First Year B.Pharm Degree Examinations - September 2012

# PHARMACEUTICAL CHEMISTRY - I

## (Organic Chemistry)

## Time: 3 Hours

Answer all Questions.

Write equations wherever necessary.

#### Essay

- 1. Describe resonance, hyper conjugation, mesomerism and inductive effect with examples.
- 2. Discuss the general methods of preparation and reactions of phenols.
- 3. Explain the mechanism of benzoin condensation and Reformatsky reaction.

#### Short notes

- 4. Mention the synthesis and importance of malonic ester.
- 5. Explain the mechanism of Cannizzaro reaction
- 6. Explain the mechanism of SN1 and SN2 reactions.
- 7. Explain Sachse-Mohr theory with example.
- 8. Explain the acidity of alkynes.
- 9. Discuss Kharasch effect and Bayer's oxidation.
- 10. Explain Kekule's structure of benzene.
- 11. Discuss the effect of substituents in electrophilic aromatic substitution reaction.
- 12. Explain with an example the mechanism of nucleophilic addition reaction of carbonyl compounds.
- 13. Mention any two important methods of preparation of carboxylic acids and alcohols.
- 14. Explain the basicity of amines.
- 15. Explain free radical substitution reaction of alkanes with mechanism.
- 16. Discuss Stability on conjugated dienes.
- 17. What are acid anhydrides . Mention any two methods of preparation of acid anhydrides.

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# **Total Marks: 100**

## (14x5=70)

(3x10=30)

# Reg.No: