

Q.P. Code: 503326

Reg. no.:

**Fifth Year Pharm D Degree Supplementary Examinations
November 2022**

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. Define nomograms. Explain their application in pharmacokinetic studies with examples. Add a note on their merits and demerits.
2. Explain in detail the general approaches for dosage adjustment in renal diseases.
3. Discuss the importance of genetic polymorphism of cytochrome P-450 isozymes on drug metabolism with suitable examples.

Short notes:

(8x5=40)

4. Explain dosage adjustment in paediatric patients.
5. Discuss the effect of hepatic diseases on pharmacokinetics of a drug.
6. Explain why TDM for digoxin is necessary.
7. How is Glomerular Filtration Rate (GFR) determined.
8. Explain the protocol for therapeutic drug monitoring of a drug.
9. Discuss NONMEM method.
10. Discuss the factors to be considered during the design of dosage regimen.
11. Define and explain pharmacokinetic drug interactions with examples.
