

QP CODE: 212327

Reg. No:.....

**Second Semester M. Pharm Degree Supplementary Examinations
February 2026**

M.Pharm (Pharmaceutics)

**Paper II: Advanced Bio-Pharmaceutics and Pharmacokinetics (MPH 202T)
(Common for 2019 and 2024 Scheme)**

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. Summarize the properties of Gastro intestinal tract and discuss in detail the various factors affecting drug absorption from the Gastro intestinal tract.
2. Discuss in detail about the problems of variable control in dissolution testing performance of drug products.
3. Derive the pharmacokinetic parameters for two compartment model and explain its significance.

Short Notes

(9x5=45)

4. Write the Noyes–Whitney equation and explain its importance in drug dissolution.
5. Explain in detail on drug interactions associated to transporters.
6. Elaborate any one method in the determination of bioavailability.
7. Causes for nonlinearity in pharmacokinetics.
8. Write in brief about *invitro invitro* correlation.
9. Discuss on Loading dose and maintenance dose.
10. Interpret the clinical significance and special concerns in Bioequivalence study.
11. Discuss on Monoclonal antibodies.
12. Write a note on Pharmacokinetics and pharmacodynamics of biotechnology drugs.
