

Rajiv Gandhi University of Health Sciences, Karnataka

Sixth Semester B. Pharm Degree Examination – 24-Nov-2022

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.

2 x 10 = 20 Marks

LONG ESSAYS

1. Classify factors influencing absorption drugs. Explain physicochemical factors in detail.
OR
Define bioavailability. Write its objectives. Explain different methods for measurement of bioavailability.
2. Derive various pharmacokinetic parameters for intravenous infusion by one compartment open model.

7 x 5 = 35 Marks

SHORT ESSAYS

3. Enlist various mechanism of drug absorption. Explain active and passive diffusion.
OR
Write a note on tissue permeability of drugs.
4. Write a note on pathways of renal excretion of drugs.
OR
Explain bioequivalence studies in brief.
5. Define compartment. Write its applications in pharmacokinetic analysis.
6. Write about different pharmacokinetics parameters.
7. Explain two compartment open model.
8. Write a note on factors causing nonlinearity.
9. Explain the method to determine nonlinearity.

10 x 2 = 20 Marks

SHORT ANSWERS

10. Pore transport in absorption
11. Enlist factors affecting protein binding.
12. Define IVIVC.
13. Enlist methods to enhance the dissolution rate of poorly soluble drugs.
14. Define physiological model and write its one application.
15. Define Biological half-life.
16. Significance of loading dose in clinical setting.
17. Define steady state in drug level study.
18. Define nonlinear-pharmacokinetics.
19. Define dose dependent kinetics.
