

# Rajiv Gandhi University of Health Sciences, Karnataka

**Third Semester B. Pharm Degree Examination – 23-Mar-2021**

**Time: Three Hours**

**Max. Marks: 75 Marks**

## **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. Explain the mechanism of halogenations of benzene. Halogens are deactivating group but ortho and para director. Give reasons

**OR**

Enlist the analytical constants of oils and fats. Discuss in detail about acid value and iodine value and give their significance

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

### **SHORT ESSAYS**

**7 x 5 = 35 Marks**

3. Define Friedel-Craft's alkylation. Explain the reaction and mechanism

**OR**

Give any four chemical reactions of benzoic acid

4. Explain significance and reactions of hydrolysis and hydrogenation of oils and fats

**OR**

Outline the synthesis of Anthracene by Haworth method

5. Explain Sache-Mohr theory and molecular orbital concept of cycloalkanes

6. Define and classify polynuclear hydrocarbons. Give any two synthesis of naphthalene

7. Explain the reaction and mechanism of sulphonation of benzene

8. Describe any one method to determine Reichert-Meissl value with its significance

9. Give any four chemical reactions of cyclobutane

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

10. Write the structure and uses of BHC and chloramine

11. Give any one method of synthesis of Phenanthrene

12. Write a note on drying of oils

13. Give the composition of fats and oils

14. How do you calculate the angle in cyclopropane?

15. What are fatty acids? Give an example of unsaturated fatty acids

16. Give the structure and uses of o-cresol and resorcinol

17. Give the qualitative test of phenol

18. Define cycloalkane and give examples

19. Define deactivating group? Give examples

Rajiv Gandhi University of Health Sciences, Karnataka

\*\*\*\*\*

Gen-Z Medicos