

Third Year B.Pharm Degree Examinations – July 2016

PHARMACEUTICS - IV
(Biopharmaceutics and Pharmacokinetics)
(2012 Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Define the important pharmacokinetic parameters and explain how they are determined for a drug given extra vascularly and exhibiting one compartmental model kinetics.
2. Discuss how the pharmaceutical factors related to dosage form of a drug can affect its absorption with suitable examples.
3. Define pro drug and Biotransformation. Explain the phase II process of biotransformation.

Short notes

(14x5=70)

4. Compare the various transport mechanisms of drug across biological membrane.
5. Non-linear pharmacokinetics
6. Importance of in-vitro-in-vivo correlation
7. Methods of measuring bioavailability
8. Effect of protein binding on volume of distribution of drug
9. Factors affecting excretion of drugs
10. Method of residual and its use
11. Discuss the different physiological barriers to distribution of drugs
12. Any two non-renal clearance mechanisms
13. Two compartmental model- concept
14. Significance of dissolution testing
15. First pass effect
16. Biological half-life of drugs and its significance
17. Design of single dose bioequivalence study.
