[LD 823] **OCTOBER 2013** **Sub. Code: 3823**

PHARM. D / POST BACCALAUREATE DEGREE EXAMS

FOURTH YEAR

PAPER V – BIOPHARMACEUTICS AND PHARMACOKINETICS

Q.P. Code : 383823

Time : 3 hours **Maximum : 70 marks**

I. Elaborate on : **(2x20=40)**

1. Define drug absorption. Discuss the various factors influencing GI absorption of a drug.
2. Discuss the one compartment open model intra venous administration.

II. Write notes on : **(10x3=30)**

1. Explain in brief about Michaelis menten equation
2. Explain the Mean residence time
3. Apparent volume of distribution
4. Methods to enhance the bioavailability through enhancement of drug solubility
5. How will you find out K_m and V_{max} from steady state concentration?
6. What are the major parameters studied in the urinary excretion data?
7. What are the factors affecting drug dissolution and dissolution rate?
8. Write the concept and types of clearance
9. The drug has an elimination half life of 6 hrs and follows first order kinetics. If a single dose of 500 mg is given to an adult male (68 kg) patient by I.V bolus injection, what will be the percentage of dose lost in 24 hrs?
10. Statistical moment theory.

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