

Rajiv Gandhi University of Health Sciences, Karnataka
IV Year B.Pharm Degree Examination – 24-Sep-2020

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. Explain various physiological factors affecting drug absorption
2. What do you understand by TDM? What is the criteria for valid TDM? Discuss the organization of a TDM service
3. Discuss one compartment open model after IV bolus administration.

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

4. Give the schematic representation of two and three compartment model
5. Gastric emptying and its significance
6. Protein binding and its clinical significance
7. Methods of assessing bioavailability
8. Assay methods in TDM study
9. Concept of design of dosage regimen
10. Dosing of drugs in elderly
11. TDM of cyclosporine
12. Renal and hepatic clearance
13. Mono exponential disposition

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

14. Cross over design in bioequivalence studies
15. Define organ clearance, renal clearance and hepatic clearance.
16. Biological half life and its significance
17. Apparent volume of distribution and its importance
18. Area under the curve
19. Need for TDM for Digoxin
20. First order rate
21. Give a diagrammatic representation of two compartment model for oral dosing.
22. Accumulation index
23. Relative and absolute Bioavailability