

QP CODE:201006

Reg.No:

Second Year B.Pharm Degree Examinations - October 2012

**PHARMACEUTICAL CHEMISTRY III
(Advanced Organic Chemistry)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. How will you prepare asymmetric compounds by stereo-selective method. Explain with an example
2. Define and classify heterocyclic compounds. Mention its nature and nomenclature in detail
3. Differentiate oxidation and reduction reactions. Describe the mechanism of birch reduction and oxidation with perchloric acid.

Short notes

(14x5=70)

4. Explain the structure, nomenclature and resonance structures of anthracene
5. Describe the Schmidt rearrangement
6. Explain the reaction and mechanism of hydrazine reduction
7. Define stereoisomerism and give three examples of stereoisomer
8. Discuss the nucleophilic substitution reactions of thiazole
9. Stereochemistry of oximes
10. Modern theory of double bonds
11. Define the following terms with an example • Relative configuration • Absolute configuration
12. Explain the mechanism and applications of ciemmenson's reduction
13. Discuss the structure and chemical reactions of oxepines
14. Explain the method of preparation of acridine
15. Mention the catalysts used in hydrogenation reactions and mention examples of such reactions
16. List out the various methods used for the resolution of racemic mixtures
17. Discuss the Darzen's reaction and its application in synthesis
