Hemchandracharya North Gujarat University, Patan

Bachelor of Vocation

Pharmaceutical Chemistry Semester-IV

End Term Examination, April, 2018

Subject: Medicinal Chemistry –I (PC-411)

Time: 2 hrs **Date: 24/04/2018** **Marks: 50**

Q.1 Answer any 9 questions. Each question carries 01 mark **[9*1=12]**

1. Full form of HTS is _____ and LTS is _____.
2. Which of the following is electronic parameter?
   (a) Partition coefficient (B) Pi substituent constant
   (c) RM chromatographic parameter (d) All of above
3. –OH is a lipophilic group (True/False)
4. Which of the following is electronic parameter?
   (a) Partition coefficient (B) Pi substituent constant
   (c) RM chromatographic parameter (d) All of above
5. Full form of SAR is _____ and QSAR is_____.
6. Definition: Isosterism.
7. Give two main aspects of molecular modeling.
8. Define molar refractivity equation
9. Definition: Bioisosterism.
10. Write Down full form of LBDD.

Q.2 Answer any 5 questions. Each question carries 04 marks **[5*4=20]**

1. Enlist the methods of QSAR and write a note on wilson Model
2. Predict pKa value for 3-methoxy-4-hydroxy benzoic acid using Hammett equation. Sigma(OCH_3) META=0.14 Sigma(OH) PARA=0.37
3. Short note on Fergusion theory
4. Short note on tailoring of drug.
5. Write a note on identification and optimization of lead in detail.
6. Draw for resonance stretcher for aniline and phenol.

Q.3 Answer any 3 questions. Each question carries 07 marks **[3*7=21]**

1. Give a comprehensive account of the importance of 'Isosterism' and 'Boi-Isosterism in drug design.
2. Explain the concept of Factors governing ability of drugs to reach active site.
3. Enlist the methods of QSAR and write a note on Hansch Model.
4. Define docking? Discuss the step of docking.