

5/15

(3 Hours)

22

QP Code : 5184

[Total Marks : 80]

N.B : Q1 is compulsory

Answer any three out of remaining five questions

Draw neat and labeled diagram wherever necessary.

Q1] Describe QSAR and explain how to identify and quantify the physicochemical properties of a drug and describe how these properties has an effect on the drugs biological activity. 20M

Q2] i) List and describe the role of various types of chaperones. 10M

ii) Explain the features of torsion angle and Cartesian coordinates 10M

Q3] i) Describe the various features and process of protein ligand docking. 10M

ii) Describe 3D QSAR 10M

Q4] i) Explain the importance of clustering and describe the different methods of clustering algorithms. 10M

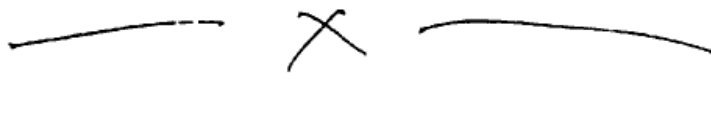
ii) Explain the process of energy minimization 10M

Q5] i) Describe the various features of interoperability. 10M

ii) Describe various Protein ligands interactions 10M

Q6] i) Define Prodrugs and explain its features and describe how endogenous compounds can be used as drug molecules. 10M

ii) Describe the various methods of Machine learning and there role in bioinformatics 10M



JP-Con. 3494-15.