



BIOPHARMACEUTICS AND PHARMACOKINETICS

(RS 2 & RS 3)

Q.P. CODE : 9283

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

LONG ESSAY (Answer any TWO)

2 X 20 = 40 Marks

1. Explain various factors affecting biotransformation of drugs.
2. Define Rate of Elimination and Clearance. Explain Non-Renal Clearance in detail.
3. Explain in detail the application of pharmacokinetics in development of controlled release drug delivery system.

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

4. Explain drug related factors affecting absorption of drug.
5. Explain significance of protein binding.
6. Deduce equation to obtain pharmacokinetic parameters of a drug administered by IV infusion and body acting as single compartment.
7. Explain concept of loading dose and maintenance dose.
8. Write a note on in-vitro in-vivo correlation.
9. Why is, human serum albumin considered a versatile protein for drug binding?

SHORT NOTES

2 X 5 = 10 Marks

10. Individualization
11. Polar drugs such as penicillin normally do not cross BBB but do so in meningitis. Explain.

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