



[Time: 3 Hours]

[Max. Marks: 75]

Biopharmaceutics and Pharmacokinetics

Q.P. CODE: 5167

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. Describe Phase I reactions of oxidation with suitable examples.
2. Explain factors affecting protein binding.
3. Explain the dosage regimen.
4. Explain physiological pharmacokinetic model with advantages and disadvantages.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

5. Loading dose and maintenance dose
6. Explain concept of drug clearance and give its significance.
7. Dosage regimen (Dose adjustment) in renal and hepatic failure
8. Explain non-compartment pharmacokinetic model.
9. List out all factors and explain factors (any six) affecting biotransformation.
10. Define volume of distribution and explain the significance of it.
11. Explain the statistical moment theory.
12. Explain the displacement interactions with significance.
13. Explain the accumulation index and its importance.
14. Explain individualization of therapy.

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