

Q.P. Code: 106340

Reg. no.:

**First Pharm D Post Baccalaureate Degree Supplementary
Examinations October 2023**

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. Narrate the factors affecting the distribution of drugs.
2. Define optimal dosage regimen, Enlist and brief about the steps involved in the individualisation of dosage regimen.
3. Define bioavailability, Mention the bioavailability enhancement through enhancement of drug stability and permeability.

Short notes:

(8x5=40)

4. Define absorption, what are the various routes from which absorption of a drug is necessary for pharmacological action.
5. Brief about BCS for drugs.
6. What is a physiological barrier, explain the blood-brain barrier with a neat diagram.
7. Explain, why glucuronidation is most important in phase 2 reaction.
8. Write the methods used for estimation of nonlinear parameters.
9. Write the advantages and disadvantages of the independent model.
10. Explain the principle and applications of the Wagner Nelson method.
11. Compare intravenous bolus and infusion model.
