

Time: 2 hours 27/03/2018 Total Marks: 60

Que-1 Answer any 12 questions. Each question carries 1 mark [12]

1. Definition of prodrug.
2. Which of the following statements is true?
  - (a) Drugs and drug targets generally have similar molecular weights
  - (b) Drugs are generally smaller than drug targets.
  - (c) Drugs are generally larger than drug targets.
  - (d) There is no general rule regarding the relative size of drugs and their targets
3. -OH is a lipophilic group (True/False)
4. Which of the following is hydrophobic parameter?
  - (a) Partition coefficient
  - (B) Pi substituent constant
  - (c) RM chromatographic parameter
  - (d) All of above
5. Full form of SAR is \_\_\_\_\_.
6. Write Down full form of SBDD.
7. Define: Lead optimization.
8. Full form of HTS is \_\_\_\_\_ and LTS is \_\_\_\_\_.
9. Definition: Isosterism.
10. Write Down full form of LBDD.
11. Definition Stereoisomers.
12. Definition Enantiomers.
13. Definition Resonance effect.

Que-2 Answer any five questions. Each question carries 4marks

[20]

1. Explain the classification of prodrug.
2. Explain the classification concept of lead.
3. Explain the vanderwaal's constant.
4. Short note on Meyer-overton and meyer-hemmi theory.
5. Short note on Ferguson theory
6. Short note on tailoring of drug.
7. Draw for resonance stretcher for aniline and phenol.

Que-3 Answer any four questions. Each question carries 7 marks [28]

1. Write a detail note on steric factors.
2. Explain the type of rational drug designing.
3. Explain the overview of drugs in major stage of drug development
4. Explain the concept of Factors governing ability of drugs to reach active site.
5. Explain the stereochemistry and drug action.
6. Give a comprehensive account of the importance of 'Isosterism' and 'Boi-Isosterism in drug design.