Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2012 to 2016)   (Sem.–5)
PHARMACEUTICS-VII
(Biopharmaceutics & Pharmacokinetics)
Subject Code : BPHM-505
M.Code : 70431

Time : 3 Hrs.   Max. Marks : 80

INSTRUCTION TO CANDIDATES :
1. SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

SECTION-A

1. Answer briefly :

   a. Significance of plasma drug concentration time curve.

   b. What is a compartment model?

   c. Enlist factors affecting gastric emptying of drug.

   d. Enlist **any two** possible mechanisms of enzyme induction and enzyme inhibition.

   e. Significance of bioavailability studies.

   f. Give significance of tissue binding of drug.

   g. Flip-flop phenomenon.

   h. What is non linear pharmacokinetics?

   i. Hepatic clearance.

   j. Active transport systems.

k. Define Volume of distribution.

l. What are the various sites of drug metabolism in the body?

m. Define Passive diffusion.

n. What do understand by mean residence time?

o. Write about characteristics of active transport?

SECTION-B

2. Write a note on applications and limitations of compartment models.

3. Write a short note on urinary excretion studies.

4. Explain Zero order and first order absorption models.

5. Explain Apparent volume of distribution and distribution co-efficient.

6. Write a note on clearance. What is its unit?

SECTION-C

7. Write short notes on :

    a. Significance of plasma drug concentration measurement.

    b. Lag time

8. Discuss the assumptions, limitations and significance of pH- partition hypothesis.

9. Describe various pharmacokinetic parameters and study designs used in BA/BE studies.

10. Explain about Wagner-Nelson method and Loo-Reigelman method.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.