

[PHARMD 0122] JANUARY 2022 Sub. Code: 3823 (OCTOBER 2021 EXAM SESSION)

PHARM 'D' AND PHARM. 'D' (POST BACCALAUREATE) DEGREE EXAMINATION FOURTH YEAR

PAPER V – BIOPHARMACEUTICS AND PHARMACOKINETICS Q.P. Code: 383823

Time: Three hours Answer ALL Questions Maximum: 70 Marks

I. Elaborate on: $(4 \times 10 = 40)$

- 1. Define Biotransformation. Explain the chemical pathways of drug biotransformation.
- 2. Explain the various models of Pharmacokinetic analysis.
- 3. Explain in detail about the factors causing non-linearity.
- 4. Define Bioavailability. Explain the pharmacokinetic methods to estimate the bioavailability of drugs.

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

- 1. Mean residence time
- 2. Kinetics of protein -drug binding
- 3. Drug Accumulation
- 4. Method of residuals in two compartment IV bolus administration
- 5. Volume of Distribution.
- 6. Non-renal routes of drug excretion
