

Second Year B.Pharm Degree Supplementary Examinations - July 2016

**PHARMACEUTICAL CHEMISTRY III**  
(Advanced Organic Chemistry)  
**(2010 SCHEME)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay**

**(3x10=30)**

1. Define and explain the theory of tetrahedral carbon with an example
2. Explain any three method of preparation of imidazole and pyrimidine with reactions.
3. Explain the reaction and mechanism of Mannich reaction and Beckmann rearrangement

**Short notes**

**(14x5=70)**

4. The important electrophilic substitution reactions of phenanthrene
5. Meerwin-pondroff reduction
6. Walden inversion theory
7. Basicity of pyridine
8. Describe the sequence rule
9. Stereochemistry of biphenyl compounds
10. Nucleophilic substitution reactions of furan
11. Explain about stereo mutation
12. What are E&Z, R&S isomers. Explain with examples
13. List out any three oxidizing agents and explain its role in synthesis.
14. Explain the structure and nomenclature of azepine, diazepine, oxepine, isoxazole and pheothiazine
15. Aromaticity of naphthalene
16. Explain the various methods of preparation of pyrrole
17. Lexicon elements of symmetry

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