[Time: 3 Hours] [Max. Marks: 75]

Clinical Pharmacokinetics and Therapeutic Drug Monitoring 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

- Explain the principle and methods of converting IV to oral drug dosing.
- Discuss Bayesian theory.
- Explain the methods of dosage adjustment in renal failure patients.
- Discuss the need and protocol of TDM for cardio vascular drugs.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Explain the factors affecting individualization of drug dosage regimen.
- Discuss the principle of multiple dosing of drugs.
- 7. What is non-compartment modeling? Explain.
- 8. What are nomograms? Explain their applications.
- 9. Explain NONMEM approach in analysis of population of Pharmacokinetics data.
- Discuss the effect of drug dose on pharmacological effect and duration of activity of drugs.
- Explain with suitable examples how drug interactions influence drug absorption and distribution.
- 12. Define Pharmacogenetics and explain its impact on pharmacokinetics of drugs.
- 13. Explain START and STOP criteria.
- 14. Explain the models of hepatic clearance.

