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Total No. of Pages : 02

Total No. of Questions : 24

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

Time : 3 Hrs.

Max. Marks : 80

INSTRUCTIONS 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**Answer briefly :**

1. Define Relative Bioavailability.
2. What is meant Dosage Regimen?
3. Differentiate between drug excretion and elimination.
4. What is meant by wash out period?
5. Define Volume of Distribution.
6. How is Bioavailability related to volume of distribution?
7. Define One Compartment Model.
8. Write the equation for first order drug elimination kinetics.
9. What is MRT and how is it calculated?
10. Give examples of plasma proteins that contribute to drug binding.

11. At steady state what is relation between K_a and K_e ?
12. What is First Pass Effect?
13. Define T_{max} .
14. Write Handerson-Hasselbach equation.
15. Define Facilitated Transport.

SECTION-B

16. What are Non-compartment models?
17. What is meant by biopharmaceutics? Enumerate the factors that need to be considered during biopharmaceutical studies.
18. Write a note on active transport of drugs in body with suitable examples.
19. What are the reasons for instability of drugs in GIT?
20. What are regulatory requirements to conduct bio equivalent studies?

SECTION-C

21. Discuss method of residual for calculation of absorption rate constant.
22. Discuss various factors affecting the volume of distribution of drugs. Also explain its role in the pharmacokinetics of a drug.
23. Elaborate upon the significance of plasma drug concentration measurement.
24. Discuss briefly the methods used for evaluating in vitro-in vivo correlation.

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.