

Q.P. Code: 503326

Reg. no.:

**Fifth Year Pharm D Degree Regular/Supplementary Examinations
July 2025**

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 pharmacokinetic interactions with examples.
2. Discuss differences between traditional and population pharmacokinetics and explain NONMEM approach of modeling data.
3. Explain the genetic polymorphisms and its impact on drug metabolism with some examples.

Short notes:

(8x5=40)

4. Explain the mechanisms of enzyme inhibition in drug metabolism.
5. Explain the criteria and advantages of conversion from Intravenous dosage to oral dosing.
6. Mention the importance of age and body weight of the patient in dosage adjustment
7. Explain the Hemodialysis and peritoneal dialysis process.
8. Explain the therapeutic drug monitoring of Digoxin and Phenytoin.
9. Explain the best practices and protocol for a TDM lab.
10. Explain Child-Pugh scoring system and its relevance to hepatic dosage adjustment.
11. Describe nomograms and their applications in designing dosage regimen.
