Sl.No. M2371 Course Code: 3100405/3200405

VINAYAKA MISSION'S RESEARCH FOUNDATION (DEEMED TO BE UNIVERSITY), SALEM

Pharm.D/ Pharm.D (POST BACCALAUREATE) DEGREE EXAMINATION – July 2021 Fourth Year

BIOPHARMACEUTICS AND PHARAMCOKINETICS

Time: Three hours Maximum: 70 marks

I. Write essays on any **TWO** questions:

 $(2 \times 15 = 30)$

- 1. Elaborate on the pharmacokinetic model and equations in one compartment open model I.V. bolus.
- 2. Explain the formulation and patient related factors affecting distribution.
- 3. Elaborate on any one delivery system for estimation of bioequivalence.
- II. Write short answers on any **SIX** questions:

 $(6 \times 5 = 30)$

- 4. Causes of non-linearity with example
- 5. Limitations of multi compartmental analysis.
- 6. How will you find out Km and Vmax from steady state concentration?
- 7. Write the concept and types of clearance.
- 8. Measurement of bioavailability.
- 9. Non-compartment analysis.
- 10. Statistical moment theory.
- 11. Conjugation reaction.
- III. Write short notes on any **FIVE** question:

 $(5 \times 2 = 10)$

- 12. Solid dosage forms.
- 13. Intradermal absorption.
- 14. Bolus dose
- 15. Pharmacokinetics
- 16. Elimination half life
- 17. Mixed order kinetics.
