

# Rajiv Gandhi University of Health Sciences, Karnataka

**Third Semester B. Pharm Degree Examination – 28-May-2024**

**Time: Three Hours**

**Max. Marks: 75**

## **PHARMACEUTICAL ORGANIC CHEMISTRY - II** **Q.P. CODE: 5009**

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

All the questions are compulsory

### **LONG ESSAYS**

**2 x 10 = 20 Marks**

1. What is electrophilic aromatic substitution reaction? Classify substituent groups with examples. Explain the mechanism of Friedel-Craft's acylation

**OR**

Define Saponification value. Give principle involved in the determination of Saponification value (any one method)

2. What are aromatic amines? Explain the reactions of aromatic amines. Discuss the effect of substituents of basicity of aromatic amines

### **SHORT ESSAYS**

**7 x 5 = 35 Marks**

3. Explain the mechanism of nitration of benzene

**OR**

Explain acidity of phenols and mention the effect of substituents on acidity of phenols

4. What are cycloalkanes? Write any three methods of preparation

**OR**

Describe any one method to determine acetyl value with its significance

5. Explain Bayer's strain theory of cycloalkanes. What are its limitations?

6. Define and classify poly nuclear hydrocarbons. Give four chemical reactions of Anthracene

7. Describe any one method to determine Reichert Meissl (RM) value with its significance

8. Define acidity. Explain the effects of substituents on acidity of aromatic acids

9. Explain aromaticity and resonance of benzene

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

10. Classify fats and oil with examples

11. Give the reactions of cyclopropane

12. Give qualitative test of phenol derivative

13. Write the structure and medicinal uses of phenanthrene derivatives

14. Give the nitration reaction of naphthalene

15. Define acid value. Give its significance

16. Give structure and uses of DDT and Saccharin

17. Synthetic uses of Aryl Diazonium salts

18. **Define Rancidity of Oil**

19. Explain iodine value and its significance

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