## **2012 Scheme**

QP CODE: 112006 Reg. No: .....

## First Year B. Pharm Degree Supplementary Examinations March 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. Discuss various types of hybridization in carbon compounds with suitable examples
- 2. Elaborate the facts supporting kekule structure of Benzene.
- 3. Discuss Bayer's strain theory and its limitations with suitable examples

Short notes (14x5=70)

- 4. Compare reactivity of alkane, alkene and alkynes. Justify
- 5. Explain the free radical substitution reaction of Methane.
- 6. Inductive effects with examples.
- 7. What is Markovnikov's rule. Explain mechanism involved.
- 8. Outline Walden inversion and Saytzeff's rule.
- 9. What are Grignard reagents. Explain its preparation and utility in organic synthesis.
- 10. Discuss nomenclature and elimination reactions of alcohols
- 11. How to prepare phenols and compare the acidity of phenol with alcohols.
- 12. What is Cannizaro reaction. Explain the mechanism of Cannizaro reaction.
- 13. Any two reactions of esters.
- 14. Compare water solubility of Benzoic acid, Acetic acid and Sodium Benzoate, Justify.
- 15. Write down decarboxylation and reduction reactions of carboxylic acids.
- 16. Describe the reaction and mechanism of Diel's-Alder reaction
- 17. Explain conformational and geometrical isomerism.

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