

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

SUMMER - 2019

SUBJECT : PHARMACEUTICAL ANALYSIS – VI

Day : Thursday
Date : 25/04/2019

S-2019-4462

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) Draw and explain Pascal's triangle.
 - b) What is chemical equivalence and non-equivalence? Give example.
 - c) Why benzene protons are getting higher chemical shift values? Explain.
 - d) Write the types of burners used in flame photometry.
 - e) Write the advantages of AAS.
 - f) Write the principle of emission spectroscopy.
- Q.2** Explain shielding-deshielding, Anisotropy and Spin-Spin splitting in NMR. [15]
- Q.3** Write the principle, instrumentation and applications of AAS. [15]
- Q.4** Write a note on **ANY THREE** of the following: [15]
- a) Coupling Constant
 - b) Applications of FES
 - c) Interferences in AAS
 - d) Integration in NMR

SECTION – II

- Q.5** Attempt **ANY FIVE** of the following: [10]
- a) Enlist types of ELISA.
 - b) What do you mean by method sensitivity?
 - c) Define validation.
 - d) What do you understand from the term LC-MS?
 - e) What is principle of RIA?
 - f) Enlist types of ions formed in MS.
- Q.6** Classify thermal methods of analysis and describe types, theory, instrumentation and applications of TGA. [15]
- Q.7** Classify mass ionization sources. Describe principle, instrumentation, working and advantages of quadrupole mass analyzers. [15]
- Q.8** Write a note on **ANY THREE** of the following: [15]
- a) Sector mass analyser
 - b) Instrumentation, applications and advantages of RIA techniques
 - c) Applications and advantages of ELISA
 - d) Factors affecting TGA curve

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