QP CODE: 25019342

25019342

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

Core Course - CH4CRT04 - ORGANIC CHEMISTRY-II

(Common for B.Sc Chemistry Model I ,B.Sc Chemistry Model II Industrial Chemistry, B.Sc Chemistry Model III Petrochemicals)

2017 Admission Onwards

9FB0CE3A

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Name the functional isomer of saturated alcohol.
2. Give any one chemical test to distinguish the three type of alcohols.
3. Give the IUPAC name of the white precipitate obtained by the reaction of Phenol and Bromine water.
4. Draw the structure of the compound 1- Methoxy Propane.
5. What is Bakelite? How is it prepared?
6. Illustrate the use of dialkyl cadmium in the synthesis of carbonyl compounds. What is its merit over Grignard reagents?
7. Write an example of Claisen-Schmidt reaction.
8. Write one test to distinguish between acetaldehyde and benzaldehyde.
9. What happens when ethyl magnesium bromide is treated with carbon dioxide?
10. What happens when dicyanogen undergo hydrolysis?
11. Outline the industrial method of preparation of acrylic acid.
12. How will you convert p-toluene sulphonic acid to p-toluene sulphonyl chloride?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

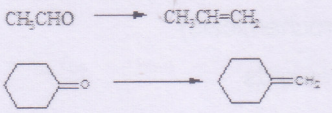
13. Suggest a method for the conversion of
    a) 2-propanol to 2- methyl- 2-propanol
    b) Ethanol to 2-propanol

14. Briefly explain Pinacol-Pinacolone rearrangement

15. Describe the preparation of Phenol from (i)Cumene (ii) Diazonium salt

16. Briefly explain Grignard addition reactions on aldehydes and ketones.

17. Write down the mechanism involved in the following conversions



18. What is Mannich reaction? Mention its synthetic importance.

19. Compare the stability of carboxylic acid with carboxylate anion.

20. Explain Hoffmann's degradation method with mechanism.

21. Suggest a method of synthesis of maleic acid from a) benzene b) malic acid

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Give any one preparation method and two uses of the following
    a) Resorcinol b) Quinol c) nitrophenol d) picric acid

23. a) Discuss the mechanism of the following molecular rearrangements.
        1) Benzil-Benzilic acid rearrangement.
        2) Beckmann rearrangement.

    b) How caprolactam is prepared from cyclohexanone?

24. Convert the following
        a) Acetic acid to propionic acid
        b)Propionic acid to acetic acid
        c)Benzaldehyde to cinnamic acid
        d)Acetone to 3-methyl, 2- butenoic acid

25. Suggest a method of synthesis for the following compounds from toluene
    a)Chloramine T b) saccharin c)o- and p- toluene sulphonyl chloride

(2×10=20)