

QP Code: 624006

Reg. No.....

**Sixth Semester B. Pharm Degree Supplementary Examinations
October 2023**

Biopharmaceutics and Pharmacokinetics

(2017 Scheme)

Time: 3 Hours

Max. Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

Essays

(2x10=20)

1. Elaborate on the mechanism of drug absorption.
2. Explain the kinetics of two compartment open model IV bolus administration.

Short Notes

(7x5=35)

3. Explain Danckwert's model and interfacial barrier model.
4. Elaborate pH partition hypothesis and its limitations.
5. Explain the non-renal routes of drug excretion
6. Elaborate any two methods to determine AUC.
7. Explain protein binding of drug. Write a note on kinetics of protein-drug binding.
8. Elaborate on the compartment models and their types.
9. Describe enhancement of bioavailability through pharmaceutical approach.

Answer Briefly

(10x2=20)

10. Define biopharmaceutics and pharmacokinetics.
11. Draw a typical plasma concentration time profile.
12. What are the different levels of IVIVC.
13. What are the types of compendial dissolution apparatus and their application.
14. Classification of drugs according to BCS system of classification.
15. State Michaelis Menten equation.
16. State any two causes for non-linearity.
17. Describe the significance of volume of distribution.
18. Define clearance and therapeutic index.
19. Why are phase I reactions called functionalization reactions.
