

Q.P. Code: 503326

Reg. no.:

**Fifth Year Pharm D Degree Regular/Supplementary Examinations
June 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. Explain various models for pharmacokinetic and pharmacodynamic correlation.
2. Explain the procedure for dosage adjustment in renal and hepatic failure.
3. Explain the indications for Therapeutic Drug Monitoring (TDM) and explain TDM of digoxin and sodium valproate.

Short notes:

(8x5=40)

4. Explain Bayesian theory with an example.
5. Explain the mechanisms of enzyme induction.
6. Explain the factors affecting dialyzability of a drug.
7. Explain genetic polymorphism of drug transporters and their effect on pharmacokinetics of drugs.
8. Explain drug-drug interactions in absorption and distribution processes.
9. Describe the patient selection criteria and advantages of IV to oral conversion.
10. Describe the salient features that differentiates conventional and population pharmacokinetics.
11. Mention all the formula used in dosage calculation for pediatrics.
