



Date: 25-04-2019
Time: 01:00-04:00

Dept. No.

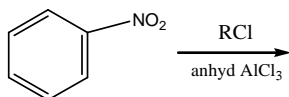
Max. : 100 Marks

PART- A

ANSWER ALL QUESTIONS:

(10x2=20)

1. What is racemisation?
2. Draw the stable conformation of n – butane. Give reason.
3. Which is a better leaving group Cl^- or CN^- ? Why?
4. E2 is single step elimination heating with only one single transition state. Is it true or false? Cite an example for E2 reaction.
5. Predict the product



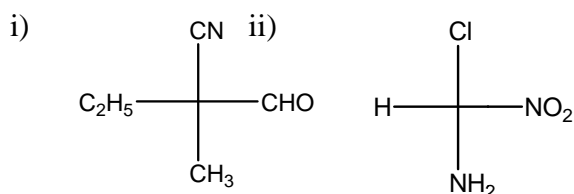
6. What are the compounds that undergo haloform reaction? Cite an example.
7. Cite an example of a phase transfer catalyst. What type of compounds does it belong to?
8. How are epoxides prepared from alkenes? Cite an example.
9. What is the product formed when nitro benzene is reduced in acid medium?
10. Write the test to distinguish primary, secondary and tertiary amines.

PART- B

ANSWER ANY EIGHT QUESTIONS:

(8x5=40)

11. Assign R and S notation for the following



12. Draw the structure of n -butane in Sawhorse and Newman projections.
13. Explain the terms, resolution, asymmetric synthesis and Walden inversion.

14. Substantiate your understanding on the optical activity of allenes and spiranes.
15. Halogenations of alkanes involve a mechanism. Explain it with an example.
16. What is S_N1 mechanism? Explain with an example.
17. Explain the mechanism of Hydroboration-oxidation of alkenes with any two examples.
18. Discuss any two methods of synthesis of phenol.
19. Write a note on ring opening reactions of epoxides by acid and base catalysts.
20. How are nitro compounds reduced? Substantiate with mechanism.
21. The substituents have remarkable effect on the basicity of aniline. Justify.
22. What are sulpha drugs? Discuss the mode of action of sulpha drugs.

PART- C

ANSWER ANY FOUR QUESTIONS:

(4 X 10=40)

23. Explain the Cahn-Ingold Prelog rules with suitable examples.
24. Distinguish between E1 and E2 mechanisms with suitable examples.
25. How are aliphatic alcohols prepared by reduction of carbonyl compounds and Grignard synthesis?
26. How are the following prepared by Williamson's synthesis?
i) aliphatic ether ii) aromatic ether and iii) cyclic ether.
27. Explain the synthesis of ortho, meta and para dinitrobenzenes.
28. How is benzenediazonium chloride prepared? Write any three synthetic uses of benzenediazonium chloride.
