

Bio-Pharmaceutics and Pharmacokinetics

(Revised Scheme 4)

Q.P. CODE: 9338

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary. Answer any ten questions.

LONG ESSAY (Answer any TEN)

10 X 10 = 100 Marks

1. Explain in detail about in-vitro dissolution testing models.
2. Explain the P^H partition theory in drug absorption along with its limitations.
3. Describe the various biological factors influencing drug absorption.
4. Discuss briefly bioequivalence studies.
5. Explain the various approaches to improve dissolution of poorly water soluble drugs.
6. Explain the pharmacokinetics of a drug administered extravascularly which follows one compartment open model.
7. Explain saturation kinetics with causes, implications, characteristics and examples in non-linear kinetics.
8. Write a note on MRT and statistical moment theory.
9. Describe the physicochemical factors influencing the distribution of drugs. Explain the influence of protein bonding on pharmacokinetics of drugs.
10. Describe the biological factors affecting biotransformation of drugs. Write a note on non renal routes of drug excretion.
11. Explain the methods of adjusting the dose and dosage regimen in patients with renal diseases.
12. Explain the concept of loading and maintenance dose.

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