

Third Year B.Pharm Degree Supplementary Examinations – January 2017

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 biopharmaceutics and pharmacokinetics. Discuss the importance of drug-plasma protein binding.
2. Discuss in detail the physicochemical factors that affect drug absorption.
3. Discuss the various parameters that are used for estimation of drug bioavailability with examples.

Short notes

(14x5=70)

4. Any two physiological factors affecting drug distribution
5. Extraction ratio
6. Excretion of drugs through bile
7. Significance of pH partition hypothesis
8. Renal failure and its significance related to drug dose
9. Dosage form factors affecting drug absorption
10. One compartmental model for drug given as IV infusion
11. Urine excretion data and interpretation
12. Dissolution testing of drugs
13. Method of determining absorption rate constant
14. Bioequivalence
15. Comparison of one and two compartment models
16. Glucuronidation in biotransformation
17. Active and passive transport of drug molecules
