

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

- Discuss the various factors affecting drug absorption.
- 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

- discuss any two methods for the estimation of K_m and V_{max}.
- Describe the various in vitro dissolution testing models.
- Explain the protocol for bioequivalence studies for drug formulations.
- 7. Explain Phase I reactions in biotransformation of drugs.
- 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

- Plasma Proteins
- Concept of Clearance

