

QP CODE: 212327

Reg. No:.....

**Second Semester M. Pharm Degree Supplementary Examinations
September 2022**

M.Pharm (Pharmaceutics)

Paper II: Advanced Bio-Pharmaceutics and Pharmacokinetics (MPH 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. Explain the formulation and physicochemical factors in the gastrointestinal absorption of drugs.
2. Discuss the biopharmaceutics factor effecting drug bioavailability and rate limiting steps in drug absorption.
3. Describe in detail about one compartment model pharmacokinetics (IV bolus and IV infusion)

Short Notes

(9x5=45)

4. Michaelis – Menten equation
5. Mechanism of drug absorption
6. Two compartmental models in pharmacokinetics
7. Drug interaction linked to transporters.
8. Design of bioequivalence studies.
9. Noyes -Whitney equation.
10. Biopharmaceutics classification systems
11. In vitro – in vivo correlation studies.
12. Pharmacokinetics and pharmacodynamics of biotechnology drugs.
