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Total No. of Pages : 01

Total No. of Questions : 06

M.Pharmacy (Pharmaceutical Analysis) (Sem.-1)

MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

Subject Code : MPA-101T

M.Code : 74693

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. Write briefly :

- a. Define Beer Lambert's law (2×7+1=15)
- b. Coupling constant
- c. What are hypsochromic and hyperchromic shifts?
- d. Types of pumps in HPLC
- e. Define retention time and column efficiency
- f. Nernst equation
- g. What is the Full form of FAB?

2. Discuss in brief the various thermal methods of analysis giving their advantages and disadvantages of each (15)
3. Give the principle of Ion Exchange chromatography and briefly describe the exchangers used for it. (10)

Give a brief outline of principle of Fluorimetry (5)

4. Write short notes on :
 - a. Ultra high performance liquid chromatography (5)
 - b. Capillary electrophoresis (5)
 - c. Metastable ions and isotopic peaks (5)
5. Comment on analytical and guard columns in HPLC (10)
Explain Index of hydrogen deficiency (5)
6. Discuss the theory of fluorimetry. Discuss the factors affecting fluorescence of a compound. Mention advantages of fluorimetry over UV. (15)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

