

Second Year B.Pharm Degree Examinations July 2018**Pharmaceutical Chemistry III
(Advanced Organic Chemistry)****(2012 Scheme)****Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

Essays**(3x10=30)**

1. Describe the chemical reactions involved in the synthesis of any two heterocyclic ring system. Give any two important chemical reactions of each
2. Discuss the mechanism of Hoffmann rearrangement reaction with example
3. Explain the stereochemistry of nucleophilic substitution reactions with the help of one example.

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

4. How do you prepare oxazole and indole. Give chemical reactions of each
5. Mention any two important reactions of quinoline and pyrimidine
6. The structure and biological importance of azepine and diazepine
7. Any two important reactions of imidazole
8. Oxidation with selenium oxide and give example
9. What is the mechanism of metal hydride reduction and what is its importance
10. What is Schmidt rearrangement. Explain with example
11. Give the mechanism of Birch reduction
12. How do you distinguish between Cis and trans isomers. Give any two methods
13. Effect of geometrical isomerism on addition reactions. Explain
14. Stereochemistry of amines with example
15. Explain racemic modification with the help of an example
16. Oxidation and reduction reactions of naphthalene
17. Explain electrophilic substitution reactions of any one poly nuclear aromatic hydrocarbon
