

SL No of QP : 9913

Unique paper code: 21753550011

Name of the paper: DSE Fundamentals of Medicinal Chemistry

Name of the Course: B.Sc. (Prog.)

Semester: VII

Duration: 2 Hours

Maximum marks: 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper
2. Attempt four questions in all.
3. All questions carry equal marks.

Q: 1 Attempt any five of the following. ($5 \times 3 = 15$ M)

- i. Prodrugs
- ii. Chirality with suitable example
- iii. Preclinical and clinical trails
- iv. Hansch equation
- v. Antipyretics
- vi. Half-life of a drug
- vii. Partition coefficient

Q: 2 (a) Write different stages of Drug discovery. (10 M)

(b) Differentiate between Random and Systematic screening. (5 M)

Q: 3 (a) Explain the phase I of drug metabolism with different types of reactions. (10 M)

(b) Write note on Drug excretion. (5 M)

Q: 4 (a) Give the synthesis of Fluconazole. (5 M)

(b) Discuss parameters used in QSAR. (5 M)

(c) Discuss statistical methods used in QSAR analysis. (5 M)

Q: 5 (a) Write tools for target identification. (10 M)

(b) Write the structure and uses of the following. (5 M)

- (i) Penicillin (ii) Isoniazid

Q: 6 (a) Explain drug absorption and drug distribution. (10 M)

(b) Explain stereochemistry of penicillin. (5 M)