QP CODE: 213331 Reg. No:.....

Second Semester M.Pharm Degree Examinations August 2018 M.Pharm (Pharmaceutical Chemistry)

Paper III - Computer Aided Drug Design (MPC203T)

(2017 Scheme)

Time: 3 Hours Total Marks: 75

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays (3x10=30)

- 1. Give a detailed account on QSAR studies and their implications.
- 2. Explain the different energy minimization methods. Add a note on agents acting on the enzymes DHFR and HMG-CoA reductase
- Give a detailed account on pharmacophore mapping and pharmacophore based screening

Short Notes (9x5=45)

- 4. Fragment based drug design
- 5. Hansch analysis.
- 6. Homology modeling
- 7. Force field used in molecular mechanics
- 8. Drug design based on ADMET predictions
- 9. Structure based In-silico virtual screening protocols
- 10. Statistical methods used in QSAR analysis
- 11. Differentiate between rigid docking and flexible docking
- 12. Applications of quantum mechanics in drug design
