



Advanced Biopharmaceutics and Pharmacokinetics -II

Q.P. CODE: 5141

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)

3 X 10 = 30 Marks

1. Explain mechanisms of drug absorption.
2. Define bioavailability. Explain the methods of enhancing bioavailability of drugs.
3. Discuss pharmacokinetics of drugs which follow one compartment when given as IV bolus injection.
4. Explain the applications of pharmacokinetics in designing of targeted drug delivery system.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

5. Explain physico-chemical factors influencing dissolution of drug product.
6. Explain Michaelis-Menten equation.
7. Write short notes on nonlinear kinetics.
8. Explain any one method of determination of AUC.
9. How to estimate V max and Km at steady state in non-linear pharmacokinetics.
10. Write a note on two compartment model.
11. Explain rate limiting steps in drug absorption.
12. Write a note on in vitro-in vivo correlation.
13. Explain Noyes-Whitney's equation.
14. Write a note on drug interaction linked to transporters.

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