R13

Code: 13R00702

B.Pharm IV Year I Semester (R13) Regular Examinations November 2016
BIOPHARMACEUTICS & PHARMACOKINETICS

Time: 3 hours   Max. Marks: 70

PART – A
(Compulsory Question)
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1   Answer the following: (10 X 02 = 20 Marks)
   (a)   Mention the physiological barriers of drug diffusion.
   (b)   What is apparent volume of distribution?
   (c)   Write about non renal clearance.
   (d)   Mention the phase II reactions of drug metabolism.
   (e)   Write the methods to measure bioavailability.
   (f)   Explain IVIVC.
   (g)   What is MRT?
   (h)   Define biological half life.
   (i)   Write reasons for non-linearity.
   (j)   Explain Michaelis-Menten equation.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

2   Mention the physico-chemical factors influencing absorption with examples.
OR
3   What is protein binding and explain factors affecting protein binding and significance of protein binding?

UNIT - II

4   Explain phase I pathways of drug metabolism with examples.
OR
5   Write about renal excretion of drugs.

UNIT - III

6   Explain types and measurement of bioavailability studies.
OR
7   Explain the designing and protocol of bioequivalence studies as per CDSCO guidelines.

UNIT - IV

8   Explain one compartment open model for IV bolus administration.
OR
9   Explain sigma minus method used to determine the excretion of drug.

UNIT - V

10   Explain the concept of linearity and non-linearity.
OR
11   Comment on non compartmental models.

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