QP CODE:112006 (2012 - Scheme) Reg.No: ......

First Year B.Pharm Degree Supplementary Examinations - March 2014

## (2012 - Scheme)

## PHARMACEUTICAL CHEMISTRY - II

(Organic Chemistry)

Time: 3 Hours Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay (3x10=30)

- 1. Discuss resonance, hyper conjugation, mesomeric effect and inductive effect with examples.
- 2. Describe three general methods of preparation of alcohols, carboxylic acids and ketones.
- 3. Explain the mechanism of electrophilic addition reaction of alkenes and how is that the catalytic hydrogenation of alkenes always gives a cisproduct

Short notes (14x5=70)

- 4. List any three methods of preparation of phenols
- 5. Differentiate conformational and geometrical isomerism with examples
- 6. Define the term aromaticity. Discuss the modern theory of aromaticity, making a mention of Huckel's rule.
- 7. What is Williamson's synthesis. Explain the action of hydroiodic acid on ethers.
- 8. What do you mean by 'coupling' of diazonium salts of phenols and amines. Mention two examples.
- 9. Mention the different methods of preparing aromatic nitro compounds with reaction.
- 10. What is aldol condensation and benzoin condensation with suitable examples.
- 11. Explain Saytzeff's rule with examples.
- 12. Sachse-Mohr theory.
- 13. Method of preparation and synthetic uses of ethylacetoacetate.
- 14. Classify amines with two examples and explain how they are separated in a mixture.
- 15. Explain the theory of orientation by amino group and chlorine in electrophilic aromatic substitution.
- 16. Kharasch effect with example.
- 17. Explain Walden inversion with mechanism and examples.

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