Rajiv Gandhi University of Health Sciences, Karnataka
First Year M. Pharm Degree Examination – May 2016

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

BIOPHARMACEUTICS AND PHARMACOKINETICS
(Revised Scheme 4)

Q.P. CODE: 9338

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

LONG ESSAYS (Answer any Two)   **2 x 20 = 40 Marks**

1. Discuss the various factors affecting drug absorption.

2. Derive an expression for calculating various pharmacokinetic parameters for a drug administered as I.V infusion and follows one compartment kinetics.

3. Explain the determination of various pharmacokinetic parameters in multiple dosing with respect to I.V and oral route.

SHORT ESSAYS (Answer any FIVE)   **5 x 10 = 50 Marks**

4. discuss any <u>two</u> methods for the estimation of K_m and V_{max}.

5. Describe the various in vitro dissolution testing models.

6. Explain the protocol for bioequivalence studies for drug formulations.

7. Explain Phase I reactions in biotransformation of drugs.

8. Explain the method of residual to determine the absorption rate constant. Mention its limitations.

9. Discuss MRT for various compartment models.

SHORT NOTES   **2 x 5 = 10 Marks**

10. Plasma Proteins

11. Concept of Clearance

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