K25U 0812

Reg. No. : .....

Name : .....

IV Semester B.Sc. Degree (C.B.C.S.S. – OBE-Regular/Supplementary/ Improvement) Examination, April 2025
(2019 to 2023 Admissions)
CORE COURSE IN CHEMISTRY/POLYMER CHEMISTRY
4B06 CHE/PCH : Organic Chemistry – II

Time : 3 Hours Max. Marks : 40

SECTION – A

Very short answer type. **Each** carries **1** mark. Answer **all 4** questions.

1. What is Kharasch effect ?
2. Which is Bayer's reagent ?
3. What is Lucas reagent ?
4. Convert Acetyl chloride to Acetaldehyde. **(4×1=4)**

SECTION – B

Short answer type. **Each** carries **2** marks. Answer **7** questions out of 10.

5. Explain E2 reaction with example.
6. Explain cope elimination reaction.
7. Explain hydroboration oxidation reaction with example.
8. Explain the preparation of Butane by Kolbe's electrolytic method.
9. How can Aniline be converted to Chlorobenzene ?
10. What is Hauben-Hoesch reaction ?

P.T.O.

11. Give the Preparation of Alpha Naphthol.
12. How will you distinguish between acetaldehyde and Acetone ?
13. What is Oppeanauer oxidation ?
14. Explain Beckmann rearrangement. **(7×2=14)**

SECTION – C

Short essay/problem type. **Each** carries **3** marks. Answer **4** questions out of 6.

15. Explain the mechanism of dehydration of primary alcohol.
16. Briefly discuss the Haworth synthesis of Naphthalene.
17. Explain Benzyne intermediate mechanism with example.
18. Explain Victor mayers test.
19. Explain Aldol condensation with mechanism.
20. What are the main postulates of Bayers strain theory ? **(4×3=12)**

SECTION – D

Long essay type. **Each** carries **5** marks. Answer **2** questions out of 4.

21. Explain the SN1 and SN2 mechanism with stereochemistry.
22. Briefly explain the ozonolysis of alkyne. What are its significance ?
23. Explain the following reactions with mechanism. Pinacole-pinacolone rearrangement and Claisen rearrangement.
24. Explain witting reaction with its synthetic applications. **(2×5=10)**

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