

Q.P. Code: 106340

Reg. no.:

First Pharm D Post Baccalaureate Degree Examinations July 2019

Paper VI – Biopharmaceutics & Pharmacokinetics

Time: 3 Hours

Total Marks: 70

- Answer all questions
- Draw diagrams wherever necessary

Essays:

(3x10=30)

1. Draw the structure of cell membrane and describe different mechanisms involved in gastro intestinal absorption.
2. Mention the different types of protein involved in drug binding and its application
3. How will you determine the pharmacokinetic parameters in two compartment open model after intravenous bolus injection

Short notes:

(8x5=40)

4. Write the markers used for evaluating the renal function with its advantage
5. Enumerate methylation biotransformation with an example
6. How to determine mean residence time for different compartment models.
7. How to determine absorption rate constant after extra vascular administration in one compartment model.
8. Differentiate absolute and relative bioavailability with the formula
9. Write the principle involved in drug accumulation during multiple dosing.
10. Mention any two methods for the determination of K_m and V_{max} in Michaelis Menten equation
11. Write the procedure for carrying out bioequivalence studies.
