

Q.P. Code: 503326

Reg. no.:

**Fifth Year Pharm D Degree Regular/Supplementary Examinations
October 2021**

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. Discuss the importance of genetic polymorphism of cytochrome P-450 isozymes on drug metabolism with suitable examples.
2. Discuss various markers used in the measurement of glomerular filtration rate along with their advantages and disadvantages. Enumerate the various formulae used for the measurement of creatinine clearance.
3. Enumerate and explain the various factors in individualizing drug dosage regimen.

Short notes:

(8x5=40)

4. Enumerate the factors involved in the calculation of drug dose in paediatric patients.
5. Explain the relationship between dose and pharmacological effect of a drug.
6. Explain the effect of inhibition of biliary excretion of drugs and list out the drug interactions which influence the biliary excretion.
7. Explain the various pharmacokinetic changes observed in the renally impaired patients.
8. Define TDM. Discuss the indications for TDM of drugs.
9. Describe the genetic polymorphism in CYP2D6 and 2C9 isozymes.
10. Discuss the analysis of population pharmacokinetic data.
11. What are the limitations of population pharmacokinetic approach.
