

**Q.P. Code: 106340**

**Reg. no.:** .....

**First Pharm D Post Baccalaureate Degree Supplementary  
Examinations March 2022**

**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. Discuss the different mechanisms involved in gastro intestinal absorption.
2. Explain the different factors affecting protein drug binding.
3. How will you determine the pharmacokinetic parameters in one compartment open model after intravenous bolus injection.

**Short notes:**

**(8x5=40)**

4. The principle involved in active tubular secretion.
5. Enumerate acetylation biotransformation with an example
6. Physiological pharmacokinetic model.
7. How to determine absorption rate constant after extra vascular administration in one compartment model.
8. Differentiate absolute and relative bioavailability.
9. 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. The protocol involved in bioequivalence studies.

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