

# **2012 Scheme**

**QP CODE: 211006**

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

## **Second Year B.Pharm Degree Supplementary Examinations February 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*

#### **Essays**

**(3x10=30)**

1. Explain the stereochemistry of amines and oximes.
2. Give a detailed note on the mechanism and applications of catalytic hydrogenation and dehydrogenation.
3. Describe the structure, aromaticity and reactions of anthracene.

#### **Short notes**

**(14x5=70)**

4. Discuss the elements of symmetry.
5. Define chirality, enantiomers and diastereomers with examples.
6. Outline the Skraup's quinoline synthesis
7. SN<sub>1</sub> reactions.
8. Discuss the stereochemistry of biphenyl compounds.
9. Jot down the mechanism for the oxidation of mercuric acetate.
10. Explain Clemmenson reduction.
11. Schmidt rearrangement.
12. How are indole and thiazole prepared. Mention their chemical reactions.
13. Distinguish between oxazole and isoxazole.
14. Emphasize the nature and nomenclature of quinolone and quinazolone.
15. Explain the fused heterocyclic ring systems. Give a note on phenothiazine.
16. Explain the structure, resonance and reactivity of naphthalene.
17. The oxidation and reduction reactions of phenanthrene

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