Rajiv Gandhi University of Health Sciences, Karnataka Third Semester B. Pharm Degree Examination - JAN-2019

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

LONG ESSAYS (Answer any Two)

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

- 1. What is electrophilic aromatic substitution reaction? Discuss the mechanism of nitration and halogenation of benzene.
- 2. What are aromatic acids? Give any three chemical reactions of benzoic acid. Add a note on acidity of aromatic acids.
- 3. Explain drying, semidrying and non-drying oils with examples. Define and explain the principle involved in the determination of Saponification value (Any one method).

SHORT ESSAYS (Answer any Seven)

 $7 \times 5 = 35 Marks$

- 4. Define activating and deactivating groups with examples. Discuss the mechanism of sulphonation of benzene.
- 5. Explain the aromaticity, orbital picture and resonance structure of benzene.
- 6. What are phenols? Discuss the acidity of phenols.
- 7. Write any two synthesis and reactions of Anthracene.
- 8. What are aromatic amines? Explain the basicity aromatic amines.
- 9. Describe any one method to determine iodine value with its significance.
- 10. Write the any two synthesis and reactions of phenanthrene.
- 11. Define angle strain. Discuss why higher cycloalkanes are more stable than lower members.
- 12. Give any four methods of synthesis of cycloalkanes.

SHORT ANSWERS (Answer All)

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

- 13. Write the structure and uses of DDT and BHC.
- 14. Give the synthesis of benzoic acid.
- 15. Write the significance of hydrogenation of fats and oils.
- 16. Define rancidity. Give its significance.
- 17. Give the compositions of fats and oils.
- 18. Give any one synthesis of naphthalene.
- 19. Write the structure and medicinal uses of triphenylmethane.
- 20. Give the structure and uses of one medicinally important phenanthrene derivatives.
- 21. Give addition reactions of cyclopropane.
- 22. What is Sache Mohr's theory? Explain.
