

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 0823]

**AUGUST 2023
(APRIL 2023 EXAM SESSION)**

Sub. Code: 2936

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACEUTICS - MPH
PAPER II – ADVANCED BIOPHARMACEUTICS & PHARMACOKINETICS**

Q.P. Code: 262936

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the properties of Gastro intestinal tract and discuss in detail the various factors affecting drug absorption from the Gastro intestinal tract.
2. Answer the following:
 - a) Discuss the effect of protein binding, tissue binding and cytochrome p450-based drug interactions and its significance.
 - b) Write a note on problems of variable control in dissolution testing performance of drug products.

II. Write notes on:

(7 x 5 = 35)

1. Derive equation to calculate the pharmacokinetic parameters of two compartment open model.
2. Methods for assessing the bio availability of a drug.
3. Compendial methods of dissolution studies.
4. Biological factors affecting the drug bioavailability.
5. Mechanism of drug absorption in bio environmental system.
6. Biopharmaceutical classification system and its significance.
7. Correlation of in vivo data with in vitro dissolution data.
