

Q.P. Code: 106340

Reg. no.:

**First Pharm D Post Baccalaureate Degree Regular/Supplementary
Examinations November 2021**

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 physiochemical factors affecting drug absorption.
2. Draw the plasma concentration time profile curve. Describe the different pharmacokinetic and pharmacodynamic parameters.
3. Explain Michaelis Menten equation. Write the methods used for estimating the nonlinear parameters.

Short notes:

(8x5=40)

4. Mention the principle involved in active tubular secretion.
5. Explain the standard protocol for carrying out bioequivalence study.
6. Explain the pharmacokinetic equations for two compartment open model after oral administration.
7. Explain the factors affecting clearance.
8. Differentiate oxidation and reduction reactions with suitable examples.
9. What are strategies adopted for transporting drug across blood brain barrier.
10. How to determine mean resident time in non-compartment model.
11. Describe the concept involved in Wagner Nelson method.
