Rajiv Gandhi University of Health Sciences, Karnataka
Third Semester B. Pharm Degree Examination – 15-Nov-2022

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. Define activating and deactivating groups with examples. Discuss the mechanism of nitration and sulphonation of benzene.

OR

What are phenols? Give any three methods of preparation of phenol. Explain the acidity of phenol.

2. What are oils and fats? Give the classification of oils with examples? Enlist the analytical constants of fats and oils with their significance.

SHORT ESSAYS   **7 x 5 = 35 Marks**

3. Explain the reaction and mechanism of Friedel craft's alkylation with its limitations.

OR

Explain the reaction and mechanism of halogenation of benzene.

4. What is acidity discuss the effect of substituent's on acidity of aromatic acids.

OR

What is basicity? Explain the basicity of aromatic amines.

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

6. Outline the synthesis of Anthracene by Haworth's method

7. Give any two methods of synthesis of Naphthalene.

8. Preparation of cycloalkanes.

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

SHORT ANSWERS   **10 x 2 = 20 Marks**

10. Define the terms 'Aromaticity' and 'Resonance'.

11. Give the structure and uses of phenol and o-cresol.

12. Write the significance of hydrogenation of fats and oils.

13. Give the pharmaceutical applications of fats and oils.

14. Why oils are liquid and fats are solids at room temperature? Explain.

15. Write the structure and medicinal uses of diphenylmethane.

16. Write any two reactions of phenanthrene.

17. Write any two reactions of Anthracene.

18. Define cycloalkane give two examples.

19. Define angle strain and tetrahedral angle.

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