

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[PHARMD 0122]

**JANUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 3823

**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 x 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 x 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
