Q.P. CODE : 9283

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY (Answer any TWO)   **2 X 20 = 40 Marks**

1. Deduce equations to obtain pharmacokinetic parameters of a drug administered by oral route, the drug undergoing absorption by first order kinetics and body acting as a single compartment

2. Explain Michaelis-Menten equation and estimation of Km and Vmax

3. Explain in detail the application of pharmacokinetics in new drug development and designing of dosage forms

SHORT ESSAY (Answer any FIVE)   **5 X 10 = 50 Marks**

4. Biological factors affecting absorption of drugs

5. Write a note on therapeutic drug monitoring

6. Explain with examples conjugation reactions for elimination of drugs

7. Write on adjustment of dosage in renal and hepatic impairment

8. Write on objectives and considerations in bioavailability study

9. Explain significance and kinetics of protein binding

SHORT NOTES   **2 X 5 = 10 Marks**

10. Concept of loading and maintenance dose

11. Volume of distribution

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