

Q.P. Code: 503326

Reg. no.:

**Fifth Year Pharm D Degree Supplementary Examinations
December 2024**

Clinical Pharmacokinetics and Pharmacotherapeutic Drug Monitoring

Time: 3 Hours

Total Marks: 70

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays:

(3x10=30)

1. What is population pharmacokinetic data. Explain NONMEM method of analysis of such a data.
2. Explain with suitable examples the principle behind conversion of drug dosing from IV infusion to oral dose.
3. Define Pharmacokinetic drug interactions. Explain with suitable examples how such drug interactions influence the ADME of drugs.

Short notes:

(8x5=40)

4. Explain the typical plot of pharmacologic response versus drug dose.
5. Describe the methods of measurement of GFR and their significance.
6. Explain the role of clinical Pharmacokineticist in TDM.
7. Explain genetic polymorphism in drug metabolism with suitable examples.
8. Explain the protocol for Therapeutic Drug Monitoring.
9. What are nomograms and explain their use in clinical Pharmacokinetics with examples.
10. Explain the influence of drug interaction on drug metabolism with respect to enzyme induction and inhibition.
11. Enumerate and explain the variable factors in individualizing drug dosage regimen.
