

Rajiv Gandhi University of Health Sciences, Karnataka
Second Semester M. Pharm Degree Examination - 02-Nov-2023

[Time: 3 Hours]

[Max. Marks: 75]

ADVANCED BIOPHARMACEUTICS AND PHARMACOKINETICS

Q.P. CODE: 5141

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

Answer All The Questions

10 x 7.5 = 75 Marks

1. Explain the formulation factors affecting drug absorption. Mention the role of transporters in drug absorption
2. Briefly comment on the following
a) Passive drug absorption b) pH-partition theory c) Tight-junction complex
3. Discuss compendial methods of dissolution
4. Explain in detail biopharmaceutical considerations in drug product design
5. Define Non-linear pharmacokinetics. How do you estimate K_m & V_{max} after i.v. bolus administration of drug following non-linear kinetics
6. Define drug interactions. Explain the Cytochrome P450 based drug Interactions
7. Discuss in detail the design and evaluation of bioequivalence studies
8. Write a brief note on Biosimilar drug (Generic biologics) products and their applications
9. Mention three applications of pharmacokinetics. Describe the role of PKPD interactions in novel drug delivery systems
10. Elaborate on monoclonal antibodies as targeted drug delivery systems

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