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Total No. of Printed Pages: 1

Total No. of Questions: [13]

B. Pharmacy (Semester – 3rd)
PHARMACEUTICAL ORGANIC CHEMISTRY –II
Subject Code: BP301T
Paper ID: [17170114]

Time: 03 Hours

Maximum Marks: 75

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 9 questions of 5 marks each. The student has to attempt any 7 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a. Draw the molecular orbital diagram of benzene.
- b. Why are phenols acidic in nature?
- c. Draw the structure and write uses of DDT.
- d. What do you mean by drying of oils?
- e. Draw the structure and write uses of cresols.
- f. Write down the significance of acid value.
- g. Why does anthracene undergo substitution reaction at 9th and 10th position?
- h. Why larger rings with no angle strain are difficult to synthesize?
- i. Justify the acidic character of triphenylmethane.
- j. What is Coulson Mofitt's modification?

Section – B

(5 marks each)

- Q2. Write a note on Friedal Craft's acylation along with a detailed mechanism.
- Q3. Discuss the various factors affecting acidity of carboxylic acid.
- Q4. Write the principle and method for determination of the saponification value of fat or oil.
- Q5. Discuss Haworth synthesis for the preparation of phenanthrene.
- Q6. Write any two preparation methods and three chemical reactions of cyclopropane and cyclobutane.
- Q7. Describe evaluation of ester and acid value.
- Q8. Write the structure and uses of BHC and Chloramine.
- Q9. Discuss any two reactions of fatty acids.
- Q10. What are aryl diazonium salts? Justify their stability in comparison to alkyl diazonium salts

Section – C

(10 marks each)

- Q11. Discuss in detail Baeyer's Strain theory along with its limitations. Also, discuss the theory of strainless rings.
- Q12. What do you understand by polynuclear hydrocarbons? Give methods of preparation, medicinal uses and chemical reactions of naphthalene.
- Q13. Discuss the classification of aromatic amines, methods of preparation and chemical reactions of aromatic amines.