

Total No. of Pages : 01

M.Pharm(Pharmaceutical Chemistry) (2017 & Onwards) (Sem.-1)

Subject Code : MPC-101T

Max. Marks : 75

1. Attempt any FIVE questions out of SIX questions.

2. Each question carries FIFTEEN marks.

1. a. Write down the theory and modes of molecular vibrations in IR spectroscopy. 5
b. Describe the theory and the laws of UV-visible spectroscopy. 5
c. Discuss the factors affecting fluorescence. 5
2. a. Write down the applications of NMR spectroscopy. 10
b. Discuss the spin-spin coupling. 5
3. Write short notes on the followings :
a. Thin layer chromatography. 5
b. Ultra high performance chromatography. 5
c. Gas chromatography. 5
4. a. Discuss the "Nitrogen rule" with appropriate examples. 5
b. Describes the FAB and MALDI. 10
5. Discuss the following :
a. Pharmaceutical applications of potentiometry. 5
b. Factors affecting results in TGA. 5
c. Principle of Thermal techniques and thermal transitions. 5
6. Write briefly on the following :
a. Capillary electrophoresis. 5
b. Applications of X-ray diffraction. 5
c. Pharmaceutical applications of DSC. 5

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.