

TB242431G

Reg. No :

Name :

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2024
2023 ADMISSIONS REGULAR
SEMESTER II - Home Science COMPLEMENTARY COURSE 1
CH2B01B23 - Basic Organic Chemistry

Time : 3 Hours

Maximum Marks : 60

Part A

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

1. Memorize two examples of positive electrophiles.
2. Memorize any two examples for neutral electrophiles reagents.
3. Define 1,2-elimination.
4. Recall a catalyst used in Friedel Craft's alkylation reaction.
5. Recall any two examples of groups which show +M effect.
6. In bimolecular Nucleophilic Substitution, identify the species on which rate of the reaction is dependent on.
7. Describe the classification of stereoisomerism.
8. Define the term enantiomer.
9. Recall the equation for specific rotation.
10. Discuss the term homopolymer with an example.
11. Reproduce the structure of Terylene.
12. Represent different types of copolymers.

Part B

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

13. Predict and explain the type of structural isomerism present in the following pair of compounds: a) Pentane and 2,2-dimethyl propane b) Ethanol and Methoxymethane.
14. Discuss briefly on free radicals and its stability .
15. Describe Baker-Nathan effect.
16. Identify the compound which is more stable: 2-methyl-1-butene or 2-methyl-2-butene. Explain.
17. Describe Steric effect.
18. Discuss the optical isomerism in tartaric acid.
19. Describe briefly about geometrical isomerism in cyclic compounds.
20. Differentiate addition polymers and condensation polymers with suitable examples.
21. Predict the advantages of synthetic rubber over natural rubber.

Part C

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

22. Explain the different types of structural isomerism. Cite suitable example for each type.
23. Discuss Hyperconjugation. Explain its various applications.
24. Explain the rules for E and Z system of nomenclature in geometrical isomers with suitable example.
25. Discuss about various environmental hazards due to plastics.

