

# **2012 Scheme**

**QP CODE: 211006**

**Reg. No: .....**

## **Second Year B.Pharm Degree Supplementary Examinations December 2019**

### **Pharmaceutical Chemistry III (Advanced Organic Chemistry)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

#### **Essays**

**(3x10=30)**

1. Define stereoisomerism and elaborate on the criteria for conformational analysis.
2. Explain the structure, aromaticity and chemical reactions of phenanthrene.
3. Outline the mechanism and applications of Birch reduction and Darzen's reaction.

#### **Short notes**

**(14x5=70)**

4. Discuss on addition reactions.
5. How do you determine the configuration
6. Explain the nomenclature of isomers.
7. Asymmetric synthesis.
8. Discuss on stereospecific synthesis.
9. Explain the mechanism of oxidation with selenium oxide.
10. List out some metal hydrides. Mention the mechanism of metal hydride reduction.
11. Explain the nature and rotation about carbon-carbon double bond.
12. Classify various heterocyclic compounds with suitable examples.
13. Prepare and list the reactions of thiophene and pyrimidine.
14. The nature and reactions of furan.
15. Discuss the preparation and reactions of pyridine.
16. Explain the nature, electron density and reactivity of naphthalene.
17. The oxidation and reduction reactions of naphthacene

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