Rajiv Gandhi University of Health Sciences

First Semester M. Pharm Degree Examination - DEC-2017

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

Biopharmaceutics and Pharmacokinetics
Q.P. CODE: 5125

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. Define pharmacokinetics. Explain two compartment models with example.
2. Write a note on various approaches to enhance dissolution of poorly soluble drugs.
3. Write note on different methods of determining bioavailability.
4. Explain various factors affecting drug absorption.

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

5. Explain active and passive diffusion of absorption.
6. Differentiate in vivo and in vitro methods for the determination of absorption of drugs.
7. Write a note on Bioequivalence protocol.
8. Explain USP type II dissolution test apparatus.
9. Write a note on BCS systems.
10. Explain the assumptions and limitations of one compartment model.
11. Write the mathematical expressions involved in the determination of pharmacokinetic parameters by feathering method.
12. Draw a typical blood level time profiles after oral administration of drug and explain various pharmacokinetic parameters.
13. Define non-linear kinetics. Explain the causes of nonlinearity detection.
14. Write a note of principles of non linear pharmacokinetics.

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