

Third Year B.Pharm Degree Supplementary Examinations – July 2016

PHARMACEUTICS - V
(Biopharmaceutics and Pharmacokinetics)
(2010 Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. What are the various methods for measurement of bioavailability. What is the importance of invitro-in vivo correlation coefficient in bioequivalence studies
2. What is meant by Michaelis-Menten kinetics. What are the reason for this. Describe any two methods for measurement of Michaelis-Menten constant in one compartment open model I.V. bolus administration.
3. Describe the determination of various pharmacokinetics parameters in one compartment open model I.V. bolus administration.

Short notes

(14x5=70)

4. Determination of Pharmacokinetic parameters using urinary excretion data
5. What are the primary objectives of phase I biotransformation reactions.
6. Design of single dose bioequivalence studies
7. Determination of over all elimination rate constant in one compartment open model continuous intravenous infusion.
8. Blood placental barrier and drug distribution.
9. Binding of drugs to human serum albumin.
10. Hepatic clearance
11. Dose adjustment in renal failure
12. Loading dose
13. Biopharmaceutical classification system
14. Significance of drug polymorphism in its absorption.
15. pH partition hypothesis
16. Active transport of drugs
17. Physicochemical properties of the drug influencing its distribution.
