

Time: Three Hours

Max. Marks: 100 Marks

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 various non per-oral routes of drug absorption.
2. Write the objectives of bioavailability studies. Explain the methods for measurement of bioavailability.
3. Define drug distribution. Explain various physiological barriers for drug distribution.
4. Define the equivalence terms. Write the equation for similarity and dissimilarity factor and explain.
5. Explain Michael's Menten equation. How do you estimate K_m and V_{max} ?
6. Explain the pharmacokinetics of a drug given by extravascular route which follows one compartment open model.
7. What is protein binding? Explain the kinetics and significance of protein binding.
8. Classify pharmacokinetic models and explain briefly about each.
9. Explain pH partition hypothesis and its limitations.
10. What are the pharmacokinetic considerations in designing a dosage regimen?
11. Write a note on Phase-II biotransformation reactions.
12. Explain in detail about factors involved in Individualizing drug therapy.

* * * * *