Rajiv Gandhi University of Health Sciences, Karnataka

First Year M. Pharm Degree Examination - 14-Jan-2020

Time: Three Hours **Max. Marks: 100 Marks**

BIO-PHARMACEUTICS AND PHARMACOKINETICS

(Revised Scheme 4)

Q.P. CODE: 9338

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

LONG ESSAY (Answer any TEN) **10 X 10 = 100 Marks**

1. Discuss in detail the drug related factors affecting absorption of drugs.
2. Define Bioavailability and Bioequivalence. Explain the methods to estimate bioavailability.
3. Describe *In-Vitro* methods for the evaluation of drug absorption.
4. Explain the theories proposed for the dissolution process with labeled diagram.
5. Classify compartment models. Explain them with concept and schematic representation.
6. Explain one compartment model with respect to extra vascular administration.
7. Describe Mixed order kinetics.
8. Define protein binding. Explain its kinetics and significance in detail.
9. Define AUC. Explain the various methods of determining AUC.
10. Explain the terms biotransformation and detoxification. What are the applications of biotransformation? Describe the metabolism of drugs by conjugation reactions.
11. Explain the mechanism involved in the renal excretion of drugs with suitable examples.
12. Define multiple dosage regimen. Write the advantages and disadvantages of Multiple dosage regimen. Explain the concept of loading dose in multiple oral dosing.

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