

Rajiv Gandhi University of Health Sciences, Karnataka Third Semester B. Pharm Degree Examination – 02-Jan-2020

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 Friedelcraft's alkylation.
- 2. What are Aromatic amines? Explain diazotization reaction with its mechanism. Add a note on basicity of amines.
- 3. Define fats and oils. Explain drying, semidrying and non-drying oils with examples. Define and explain the principle involved in the Iodine value (any one method).

SHORT ESSAYS (Answer any Seven)

 $7 \times 5 = 35 \text{ Marks}$

- 4. Halogens are deactivating group but ortho and para director. Give reasons.
- 5. Discuss the mechanism of Halogenation and Sulphonation of benzene.
- 6. What are phenols? Discuss the acidity of phenols.
- 7. Give any three chemical reactions of benzoic acid.
- 8. Describe any one method of determine Saponification value with its significance.
- 9. Write any two synthesis and reactions of Naphthalene.
- 10. Discuss the Bayer's strain theory with limitations.
- 11. Give any four methods of synthesis of cycloalkanes.
- 12. Write any two synthesis and reactions of Anthracene.

SHORT ANSWERS (Answer All)

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

- 13. What is Huckel's rule? Write its importance.
- 14. Write the structure and uses of DDT and BHC.
- 15. Give the structure and uses of Resorcinol and Naphthols.
- 16. Define rancidity. Give its significance.
- 17. Define acid value. Give its significance.
- 18. What is friedelcraft's acylation?
- 19. Write the structure and medicinal uses of Diphenylmethane.
- 20. Give reactions of Cyclobutane.
- 21. What is a Coulson and Moffitt's modification?
- 22. Give the compositions of fats and oils.
