



Clinical Pharmacokinetics and Therapeutic Drug Monitoring -II

Q.P. CODE: 5183

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 in detail about compartmental and non-compartmental modelling.
2. Explain the pharmacokinetics drug interactions with suitable examples.
3. How does population pharmacokinetics differ from linear pharmacokinetics? How is the analysis of population pharmacokinetic data carried out?
4. Explain why and how TDM of methotrexate is carried out?

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

5. What is clearance, and explain about the models of hepatic clearance?
6. Define loading dose and maintenance dose. Give the formula for calculating the same.
7. Write a note on genetic polymorphism in drug metabolism.
8. Write a note on NONMEM and how is it useful in pharmacometry.
9. Discuss the considerations for drug dosing in patients with hepatic impairment.
10. Explain why antipsychiatry drugs need therapeutic drug monitoring.
11. Write a note on Bayesian Theory.
12. Write a note on conversion from intravenous to oral therapy.
13. What do you understand by hepatic extraction ratio? Discuss the significance of the same.
14. What are the reasons for individualization of drug dosage regimen.

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