[LH 823]　　　　　　　　**OCTOBER 2015**　　　　　　　**Sub. Code: 3823**

PHARM. 'D' AND PHARM. 'D' (POST BACCALAUREATE)
DEGREE EXAMINATION
(2009-2010 Regulation)
FOURTH YEAR
PAPER V – BIOPHARMACEUTICS AND PHARMACOKINETICS

Q.P. Code: 383823

Time : Three hours　　　　　　　　　　　　　　**Maximum : 70 marks**

I. Elaborate on :　　　　　　　　　　　　　　　　　　**(4 x 10 = 40)**

1. One compartment open IV bolus administration.

2. Define excretion and explain briefly about renal excretion of drugs.

3. Physiological barriers to distribution of drugs.

4. *In Vitro* drug dissolution testing models.

II. Write notes on :　　　　　　　　　　　　　　　　　**(6 x 5 = 30)**

1. Approaches for dosage regimen.

2. Biopharmaceutical classification systems.

3. Line-weaver Burk plot.

4. Micro and hybrid constants.

5. Tissue localization of drugs.

6. A drug is administered at a dose of 500 mg IV bolus injection. The drug has elimination rate constant 0.231/hr, volume of distribution is 20 L by following one compartmental kinetics. If Area under the curve is 110 mg hr/L, then calculate mean residence time of the drug.

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