

Q.P. Code: 405326

Reg. no.:

**Fourth Year Pharm D Degree Supplementary Examinations
February 2025
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. Define Absorption. Discuss in detail the various biological factors affecting drug absorption.
2. Discuss in detail one-compartment open model for a drug administered as IV Bolus with the schematic representation, equations and graphs.
3. Define biotransformation. Explain phase I and phase II reactions.

Short notes:

(8x5=40)

4. Explain passive diffusion of drugs and principle involved in passive diffusion.
5. Write a short note on BCS classification of drugs.
6. Discuss about the Glucuronic acid conjugation.
7. Explain drug distribution to foetus through placental barrier.
8. Explain the assumptions of one-compartment open model.
9. Give the estimation K_m and V_{max} .
10. What are the various methods for measurement of bioavailability.
11. Explain statistical moment's theory.
