

Hemchandracharya North Gujarat University, Patan

Bachelor of Vocation

Pharmaceutical Chemistry Semester-IV

End Term Examination, May, 2017

Subject: Medicinal Chemistry –I (PC-411)

Time: 2 hrs

Date: 01/05/2017

Marks: 50

Q.1 Answer any 9 questions. Each question carries 01 mark

[9*1=12]

1. What is pharmacokinetics?
2. Full form of HTS is _____
3. Definition of prodrug.
4. Define molecular modeling.
5. 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
6. –OH is a lipophilic group (True/False)
7. Which of the following is hydrophobic parameter?
 - (a) Partition coefficient
 - (B) Pi substituent constant
 - (c) RM chromatographic parameter
 - (d) All of above
8. Full form of SAR is _____.
9. Write Down full form of SBDD.
10. Define: Lead optimization.

Q.2 Answer any 5 questions. Each question carries 04 marks

[5*4=20]

1. Short note on Ferguson theory.
2. Explain the novel classification of prodrug.
3. Explain the vanderwaal's constant.
4. Explain DENOVO Drug design
5. Predict pKa value for 3-methoxy-4-hydroxy benzoic acid using Hammett equation.
Sigma (OCH₃) META=0.14 Sigma (OH) PARA=0.37
6. Explain the concept of Factors governing ability of drugs to reach active site.

Q.3 Answer any 3 questions. Each question carries 07 marks

[3*7=21]

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. Define docking? Discuss the step of docking.