Roll No. | | | | | | | | | | | | | **Total No. of Pages : 01**

Total No. of Questions : 06

M.Pharma(Pharmaceutical Chemistry) (Sem.–2)

COMPUTER AIDED DRUG DESIGN

Subject Code : MPC-203

M.Code : 74957

Date of Examination: 16-12-2022

Time : 3 Hrs. **Max. Marks: 75**

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE questions out of SIX questions.**
2. **Each question carries FIFTEEN marks.**

1. a. Discuss significance of A.D.M.E. in drug design.

   b. Name and define the rule for drugability prediction. Explain its salient features and significance in drug discovery process.

2. a. Explain steps of De novo drug design

   b. Craig plot and Cluster analysis.

   c. Discuss in short drug design through Conjunction.

3. a. Compare the features of Rigid and Flexible docking.

   b. Discuss the principle, steps and applications of Homology modelling.

4. a. Explain virtual screening techniques.

   b. Discuss drug design based on Enzyme inhibition.

   c. Discuss the effect of steric features on the biological activity.

5. Enumerate the different physicochemical properties of a drug molecule that influence the biological activity and describe in detail about hydrogen bonding and ionization influences on biological activity.

6. What is QSAR? Give advantages and disadvantages of QSAR. Explain Hantzsch analysis and Free Wilson analysis.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.