

Sl.No: M21161

Course Code: MPH202T

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

**M.PHARM. DEGREE EXAMINATION – September 2021
Second Semester**

BRANCH: PHARMACEUTICS

**ADVANCED BIOPHARMACEUTICS AND
PHARAMACOKINETICS**

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. Explain the importance strategies of drug absorption. Various steps involved in the absorption of a drug from orally administered solid dosage forms.
2. a) Enumerate the factors affecting bioavailability of a drug from its dosage form.
b) Discuss about the theories proposed for the dissolution process and the factors affecting dissolution.
3. a) Explain one compartment model with respect of IV infusion.
b) Discuss with example cytochrome P₄₅₀ based drug interaction.
4. a) Enumerate and briefly explain different modified release dosage forms.
b) Briefly describe the emerging trends in drug targeting.

SECTION –B

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

5. a) Write the various theories that explain drug absorption using Noyes-Whitney's equation.
b) Discuss the diffusion layer theory the variables that influence drug absorption.
6. a) What is invitro- invivo correlation (IVIVC).
b) Explain the various methods for assessment of bioavailability.
7. a) Describe the experimental protocol and analysis of data for bio equivalence studies.
b) Explain comparative drug release kinetic of oral dosage forms
8. a) Write the application of pharamacokinetics in targeted drug delivery system.
b) Write a detailed notes on drug transporters.
