

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

**M.PHARM. DEGREE EXAMINATION – December 2018
Second Semester**

BRANCH : PHARMACEUTICS

ADVANCED BIOPHARMACEUTICS AND PHARMACOKINETICS

Time : Three hours

Maximum: 75 marks

**(Draw neat labeled diagrams wherever necessary
your answer should be specific to the questions asked)**

SECTION –A

I. Answer any **THREE** questions: **(3 x 15 = 45)**

1. Define absorption. What are the factors affecting absorption? Write a detailed note on dissolution process.
2. Write a detail note on :
 - a) Physiochemical nature of the drug. **(7 ½)**
 - b) Formulation of factors affecting drug product performance. **(7 ½)**
3. Write short notes on :
 - a) One compartment model in IV Bolus and IV infusion. **(7 ½)**
 - b) Vaccines **(7 ½)**
4. Design and evaluation of bioequivalence studies and Oligonucleotides.

SECTION –B

II. Answer any **THREE** questions: **(3 x 10 = 30)**

5. What are the properties of the GIT and Tight junction complex?
6. Write a note on Biopharmaceutic factors affecting drug bio-availability.
7. Write short notes on :
 - a) Michaelis – Menten equation. **(5)**
 - b) Drug interactions. **(5)**
8. Discuss about

a) Monoclonal antibodies b) Purpose of Bio-availability studies.
