

Rajiv Gandhi University of Health Sciences, Karnataka
V Year Pharm-D (II Year Pharm D Post Baccalaureate) / V Year Pharm-D
Degree Examination – 17-Nov-2021

Time: Three Hours

Max. Marks: 70 Marks

CLINICAL PHARMACOKINETICS AND THERAPEUTIC DRUG MONITORING (RS & RS2)

Q.P. CODE: 2876 / 2892

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any two)

2 x 10 = 20 Marks

1. Explain the various factors considered in design of dosage regimen for geriatric and obese patients.
2. Explain the TDM of digoxin in detail.
3. List out the various factors of hepatic impairment. Discuss in detail the PK considerations in hepatic disease patients.

SHORT ESSAYS (Answer any six)

6 x 5 = 30 Marks

1. Describe the two-stage approach in POP PK analysis.
5. Describe the role of genetic polymorphism in CYP2D6 and 2C9 isoenzymes.
6. Explain the Guisti-Hayton method for dosage adjustment in uremic patients.
7. Explain the effect of inhibition of biliary excretion of drugs.
8. Explain in detail the determination of dose and dosing interval of a drug.
9. How do you adjust dosage regimen in renal failure patient based on total body clearance?
10. Explain the principle of superposition and how it applies to multiple drug dosing
11. Explain the Sigmoidal E_{max} model in PK/PD consideration.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Write the difference between first and zero order elimination and give the graphs.
13. Why is TDM necessary for methotrexate?
14. How do you adjust the dose in obese patients?
15. Write briefly about the induction of drug metabolism
16. Explain the reasons for monitoring drug levels.
17. What are the factors considered in conversion of IV to oral dosing
18. What are the importance of loading dose in finding drug dosing intervals?
19. Define Pharmacogenetics
20. What is Random error?
21. With suitable examples, enumerate drug dosing in genetic dependent fast acetylators.
