

[LE 342]

APRIL 2014

Sub. Code: 2903

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

*Q.P. Code : 262903*

**Time : 3 hours**

**Maximum : 100 marks**

**I. Elaborate on :**

**(2x20=40)**

1. Explain the designing and protocol of bioequivalence studies as per CDSCO guidelines.
2. Discuss various pharmaceutical dosage form factors and physiological factors affecting drug absorption in the gastrointestinal tract.

**II. Write notes on :**

**(10x6=60)**

1. Volume of distribution of drugs.
2. Methods of drug dosage adjustments in renal impairment.
3. Phase II biotransformation of drugs.
4. Pharmacokinetic variability in thyroid disease.
5. Pharmacokinetic drug interactions.
6. Area under first moment curve and mean residence time.
7. Drug penetration to CNS.
8. Plasma protein binding of drugs.
9. Concept of loading dose and maintenance dose.
10. Any 6 methods to improve bioavailability of poorly water soluble drugs.

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