

# 2010 Scheme

QP CODE: 201006

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.

**Essay**

**(3x10=30)**

1. Define optical isomerism. Explain elements of symmetry in molecules with examples.
2. Explain any two methods of synthesis of furan and write any three reactions of furan.
3. What are polynuclear hydrocarbons. Outline the synthesis and chemical reactions of naphthalene.

**Short notes**

**(14x5=70)**

4. Explain the basicity of pyrrole.
5. Hoffmann rearrangement.
6. Explain E-Z system of naming geometrical isomers.
7. Explain the mechanism of Schmidt rearrangement.
8. Write any two methods of preparations of imidazole.
9. Explain metal hydride reduction.
10. Write any three reactions of thiophene.
11. Explain the term stereospecific synthesis with examples.
12. Write one method of preparation each for phenothiazine and acridine.
13. Explain the electrophilic substitution reaction of phenanthrene.
14. Outline the synthesis of indole by Fisher indole synthesis.
15. Explain the Clemmenson's reduction with mechanism.
16. Explain asymmetric synthesis with suitable examples.
17. Explain the Stereochemistry of oximes.

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