

QP Code: 624006

Reg. No.....

**Sixth Semester B. Pharm Degree Regular/Supplementary
Examinations February 2024
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. Describe the various physiological barriers affecting distribution of drug .
2. Define metabolism. Explain the different types of phase I reactions with suitable examples.

Short Notes

(7x5=35)

3. Briefly explain about mechanism of renal clearance.
4. Explain clinical significance of protein binding.
5. What is a compartment model. Discuss the various types of compartment models.
6. Discuss about criteria for obtaining a valid urine excretion data.
7. Explain two compartment open model.
8. Write a note on Invitro-in vivo correlations.
9. Michaelis-Menten equation.

Answer Briefly

(10x2=20)

10. Pharmaceutical equivalence and bioequivalence.
11. Fick's first law of diffusion.
12. Maximum Safe concentration, Minimum effective concentration.
13. Loading dose and maintenance dose.
14. Mean residence time.
15. What is the BCS classification.
16. Define Endocytosis.
17. Biopharmaceutics and pharmacokinetics.
18. Biological half life of a drug.
19. Define T max, Cmax.
