

# Rajiv Gandhi University of Health Sciences, Karnataka

First Year Pharm - D Examination – Feb/March 2011

**Time: Three Hours**

**Max. Marks: 70 Marks**

## PHARMACEUTICAL ORGANIC CHEMISTRY

### **Q.P. CODE: 2854**

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

#### **LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Explain and give mechanism involved in (a) Benzoin condensation (b) Michael condensation
2. Explain the effect of substituents on electrophilic aromatic substitution reaction with suitable examples
3. What are dienes, classify them, explain electrophilic addition to conjugated dienes. Discuss the stability of conjugated dienes

#### **SHORT ESSAYS (Answer any Six)**

**6 x 5 = 30 Marks**

4. Explain Cannizzaro reaction with mechanism
5. Compare the basicity of methyl amine and aniline
6. Explain the chlorination of methane with mechanism
7. Give the mechanism of sulphonation and chlorination of benzene
8. Write a note on dehydration of alcohols
9. Explain the term Hybridisation and Hyperconjugation with examples
10. Explain the Friedel Craft's reaction with its limitation
11. Explain the acidity of carboxylic acid and add a note on effect of substituents

#### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

12. Write a note on rearrangement of carbocations
13. Explain peroxide effect
14. Write Diel's Alder reaction
15. Give the reaction of Williamson's synthesis of ether
16. What is Halohydrin reaction
17. Outline the concept of resonance give examples
18. Define nucleophile, classify with examples
19. How will you convert acetaldehyde to acetic acid
20. What is pyrolysis
21. Give any one method of preparation of Lactic acid and mention its uses

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