaining questions attempt **ANY TWO** questions from each section
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

**SECTION – I**

- Q.1** Attempt **ANY FIVE** of the following: [10]
- a) What do you mean by Wavelength and Amplitude?
  - b) List out the emission spectrometric methods.
  - c) Explain how does matter absorb radiation.
  - d) What do you mean by Bathochromic and Hypsochromic shifts?
  - e) Explain the terms Auxochrome and give example.
  - f) Write the Beer's Lamberts law.
- Q.2** a) What are Monochromators? Explain in detail. [08]  
b) Explain various quantitative analytical methods by spectrophotometry. [07]
- Q.3** Discuss the woodward fieser's rule in detail. [15]
- Q.4** Write a note on **ANY THREE** of the following: [15]
- a) Kinds of electronic transitions
  - b) Applications of UV-Vis spectrophotometry
  - c) Solvent selection for spectrophotometry
  - d) EMR

**SECTION – II**

- Q.5** Attempt **ANY FIVE** of the following: [10]
- a) What are dispersive IR instruments?
  - b) Write two point comparative of Nephelometry and Turbidometry techniques.
  - c) What are two distinct advantages of fluorometry?
  - d) What is principle of RAMAN spectroscopy?
  - e) Define photofluorometry and spectrofluorometry.
  - f) Enlist parts of Raman instruments.
- Q.6** Describe principle, instrumentation, applications and advantages of IR [15]  
Spectrometer.
- Q.7** Describe principle, instrumentation, applications and advantages of [15]  
spectrofluorometry.
- Q.8** Write notes on **ANY THREE** of the following: [15]
- a) Nephelometry – principle and applications
  - b) Phosphorescence – principle and applications
  - c) Important bands in IR spectra
  - d) Advantages of Raman Spectroscopy

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