PG (CBCS) EVEN SEMESTER EXAMINATION, 2024

PHARMACEUTICAL SCIENCES
(M.Pharm. 2nd Semester)

Course No: MPH 202T
(Advanced Biopharmaceutics & Pharmacokinetics)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

I. Objective type (Answer the following in brief) 2x10=20

1. What is dosage regimen?
2. What do you mean by pH micro climate?
3. What does absorption rate limited drug mean?
4. What is the significance of protein binding of a drug?
5. Name synonyms of satellite pattern and train pattern compartment models. 1+1
6. How iv bolus is different from iv infusion?
7. Define oligonucleotide.
8. Define gene therapy.
9. What is first pass metabolism?
10. Define bioavailability.

(Turn Over)

II. Long answers (Answer two out of three questions) 10x2=20

1. Discuss in detail the methods available for assessment of bioavailable fraction of a drug in body post administration of a dosage form.
2. With the help of a neat labelled diagram of GIT explain the mechanism of drug absorption in the body post oral route of administration.
3. Discuss various biopharmaceutic considerations for drug product design and performance. 5+5

III. Short answers (Answer seven out of nine questions) 5x7=35

1. Write a brief note on immunotherapy.
2. Highlight the potential of proteins and peptides as biotechnological products. 2.5+2.5
3. What have you learnt from pH partition hypothesis.
4. Discuss on the importance of IVIVC.
5. Discuss various drug transport mechanisms of our body.
6. Write a note on the rate limiting steps in drug absorption.
7. Discuss on targeted drug delivery system.
8. Highlight the prospect of monoclonal antibodies.
9. Differentiate between absolute and relative availability of a drug citing suitable examples.

★★★