

[LM 823] MAY 2018 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. Outline the physicochemical factors affecting drug absorption.

- 2. Explain the significance of protein/tissue binding of drugs.
- 3. Explain Non-linear Pharmacokinetics. Write in estimation of  $K_m$  and  $V_{max}$ .
- 4. How to determine pharmacokinetic parameters in one compartment open model intravenous infusion administration?

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

- 1. Differentiate active transport and passive diffusion.
- 2. Write the importance of volume of distribution.
- 3. Describe about salivary excretion.
- 4. Discuss method of determination and absorption rate constant (Ka).
- 5. Write the merits and demerits of non compartmental pharmacokinetics.
- 6. Mention the methodology involved in the determination of bioavailability.

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