

Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.Pharm Degree Examination – NOV 2016

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. Define bioavailability. Write the objectives of the bioavailability studies. Enumerate the various factors affecting bioavailability of a drug from its dosage forms.
2. Define pharmacokinetics. Describe various PK and PD parameters with the help of plasma drug concentration and time profile.
3. Discuss in detail the criteria and necessity of TDM.

SHORT ESSAYS (Answer any Eight)**8 x 5 = 40 Marks**

4. Define rate order of reaction. Explain constant rate process.
5. Write the advantages of physiological models over compartment models.
6. Dosage adjustment in renal impairment
7. Describe the conversion of IV dosing to oral dosing.
8. Kinetics of IV infusion in one compartment model
9. Write a note on mono exponential disposition.
10. Explain drug dosing in elderly.
11. Analytical methods of TDM
12. Explain briefly TDM of cyclosporine.
13. Influence of protein binding on drug action

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

14. Apparent volume of distribution
15. Limitations of one compartment modeling
16. Biological half life
17. Extraction ratio
18. Advantages of mammillary model
19. What is intrinsic capacity?
20. Organ clearance
21. Define Bioequivalence. What is its significance?
22. Define steady state, loading dose and maintenance dose.
23. Determination of AUC.
