

**Q.P. Code: 405326**

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

**Fourth Year Pharm D Degree Examinations, July 2017**

**Biopharmaceutics & Pharmacokinetics**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all questions
- Draw diagrams wherever necessary

**Essay:**

**(3x10=30)**

1. Define drug absorption. Discuss the various factors influencing GI absorption of a drug.
2. Explain the designing and protocol of bioequivalence studies as per CDSCO guidelines.
3. Derive Michaelis-Menten equation and explain about in vitro and in vivo correlation method.

**Short notes:**

**(8x5=40)**

4. Derive the pharmacokinetic parameters for one compartment open model intravenous administration
5. Explain briefly the physiological barriers for distribution.
6. Describe the phase II biotransformation of drugs.
7. Explain the concept of loading dose and maintenance dose.
8. Statistical moment theory.
9. Explain the pharmacokinetic method for assessing bioavailability
10. Explain various models of pharmacokinetic analysis.
11. Explain Wagner and Nelson method.

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