

Q.P. Code: 106340

Reg. no.:

**First Pharm D Post Baccalaureate Degree Regular/Supplementary
Examinations November 2025**

Paper VI – Biopharmaceutics & Pharmacokinetics

Time: 3 Hours

Total Marks: 70

- *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 chemical pathways of drug biotransformation.
2. Describe the methods of measurement of bioavailability.
3. Explain the factors influencing the absorption of drugs in GIT.

Short notes:

(8x5=40)

4. Differentiate carrier-mediated transport from passive diffusion.
5. Discuss the limitations of the pH partition hypothesis.
6. Explain, how are body tissues classified based on perfusion rate.
7. Discuss the non-renal routes of drug excretion.
8. Classify pharmacokinetics models and their applications.
9. Write the advantages and disadvantages of the compartment model.
10. Describe the two-compartment open model system.
11. Define dose-dependent kinetics and discuss the Michaelis Menten equation.
