

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

[LO 342]

MAY 2019

Sub. Code: 2903

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH I – PHARMACEUTICS  
PAPER III – BIOPHARMACEUTICS AND PHARMACOKINETICS**

*Q.P. Code : 262903*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Explain two compartment open model. Derive suitable equations for calculating pharmacokinetic parameters for extra vascular administration of drug that follows two compartment open model.
2. a) Explain principal involved in renal excretion of drug with suitable example.  
b) Describe drug binding in tissues.

**II. Write notes on:**

**(10 x 6 = 60)**

1. GCP guidelines for bio equivalence studies.
2. Loading dose, maintenance dose and accumulation index.
3. Explain any two Phase II reactions.
4. Non Renal excretion of drugs.
5. Explain passive transport and facilitated diffusion.
6. Measurement of bio availability.
7. Non linear Pharmacokinetics.
8. Factors affecting bio transformation of drugs.
9. Non compartmental models.
10. Drug distribution in body fluids.

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