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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)

 $2 \times 10 = 20 \text{ Marks}$

- 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)

 $6 \times 5 = 30 \text{ Marks}$

- 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 $10 \times 2 = 20 \text{ Marks}$

- 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
