[Time: 3 Hours] [Max. Marks: 75]

## Computer Aided Drug Design -II Q.P. CODE: 5159

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

## LONG ESSAY (Answer any Three)

3 X 10 = 30 Marks

- Discuss the techniques used in virtual screening.
- 2. Explain Hammett equation and electronic parameters and how they are determined?
- 3. Explain fragment based drug design.
- 4. Write about receptor ligand interaction and how is it analysed?

## SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Describe the docking of agents on HMG-CoA reductase.
- 6. Explain in detail In silico drug design.
- 7. How the contour map is generated and analysed?
- 8. Write a note on effect of substituents on log P.
- 9. Discuss rigid docking.
- 10. Explain how the pharmacophore features can be identified?
- 11. Discuss how the ADMET properties of an experimental molecule can be predicted?
- 12. Describe drug-receptor interaction.
- # \* \* \* Explain the role of molecular modeling in drug design. 13.
- 14. Explain the statistical methods used in QSAR analysis.

