TB222070W **Reg. No :.....**

Name :.....

B. Sc. DEGREE (C.B.C.S.) EXAMINATION, MARCH 2023

2022 Admissions Regular & 2021 Admissions Supplementary / Improvement And 2020, 2019 And 2018 Admissions Supplementary

SEMESTER II - COMPLEMENTARY COURSE 1 (CHEMISTRY)

(Common for Botany, Zoology & Home Science)

CH2C01B18 - BASIC ORGANIC CHEMISTRY

Time : 3 Hours **Maximum Marks : 60**

Part A

I. Answer any Ten questions. Each question carries 1 mark **(10x1=10)**

1. Recall two examples for negative nucleophilic reagents.
2. Write the IUPAC name of the compound CH_3-CH(Br)-CH_3.
3. Memorize two examples of positive electrophiles.
4. State Saytzeff rule.
5. Recall a catalyst used in Friedel Craft's alkylation reaction.
6. In bimolecular Nucleophilic Substitution, identify the species on which rate of the reaction is dependent on.
7. Define the term enantiomer.
8. Describe the classification of stereoisomerism.
9. Explain why alkenes show geometrical isomerism.
10. Define the term plastic recycling.
11. Give any two examples for condensation polymer.
12. Define the term thermoplastic.

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. The order of stability of carbocation is Tertiary>Secondary>Primary while that of carbanion is Primary>Secondary>Tertiary. Explain this order.
14. Define homologous series. Enumerate the characteristics of homologous series. Recall one example.
15. Describe Steric effect.
16. Distinguish between Markonikov's and anti Markonikov's addition with examples.
17. Compare the electron density of Phenol and Nitrobenzene with the aid of resonance structures.
18. Explain characteristics of conformation.
19. Explain the different methods for the interconversion of Cis and trans isomers
20. Explain synthetic rubber with suitable example.
21. Explain biodegradability of polymers.

Part C

III. Answer any Two questions. Each question carries 10 marks **(2x10=20)**

22. a) Discuss the different types of Electrophilic and Nucleophilic reagents. b)Explain preparation, structure and stability of carbanions.

23. Describe the following a)Inductive effect b)Resonance effect.
24. Describe the rules for E and Z system for geometrical isomers with suitable example.
25. Describe in detail about the classification of polymers on the basis of origin and molecular forces.