

Q.P. Code: 106340

Reg. no.:

**First Pharm D Post Baccalaureate Degree Regular/Supplementary
Examinations August 2024**

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. Describe the mechanism of drug absorption.
2. Explain various pharmacokinetic parameters involved after I.V bolus administration of drug.
3. Define clearance, total body clearance and organ clearance. What are the advantages of expressing clearance at an individual organ level.

Short notes:

(8x5=40)

4. Loading Dose.
5. Compare the primary and secondary active transport.
6. Narrate the patient factors that affect the drug absorption.
7. What are the outstanding characteristics of conjugation reaction.
8. Explain the pharmacodynamic parameters .
9. Write the advantages and disadvantages of the physiological model.
10. Brief about K_a , K_e , C_{max} , t_{max} and AUC.
11. Give the advantages and disadvantages of cross over bioequivalence studies.
