

Rajiv Gandhi University of Health Sciences, Karnataka
IV Year B.Pharm Degree Examination - Aug / Sep 2011

Time: Three Hours**Max. Marks: 70 Marks****PHARMACY PRACTICE – II (RS-3)****a. Pharmacokinetics and therapeutic Drug Monitoring****Q.P. CODE: 2623**

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. Discuss the importance of AUC as a Pharmacokinetic parameter. How AUC is derived from plasma concentration data? Illustrate your answer with suitable figures
2. Define TDM. Give the necessity and criteria for valid TDM. Explain the TDM of digoxin
3. Describe two compartment model for IV bolus

SHORT ESSAYS (Answer any Six)**6 x 5 = 30 Marks**

4. Explain the analytical aspects of TDM
5. Discuss the physiologic conditions associated with altered protein binding
6. Discuss "Flip Flop" phenomena
7. Give the pharmacokinetic explanation for co-administration of probenecid and penicillin
8. Define apparent volume of distribution. How will you relate it with clearance and elimination half-life
9. Discuss the kinetics of protein binding of drugs
10. Discuss the concepts of dosing in paediatrics
11. Explain the effects of reduced drug clearance of plasma concentration of the drug for various compartment models

SHORT ANSWERS**10 x 2 = 20 Marks**

12. Biological half life
13. Significance of protein binding
14. Clearance
15. Schematic diagram for two compartment extravascular model
16. Hepatic clearance
17. Dosage regimen design
18. Draw a neat diagram of three compartment extravascular model
19. Patient compliance
20. Effect of protein binding on apparent volume of distribution
21. Drug in tissue compartment
