

**Q.P. Code: 405326**

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

**Fourth Year Pharm D Degree Supplementary Examinations  
January 2018**

**Biopharmaceutics & Pharmacokinetics**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all questions
- Draw diagrams wherever necessary

**Essay:**

**(3x10=30)**

1. Explain the physiologic barriers to drug distribution.
2. Explain causes of nonlinearity of pharmacokinetics and describe Michaelis-Menten equation for non-linear pharmacokinetics.
3. Describe pulmonary and salivary excretion of drugs and explain statistical moment theory.

**Short notes:**

**(8x5=40)**

4. Explain the determination of renal function.
5. Describe two compartment model for IV bolus administration.
6. Describe carrier mediated transport of drugs.
7. Discuss on the binding sites of human serum albumin.
8. Describe mammillary models of pharmacokinetics.
9. Tubular reabsorption of drugs.
10. Explain reasons for lipophilic drugs have higher volume of distribution.
11. Explain the significance of washout period in cross over study designs

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