

QP CODE: 212329

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
May 2022**

M.Pharm (Pharmaceutical Analysis)

Paper II: Modern Bio-Analytical Techniques (MPA 202T)

Time: 3 Hours

Total Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays

(3x10=30)

1. Enumerate the bioanalytical method validation parameters as per EMEA guidelines.
2. Define the term bioavailability. Add a note on the importance of bioavailability studies and methods employed for assessing the bioavailability studies.
3. Explain the effect of protein binding interaction studies. Discuss in detail the significance of plasma protein binding.

Short Notes

(9x5=45)

4. Principle and procedure involved in solid phase extraction technique.
5. Explain in brief the BCS classification of pharmaceuticals.
6. In vitro and in vivo methods employed to study the drug permeability.
7. Write a note on dissolution and drug release testing.
8. Explain in brief the drug interactions linked with transporters.
9. Applications of cell viability studies.
10. General procedure for isolation, subculture and cryopreservation of cells.
11. Advantages of microsomal approaches in metabolite identification.
12. Clinical significance of bioequivalence studies.
