

QP CODE: 24019247



Reg No :
Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, MAY 2024**

Second Semester

Complementary Course - CH2CMT02 - CHEMISTRY - BASIC ORGANIC CHEMISTRY

(Common for B.Sc Botany Model I ,B.Sc Botany Model II Environmental Monitoring And Management ,B.Sc Botany Model II Food Microbiology ,B.Sc Botany Model II Horticulture and Nursery Management ,B.Sc Family & Community Science Model I ,B.Sc Food Science & Quality Control Model III ,B.Sc Geology Model I,B.Sc Physics Model I,B.Sc Zoology Model I,B.Sc Zoology Model II Aquaculture,B.Sc Zoology Model II Food Microbiology,B.Sc Zoology Model II Medical Microbiology,B.Sc Geology and Water Management Model III,B.Sc Botany Model II Plant Biotechnology,B.Sc Food Technology & Quality Assurance)

2017 ADMISSION ONWARDS

ED36801B

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. Give the structural formula of the compound: 6-hydroxyheptanal.
2. Write the all possible position isomers of 1-pentanol.
3. Cl_2 molecule undergoes which type of bond cleavage?
4. Define polar covalent bond.
5. Aniline or ammonia which is more basic? Give reason for your answer.
6. What is Hofmann's rule?
7. Sketch the diastereoisomers of D(-)-threose.
8. What is biochemical separation?
9. Draw the potential energy curve of n-butane.
10. Differentiate thermoplastic and thermosetting polymers.
11. What is condensation?
12. Name any two accelerators used for the vulcanisation of rubbers.





(10×1=10)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Write the structures for the first 5 members of homologous series beginning with CH₄. Also give their IUPAC names.
14. (i) What is a carbocation? What is its structure?
(ii) Arrange the following carbocations in the order of their stability:
(CH₃)₃C⁺, (CH₃)₂CH⁺, CH₃CH₂⁺, C₆H₅-CH₂⁺
Give reason for your answer.
15. What is steric effect? Explain the role of steric hindrance in determining the rate of organic reaction using suitable examples.
16. Complete the reaction and give its mechanism:
C₆H₆ + CH₃Cl + AlCl₃ →
17. Explain peroxide effect using suitable example.
18. Write a note on structural isomerism.
19. Write a short note on sequence rule.
20. Write a note on the inter conversion of cis-trans isomers.
21. What are the various recycling codes of plastics?

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Write a note on different types of organic reactions.
23. Discuss the mechanism of nucleophilic substitution reactions. Explain the stereochemistry in each case.
24. Write a short note on the following terms a) Conformation b) configuration c) eclipsed conformation d) staggered conformation e) sawhorse and Newmann projections.
25. How is Bakelite formed? Explain the reaction with equations? What are its important uses?

(2×10=20)

