

[LK 823] MAY 2017 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: $(4 \times 10 = 40)$

1. Define drug absorption. Discuss the physiochemical factors influencing GI absorption of a drug.

- 2. Explain briefly two compartmental open model extra Vascular Administration.
- 3. Explain in details about pharmacokinetic and pharmacodynamic parameters.
- 4. What are the major parameters studied in the urinary excretion data?

II. Write notes on: $(6 \times 5 = 30)$

- 1. Measurement of bioavailability.
- 2. Explain the mean residence time.
- 3. Volume of distribution.
- 4. Methods to enhance the bioavailability through enhancement of dissolution rate.
- 5. How can you graphically estimate K_m and V_{max} from steady state concentration?
- 6. Hepatic clearance and renal clearance.
