

**Second Year B.Pharm Degree Supplementary Examinations
December 2017**

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

(2012 Scheme)

Time: 3 Hours**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

Essay**(3x10=30)**

1. Elaborate on the structure, nomenclature, aromaticity and reactions of anthracene.
2. Classify heterocyclic compounds with suitable examples. Describe the preparation and reactions of pyridine.
3. Discuss in detail on R-S notation and E-Z notation with suitable examples.

Short notes**(14x5=70)**

4. Define stereo-isomerism. List out any three evidences to explore the tetrahedral nature of carbon.
5. What is resolution of racemic modification and explain the methods in brief.
6. Explain the modern theory of double bonds.
7. Explain asymmetric synthesis with example.
8. Stereochemistry of oximes.
9. Explain the mechanism and any two applications of Mannich reaction.
10. What is the general reaction of Meerwin-Pondroff reduction and explain the mechanism.
11. What are the important reagents that help in birch reduction and how aromatic compound is converted to aliphatic diene.
12. Skaraup synthesis of Quinoline
13. Discuss the basicity of pyrrole.
14. Various reactions and nature of imidazole.
15. Nomenclature and preparation of oxazole and isoxazole.
16. Aromaticity, reactivity and resonance forms of naphthalene.
17. Mention the structure, molecular formula of diazepine, dibenzazepine, azepine, quinolone and quinazolone.
