

# 2010 Scheme

QP CODE: 102006

Reg. No: .....

## First Year B.Pharm Degree Supplementary Examinations December 2020

### 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. Explain hybridization. Discuss the shape, bond length and bond angle of various organic molecules in different hybridized state.
2. Elaborate on geometrical isomerism with suitable examples.
3. Explain Markovnikov's rule and Peroxide effect with suitable examples.

#### Short notes

(14x5=70)

4. The acidity of phenols.
5. Discuss briefly about nomenclature of alcohols. Explain the relative reactivities of 1<sup>o</sup>, 2<sup>o</sup> and 3<sup>o</sup> alcohols.
6. What are the characteristic reactions given by benzene. Explain any one reaction.
7. Mention the general equations for Williamson's synthesis and Oppenauer oxidation.
8. Discuss on the methods of preparation of aliphatic halogen compounds. How are they named
9. Explain the mechanism of Aldol condensation.
10. Bayer's strain theory. What are its limitations
11. Walden inversion – report with suitable example.
12. Explain the basicity of amines.
13. Describe on diazotization and mention the reactions of diazonium salts.
14. Discuss on the Kekulé's structure of benzene and add a note on heat of hydrogenation.
15. Explain on aromatic nitro compounds.
16. Explain the stereo specific reduction of alkynes.
17. Addition – elimination reactions in carbonyl compounds.

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