

2012 Scheme

QP CODE: 314006

Reg. No:

Third Year B.Pharm Degree Supplementary Examinations September 2024 Pharmaceutics - IV

(Biopharmaceutics and Pharmacokinetics)

Time: 3 Hours

Total Marks: 100

- *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*
- *Write chemical structures/equations wherever necessary.*

Essays

(3x10=30)

1. Explain in detail about various factors influencing absorption of drugs.
2. Describe binding of drugs with different plasma proteins.
3. Explain the pharmacokinetics of drug in blood upon IV infusion administration if it follows one compartment open model

Short notes

(14x5=70)

4. Describe blood-brain barrier features and its impact on drug distribution with example.
5. Write about the significance of plasma drug concentration.
6. Mention the salient features of drug absorption by facilitated diffusion.
7. Explain zero order kinetics of drug absorption with example.
8. Explain clearance and its significance.
9. Discuss the impact of any two excipients on drug absorption.
10. Describe the mechanism of drug dissolution.
11. Describe Phase II reaction in biotransformation of drugs.
12. Write short note on dosage adjustment in renal failure.
13. Explain 'Active tubular secretion' process in renal excretion of drugs.
14. What are the causes for non-linearity in drug distribution and drug metabolism. Explain.
15. Discuss assessment of bioavailability by Urinary excretion studies.
16. Write about 'parallel study design' of bioequivalence studies.
17. What are the various levels of in vitro in vivo correlation. Explain briefly.
