

# **2010 Scheme**

**QP CODE: 201006**

**Reg. No: .....**

## **Second Year B.Pharm Degree Supplementary Examinations September 2021**

### **Pharmaceutical Chemistry III (Advanced Organic Chemistry)**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay**

**(3x10=30)**

1. Explain two methods of preparation of pyrimidine. Explain its important chemical reactions.
2. What are stereoisomers. Explain the nomenclature to assign configuration to the stereoisomers.
3. Describe about Mannich reaction and Michael addition reaction with mechanism.

**Short notes**

**(14x5=70)**

4. Define the terms racemic mixture and resolution. Write a note on resolution.
5. Explain the mechanism of Birch reduction.
6. Give the methods of synthesis and chemical reactions of acridine.
7. Explain the mechanism of Beckmann rearrangement reaction.
8. Draw the chemical structure with numbering  
Isoxazole, isoquinoline, diazepine, dibenzazepine, oxepine.
9. Electrophilic substitution reactions of naphthalene.
10. Explain the chemical reactions of oxazole and thiazole.
11. Explain the chemical reactions of naphthacene.
12. Explain the oxidative reactions with mercuric acetate.
13. Stereochemistry of biphenyl compounds.
14. Explain the methods of synthesis and chemical reactions of phenothiazine
15. Reduction reactions with hydrazine derivatives.
16. Write about the stereochemistry of oximes.
17. Explain geometrical isomerism with suitable examples.

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