

**Q.P. Code: 106340**

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

First Pharm D Post Baccalaureate Degree Examinations, September 2013

**Paper VI – Biopharmaceutics & Pharmacokinetics**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all questions
- Draw diagrams wherever necessary

**Essay:**

**(3x10=30)**

1. Explain passive diffusion and active transport mechanisms of drug absorption.
2. Explain plasma concentration-time profile of a drug with a neat illustration and explain pharmacokinetic and pharmacodynamic parameters.
3. Explain one compartment open model for IV bolus administration.

**Short notes:**

**(8x5=40)**

4. Explain first pass metabolism.
5. Discuss on the binding sites of human serum albumin.
6. Discuss about dosage adjustment in renal failure.
7. Define pharmacokinetic models and mention their uses.
8. Explain the causes of non-linearity in pharmacokinetics.
9. Explain the concept of clearance.
10. Describe enterohepatic cycling and its impact on pharmacokinetics.
11. Describe non compartmental analysis of pharmacokinetics.

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