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 x 10 = 20 Marks What is Electrophilic aromatic substitution reaction? Discuss the mechanism of nitration and Friedelcraft's alkylation. What are Aromatic amines? Explain diazotization reaction with its mechanism. Add a note on basicity of amines. 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)  $7 \times 5 = 35 \text{ Marks}$ Halogens are deactivating group but ortho and para director. Give reasons. Discuss the mechanism of Halogenation and Sulphonation of benzene. 6. What are phenols? Discuss the acidity of phenols. Give any three chemical reactions of benzoic acid. Describe any one method of determine Saponification value with its significance. 9. Write any two synthesis and reactions of Naphthalene. Discuss the Bayer's strain theory with limitations. Give any four methods of synthesis of cycloalkanes. Write any two synthesis and reactions of Anthracene. SHORT ANSWERS (Answer All)  $10 \times 2 = 20 \text{ Marks}$ What is Huckel's rule? Write its importance. Write the structure and uses of DDT and BHC. Give the structure and uses of Resorcinol and Naphthols. 16. Define rancidity. Give its significance. Define iodine value. Give its significance. What is friedelcraft's acylation? 18. Write the structure and medicinal uses of Diphenylmethane. Give reactions of Cyclobutane. What is a Coulson and Moffitt's modification? Give the compositions of fats and oils.