

Roll No.

Total No. of Pages : 01

Total No. of Questions : 06

M.Pharmacy (Pharmaceutical Analysis) (Sem.-2)

**MODERN BIO-ANALYTICAL TECHNIQUES**

Subject Code : MPA-202T

M.Code : 74926

Date of Examination : 06-07-22

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. Explain the principle and procedure for the liquid - liquid phase extraction and protein precipitation. (15)
2. a. Explain the factors affecting drug bioavailability. (8)  
b. Explain the invitro and invivo methods for permeability testing. (7)
3. Write short note on :  
a. Drug interactions linked to transporters. (8)  
b. LC-MS in bioactive screening. (7)
4. a. Explain different procedures for cell culture techniques. (8)  
b. What is the principle and application of flow cytometry. (7)
5. a. Explain the RLM and HLM in the metabolite identification. (8)  
b. Explain the in vitro and in vivo protocols for metabolite identification. (7)
6. a. Explain the methods for assessing bioequivalence study. (8)  
b. What are relative and absolute bioavailability? Explain the methods for the assessment of bioavailability. (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.**