

**Q.P. Code: 503326**

**Reg. no.: .....**

**Fifth Year Pharm D Degree Regular/Supplementary Examinations  
June 2023**

**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 the various factors considered in the design of dosage regimen for geriatric and obese patients.
2. Enumerate various causes for renal impairment. Discuss in detail about the pharmacokinetic considerations in the renal failure patients.
3. Explain in detail about the pharmacokinetic/pharmacodynamic correlation in drug therapy.

**Short notes:**

**(8x5=40)**

4. Describe about Bayesian theory.
5. Explain the relationship between dose and duration of activity of a drug.
6. Explain the influence of drug interaction on drug metabolism with respect to enzyme induction and enzyme inhibition.
7. How do you adjust dosage regimen in renal failure patients based on elimination half-life of drug.
8. Describe the methods of measurement of GFR and their significance.
9. Describe the role of genetic polymorphism in drug targets.
10. Explain about TDM of phenytoin.
11. Explain the difference between traditional pharmacokinetics and population pharmacokinetics.

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