

Roll No.

Total No. of Pages : 01

Total No. of Questions : 06

M.Pharmacy(Pharmaceutical Quality Assurance) (2017 & Onwards)
(Sem.-1)

MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

Subject Code : MQA-101T

M.Code : 74699

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. Answer the following questions in brief :
 - A. Beer-Lambart's law 5
 - B. Factors affecting vibrational frequencies 5
 - C. Coupling constant 5
2.
 - A. Discuss principle, instrumentation and applications of flame emission spectroscopy. 8
 - B. Discuss briefly the principle of FT-NMR and ^{13}C -NMR 7
3.
 - A. Write about principle, instrumentation and pharmaceutical applications of differential scanning calorimetry (DSC). 8
 - B. Elaborate on SDS-PAGE gel electrophoresis technique. 7
4.
 - A. What is Bragg's law in X-ray crystallography? Discuss about different X-ray diffraction methods. 8
 - B. Discuss about different detectors used in gas chromatography. 7
5. Write short notes on following :
 - A. Isoelectric focusing 5
 - B. Factors influencing chemical shift 5
 - C. Explain derivative differential thermal analysis 5
6.
 - A. Discuss different types of mass analyzers used in mass spectroscopy. 8
 - B. Write about principle, working and applications of potentiometry. 7

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.