

**Rajiv Gandhi University of Health Sciences**  
**First Year M. Pharm Degree Examination - May 2011**

[Time: 3 Hours]

[Max. Marks: 100]

**BIOPHARMACEUTICS AND PHARMACOKINETICS**

**(RS 2 & RS 3)**

**Q.P. CODE: 9283**

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

**LONG ESSAY (Answer any TWO)**

**2 X 20 = 40 Marks**

1. Explain the methods of determining absorption
2. Explain Michaelis – Menten equation and estimation of  $K_m$  and  $V_{max}$
3. State the significance of using compartment models for pharmacokinetic studies

**SHORT ESSAY (Answer any FIVE)**

**5 X 10 = 50 Marks**

4. Write briefly on Therapeutic drug monitoring
5. Discuss on the dosage adjustment in renal impairment
6. Describe bioequivalence and its importance
7. Discuss on the factors affecting drug distribution
8. Write briefly on conjugation reactions
9. Write briefly on factors affecting protein binding

**SHORT NOTES**

**2 X 5 = 10 Marks**

10. Hepatic clearance
11. Loading dose

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