

Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.Pharm Degree Examination – Sep 2012

Time: Three Hours

Max. Marks: 80 Marks

PHARMACOKINETICS & THERAPEUTIC DRUG MONITORING (Revised Scheme - 2)

Q.P. CODE: 1972

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. What is an optimal dosage regimen? Explain the kinetics of multiple dosing of a drug administered orally and following one compartment kinetics
2. Discuss the pharmacokinetics of a drug exhibiting one compartment kinetics after extravascular dosing from blood data.
3. Explain the objectives and essentials of therapeutic drug monitoring

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. What are the various physicochemical properties that effect drug distribution. Explain
5. Explain the concept of loading dose with maintenance dose
6. Write briefly on methods used to enhance the bioavailability of drugs
7. Which important plasma drug level related parameters are used in bioavailability Studies? Explain
8. Explain triexponential disposition with a suitable blood level curve
9. Briefly give an account of the chromatographic methods used in TDM
10. Explain the kinetics of protein binding
11. Discuss dosing requirements in children
12. Determination of volume of distribution in one compartment kinetics and significance
13. Explain briefly renal and hepatic clearance of drugs

SHORT ANSWERS

10 x 2 = 20 Marks

14. Trapezoidal rule in the estimation of AUC
15. Advantages of compartmental modeling
16. Limitations of radioimmunoassay
17. Which methods are used in adjustment of dosage regimen in TDM
18. Objectives of bioavailability studies
19. Relationship between V_d and AUC
20. Markers used to determine liver function
21. Blood sampling times in TDM
22. Define intrinsic capacity clearance
23. Plasma drug level-time curve for constant rate I V infusion

tmp.doc

Rajiv Gandhi University of Health Sciences, Karnataka

www.FirstRanker.com