

Second Year B.Pharm Degree Examinations - July 2015

**(2012 Scheme)****PHARMACEUTICAL CHEMISTRY III  
(Advanced Organic Chemistry)****Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay****(3x10=30)**

1. Discuss on the electrophilic, oxidation & reduction reactions of naphthalene and naphthacene.
2. Define stereoisomerism. Elaborate on sequence rules and chirality.
3. Classify heterocyclic compounds and discuss on the nature & nomenclature of six membered rings.

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

4. List out the elements of symmetry.
5. Modern theory of double bonds.
6. Explain how reduction is carried out using hydrazine and metal hydrate.
7. SN1 reaction with suitable examples.
8. Enantiomers and diastereomers.
9. Addition reactions.
10. Mechanism and applications of Birch reduction.
11. Applications of dehydrogenation and Darzen's reaction.
12. Structure, nomenclature and aromatic character of phenanthrene.
13. Mode of preparation of indole and furan.
14. Enumerate any five reactions of pyridine.
15. Mention the structure for the following basic moieties:
  - quinoline quinazolone azepine diazepine dibenzazepine
16. Curtius rearrangement.
17. Resonance.

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