

QP Code: 105331

Reg No:

**First Year M.Pharm Degree Examinations – September 2013
(2011 Scheme)**

**(Pharmaceutical Chemistry)
Paper I – Advanced Medicinal Chemistry**

Time: 3 hrs

Maximum Marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays:

(2x20 =40)

1. What is meant by analog design. Explain in detail bio-isoteric replacements and rigid analogs.
2. Discuss the various steric substituent constants commonly used in QSAR. Explain the effect of steric and electromeric parameters on lipophilicity.

Short Essays:

(6x10=60)

3. Define prostaglandins and classify it with suitable structures. Add a note on its nomenclature.
4. Monte Carlo method of conformational analysis.
5. What are anti-hyperlipidemic agents. Classify it with suitable structures. Outline the synthesis of clofibrate.
6. What is nitrogen mustard. Explain the synthesis of chlorambucil and cyclophosphamide
7. Explain the advantages and limitations of molecular modeling software's
8. Discuss about recent advances in agents used to treat Alzheimer's diseases
