

**Q.P. Code: 405326**

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

**Fourth Year Pharm D Degree Examinations July 2018**

**Biopharmaceutics & Pharmacokinetics**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all questions
- Draw diagrams wherever necessary

**Essays:**

**(3x10=30)**

1. Explain one compartment open model for IV bolus administration.
2. Explain the physiologic barriers to drug distribution
3. Explain causes of nonlinearity of pharmacokinetics and describe non-linear pharmacokinetics with appropriate equation

**Short notes:**

**(8x5=40)**

4. Describe carrier mediated transport of drugs.
5. Explain cross-over design used in bioequivalence study.
6. Explain the concept of apparent volume of distribution.
7. Discuss on the binding sites of human serum albumin.
8. Define pharmacokinetic models and mention their uses.
9. List out the methods to determine bioavailability and explain any one
10. Describe some non-renal routes of drug elimination.
11. Describe passive diffusion and endocytosis in drug absorption

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