

# 2012 Scheme

QP CODE: 112006

Reg. No: .....

First Year B. Pharm Degree Supplementary Examinations August 2022

Pharmaceutical Chemistry - II

(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
- Write equations wherever necessary.

Essay

(3x10=30)

1. Describe the mechanism of electrophilic aromatic substitution with reference to nitration and halogenation in Benzene.
2. Discuss any two general methods of preparation of Phenol. Explain the stability of Phenoxide ion.
3. Elaborate the stability and conformations of Cyclohexane

Short notes

(14x5=70)

4. Compare the basicity of aliphatic amines and justify.
5. Explain resonance structures of benzene including Huckel's rule.
6. Explain inductive effect giving suitable examples
7. Explain about Kharasch effect with examples.
8. Describe  $sp^3$  hybridization in organic compounds
9. Discuss nucleophilic addition reaction in carbonyl compounds giving suitable examples.
10. Explain Hofmann's degradation of Amides.
11. Compare the relative reactivities of  $1^0$ ,  $2^0$  and  $3^0$  alcohols.
12. Briefly explain Perkins reaction and Williamson's synthesis.
13. Discuss about the acidity of Carboxylic acids.
14. Mention any two methods of synthesis of aldehydes
15. Explain the preparation of carboxylic acids.
16. Brief about the synthetic utility of Malonic acid esters.
17. Explain the mechanism of halogenations of alkanes.

\*\*\*\*\*