

Rajiv Gandhi University of Health Sciences, Karnataka
Sixth Semester B. Pharm Degree Examination – 04-Nov-2024

Time: Three Hours

Max. Marks: 75 Marks

BIOPHARMACEUTICS AND PHARMACOKINETICS

Q.P. CODE: 5026

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

All the Questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Discuss biological and physicochemical factors influencing drug absorption.

OR

Define bioavailability. Explain any two methods for measurement of bioavailability.

2. Define compartment. Discuss method of residuals/feathering method for deriving Pharmacokinetic parameters following one compartment model.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Enumerate factors affecting protein drug binding. Explain any two factors.

OR

Compare and contrast active and passive diffusion of drug absorption.

4. Define clearance. Write a note on renal clearance.

OR

Define dissolution. Explain various methods to enhance the dissolution of poorly soluble drugs.

5. Write a note on physiological models.

6. Write about non-compartment models.

7. Explain drug accumulation during multiple dosing.

8. Write a note on Michaelis-Menten equation in determining non-linearity.

9. Explain the various factors leading to non-linearity.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Define apparent volume of distribution.

11. Write any two clinical significance of protein binding.

12. Define pharmaceutical bioequivalence and therapeutic bioequivalence.

13. List out non renal routes of drug excretion.

14. Define catenary model and write its one application.

15. Define Biological half-life.

16. Define dosage regimen.

17. What do you mean by central and peripheral compartment in two compartment model?

18. Define bio-transformation of drugs.

19. Enlist the drugs follows non-linear kinetics.
