

Rajiv Gandhi University of Health Sciences, Karnataka
IV Year Pharm-D / I Year Pharm-D Post Baccalaureate Degree Examination – 07-Nov-2024

Time: Three Hours

Max. Marks: 70

BIOPHARMACEUTICS AND PHARMACOKINETICS (RS & RS-2)

Q.P. CODE: 2871 / 2888

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 methods used for assessment of Bioavailability.
2. What do you understand by pharmacokinetic model? Classify the pharmacokinetic model. Give their salient features, advantages and disadvantages?
3. Discuss in detail the various physiological factors affecting drug absorption.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Define Bioequivalence. Explain various types of equivalence.
5. How is drug distributed to CNS through blood brain barrier?
6. Write about the significance of protein binding.
7. List out the various factors affecting Biotransformation and discuss any two.
8. Explain the various factors leading to non-linearity in Pharmacokinetics?
9. Explain Renal clearance of drugs.
10. Explain the differences between passive diffusion and active transport.
11. Briefly explain the kinetics of drug following one compartment model with IV bolus administration.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Differentiate between relative and absolute bioavailability.
13. What is Enterohepatic cycle?
14. Explain importance of Loading dose.
15. Name any four methods for enhancing Bioavailability of drugs.
16. Define Pharmacokinetics.
17. Give two examples of drugs which are unstable in GIT
18. How does age effect distribution of drug?
19. Define Accumulation Index.
20. Define MRT and give its formulae.
21. Give schematic representation of two compartment model-oral administration.
