

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