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

[LP 823] OCTOBER 2019 **Sub. Code: 3823**

PHARM. 'D' AND PHARM. 'D' (POST BACCALAUREATE)
DEGREE EXAMINATION
(2009-2010 Regulation)
FOURTH YEAR
PAPER V – BIOPHARMACEUTICS AND PHARMACOKINETICS

Q.P. Code: 383823

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. Explain Protein binding of drugs and write the different factors affecting protein drug binding.

2. Explain pharmacokinetic parameters in one compartment open model after intravenous bolus injection.

3. Explain in detail the protocol involved in bioequivalent studies.

4. Mention the equations for the determination of K_m and V_{max} in Michaelis Menten kinetics equations.

II. Write notes on: **(6 x 5 = 30)**

1. Write the principle involved in excretion of drugs.
2. Enumerate bio-transformation with an example.
3. Write a note on physiological pharmacokinetic model.
4. How to determine absorption rate constant after extra vascular administration in one compartment model?
5. Differentiate absolute and relative bioavailability.
6. Mention the mean residence time formula for different compartment models.

****