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: 5170

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 in detail about in vitro and in situ methods for studying absorption of drugs.
2. Define non-linear pharmacokinetics. What are the causes of non-linearity? Describe Michaelis-Menten equation.
3. Enumerate different categories of in vitro-in vivo correlation regarding drug product performance.
4. Explain cross over study designs of bioavailability in detail. Give a note on measurement of bioavailability.

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

5. Discuss properties of GI tract with respect to drug absorption.
6. In details explain active transport of drug absorption.
7. Discuss physico chemical properties of a drug considered in drug product design.
8. Describe compendia methods of dissolution testing.
9. Explain formulation factors affecting drug product performance.
10. Explain in brief extra vascular compartmental modeling.
11. Discuss about drug interactions linked to transporters.
12. Enumerate clinical significance of bioequivalence studies.
13. Give a note on pharmacokinetic and pharmacodynamic drug interactions.
14. Describe pharmacokinetics and pharmacodynamics of vaccines (immunotherapy).

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