

**Q.P. Code: 405326**

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

Fourth Year Pharm D Degree Supplementary Examinations January 2017

**Biopharmaceutics & Pharmacokinetics**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all questions
- Draw diagrams wherever necessary

**Essay:**

**(3x10=30)**

1. Discuss the patient related factors influencing GI absorption of a drug.
2. Derive all possible pharmacokinetic parameters using one compartment open model Intravenous bolus administration.
3. Describe the purpose of various pharmacokinetic models

**Short notes:**

**(8x5=40)**

4. Explain the main reason for giving a drug by slow IV infusion
5. Explain area under curve and area under first moment curve
6. Discuss the repetitive extra vascular dosing using one compartment open model
7. Explain the physiological pharmacokinetic model.
8. Discuss the bioavailability study protocol
9. Discuss the factors causing non-linearity in case of dose dependent pharmacokinetics.
10. Explain the absorption of drugs by passive diffusion
11. Explain the chemical pathways of drug biotransformation with examples.

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