

**Final Year B.Pharm Degree Supplementary Examinations January 2017**  
**PHARMACEUTICAL CHEMISTRY - V**  
**(Medicinal Chemistry)**  
**(2012 scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw chemical structure wherever necessary.

**Essay**

**(3x10=30)**

1. Classify NSAIDS with suitable examples. Explain the chemistry and mechanism of action of any two drugs. Outline the synthesis of ibuprofen.
2. Describe elaborately on QSAR, its parameters along with various applications in drug design.
3. Classify penicillins sketching one structure under each category. Add a note on the synthesis, chemistry and uses of ampicillin.

**Short notes**

**(14x5=70)**

4. Nitrogen mustards.
5. CADD.
6. Write a note on the chemistry of anthelmintics.
7. Explain the mechanism of action and uses of chloramphenicol.
8. Proton pump inhibitors.
9. Explain the chemistry and importance of macrolide antibiotics.
10. Explain molecular modeling.
11. Beta blockers. Synthesize propranolol.
12. Describe the chemistry and SAR of benzodiazepines.
13. Outline the synthesis of phenytoin.
14. Explain on biguanides used as oral hypoglycemic agents.
15. Mention the structure and chemical name for halothane, lignocaine, haloperidol, carbachol, piroxicam.
16. How do the properties ionization and chelation help in influencing the biological activity.
17. Explain on cholinergic agents with suitable examples.

\*\*\*\*\*