

Roll No.

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

Date of Examination: 14-01-2023

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. Discuss the principles, instrumentation and applications of UV-Visible spectroscopy with suitable examples and/or flow charts.
2.
 - a. Discuss principles and instrumentation of NMR, FT-NMR & ^{13}C -NMR.
 - b. Write a note on applications of NMR.
3. Describe the principles, instrumentation, procedure and applications of Gel electrophoresis with suitable examples and/or flow charts.
4. Give a detailed account on the principles, instrumentation and applications of HPLC.
5. Write short notes on the following:
 - a. Types of ionizations in mass spectroscopy
 - b. Principles, working and applications of DSC
6. **Discuss the following with suitable examples :**
 - a. TGA
 - b. Applications of X-ray diffraction
 - c. Types of fluorescence.

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.