Rajiv Gandhi University of Health Sciences

Second Semester M. Pharm Degree Examination - MAY 2018

[Time: 3 Hours]   [Max. Marks: 75]

Advanced Biopharmaceutics and Pharmacokinetics -II
Q.P. CODE: 5141

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

LONG ESSAY (Answer any Three)   **3 X 10 = 30 Marks**

1. Explain the factors influencing GI absorption of a drug from its dosage form.
2. What is compartment model? Describe how can calculate the absorption rate constant following oral administration of a drug confers one compartment characteristics in the body.
3. Explain the problems of variable controls in dissolution testing of dosage forms.
4. Define bioavailability? Discuss the methods available to enhance bioavailability.

SHORT ESSAY (Answer any Nine)   **9 X 5 = 45 Marks**

5. Write briefly on Michaelis-Menten equation.
6. Discuss on kinetics of protein binding.
7. Describe Noyes-Whitney dissolution rate law.
8. Define bioequivalence? Explain its clinical significance.
9. Elaborate the relationship between pharmacokinetics and pharmaco dynamics.
10. Discuss various approaches for improving solubility of poorly soluble drugs.
11. Explain in brief concept of targeted drug delivery systems.
12. Discuss in vitro-in vivo correlation.
13. Write a note on biopharmaceutical classification system.
14. Explain in brief multi compartment model.

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