

Sl.No. M21628

Course Code: 3100405/3200405

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

**Pharm.D/ Pharm.D (POST BACCALAUREATE) DEGREE
EXAMINATION – July 2019
Fourth Year**

BIOPHARMACEUTICS AND PHARAMCOKINETICS

Time: Three hours

Maximum: 70 marks

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

1. Derive equations to study various pharmacokinetic parameters of a drug administered as intravenous bolus in a tow compartment open model.
2. Explain the formulation and patient related factors affecting absorption.
3. Derive equations for kinetics of capacity limited process.

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

4. Pharmacokinetic parameters.
5. Total body clearance.
6. Causes of non linearity.
7. Protein binding of drugs.
8. Measurement of bioavailability.
9. Non compartment analysis.
10. Volume of distribution.
11. Glucuronidation .

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

12. Define relative bioavailability.
13. Solvates.
14. Extra vascular dosing
15. Subjects.
16. $t_{1/2}$.
17. Zero order kinetics.
