

Sl.No. M22109

Course Code: 3100405/3200405

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)

Pharm.D DEGREE EXAMINATION - February 2020
Fourth Year

BIOPHARMACEUTICS AND PHARMACOKINETICS

Time: Three hours

Maximum: 70 marks

I. Write essays on any **TWO** questions: (2 x15 = 30)

1. Discuss in detail about distribution of drugs.
2. Define therapeutic equivalence and chemical equivalence. Explain the protocols involved in the measurement of bioavailability of a drug product.
3. What is compartment modeling? Derive equations to assess pharmacokinetic parameters for a drug administered extra vascularily by one compartment open model.

II. Write short answers on any **SIX** questions: (6 x 5 = 30)

4. Factors affecting biotransformation.
5. Non-renal excretion
6. Mamillary model.
7. Statistical moment theory
8. Cross over study
9. Loo-Reigelman method.
10. Factors affecting renal excretion.
11. Michaelis Menton Equation.

III. Write short notes on any **FIVE** question: (5 x 2 = 10)

12. Endocytosis
13. Major drug binding sites as Human Serum Albumin.
14. Henderson – Hasselback Equation.
15. Define clearance.
16. MRT
17. IV Bolus
