[LF 823] **OCTOBER 2014** **Sub. Code: 3823**

DOCTOR OF PHARMACY (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**

Answer All questions

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

1. Define absorption.
   Explain briefly about different mechanisms of drug absorption.
2. Advantages, Criteria of urinary excretion data.
   How will you find out elimination rate constant from the data?
3. Bioequivalence study protocol.
4. Multiple dosage regimens.

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

1. Partition theory and its modifications.
2. Blood Brain Barrier.
3. Significance of protein binding.
4. Carternary model.
5. Wagner Nelson Method.
6. Theophylline was administered to a patient at a dosing rate of 600 mg/day and 1200 mg/day. Respective steady state concentrations were 9.8 mg/L and 28.6mg/L. Find out K_m and V_{max}. Determine the dosing rate to achieve steady state concentration of 15 mg/L.

****