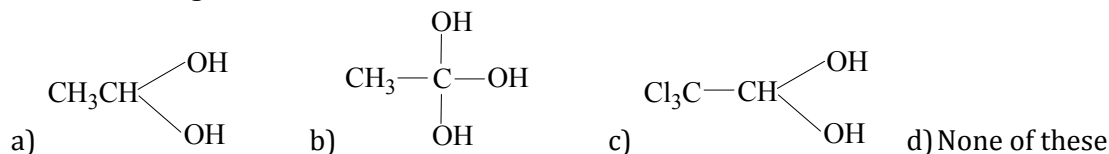


Topic :-HALOALKANES AND HALOARENES

1. A compound containing two —OH groups attached with one carbon atom is unstable but which one of the following is stable?



2. Westron is:



3. Monohalogen derivative of alkanes with alcoholic KOH gives:

- a) Alkane
b) Alkene
c) Alkyne
d) Alicyclic hydrocarbon

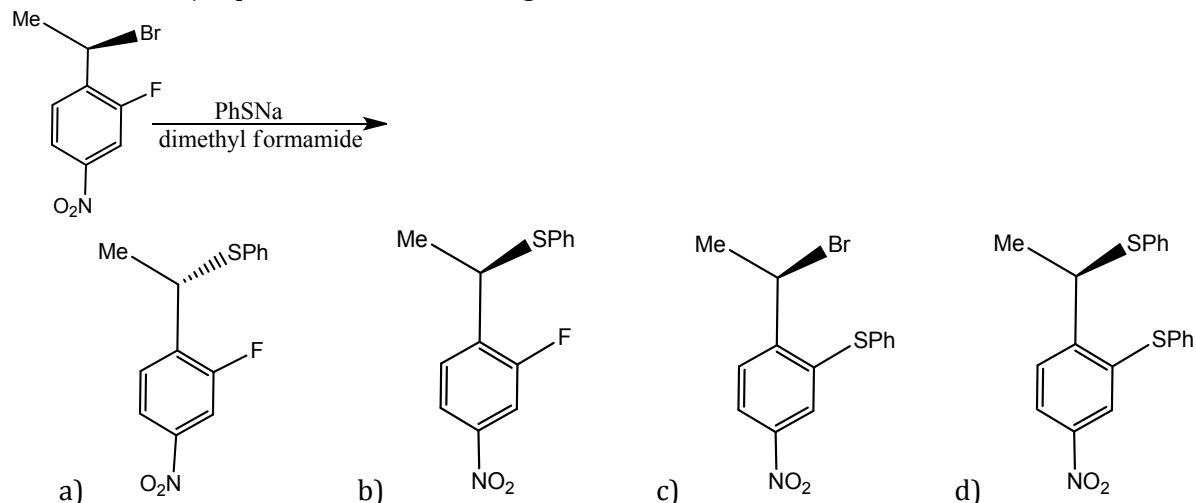
4. The reaction $\text{RCl} + \text{NaI} \xrightarrow{\text{Acetone}} \text{R-I} + \text{NaCl}$ is known as:

- a) Wurtz reaction b) Fittig reaction c) Frankland's reaction d) Finkelstein's reaction

5. The hydrogen atom in chloroform is:

- a) Acidic b) Basic c) Neutral d) None of these

6. The major product of the following reaction is



7. Ethyl bromide and isopropyl chloride can be distinguished by:
- Alcoholic AgNO_3
 - Comparing their colours
 - Burning the compound on spatula
 - Aqueous KOH solution
8. In the following sequence of reactions
- $$\text{C}_2\text{H}_5\text{Br} \xrightarrow{\text{AgCN}} \text{X} \xrightarrow{\text{Reduction}} \text{Y}; \text{Y is}$$
- n*-propyl amine
 - Isopropylamine
 - Ethylamine
 - ethylmethyl amine
9. Which alkyl halide is preferentially hydrolysed by $\text{S}_{\text{N}}1$ mechanism?
- CH_3Cl
 - $\text{CH}_3\text{CH}_2\text{Cl}$
 - $\text{CH}_3\text{CH}_2\text{CH}_2\text{Cl}$
 - $(\text{CH}_3)_2\text{C} \cdot \text{Cl}$
10. Treatment of ammonia with excess of ethyl chloride will yield:
- Diethyl amine
 - Ethane
 - Tetraethyl ammonium chloride
 - Methyl amine
11. In a group of isomeric alkyl halides, the order of boiling points is
- primary < secondary < tertiary
 - primary > secondary < tertiary
 - primary < secondary > tertiary
 - primary > secondary > tertiary
12. Ethylene dichloride and ethylidene chloride are isomeric compounds. Identify the statement which is not applicable to both of them?
- React with alcoholic potash
 - React with aqueous potash and give the same products
 - Are dihalides
 - Answer Beilstein's test
13. The $\text{Mg}-\text{Br}$ bond in $\text{CH}_3\text{CH}_2\text{MgBr}$ is:
- Ionic
 - Non-polar
 - Covalent
 - None of these
14. Chloroform is slowly oxidised by air in the presence of light and air to form
- Formyl chloride
 - Trichloro methanol
 - Phosgene
 - Formaldehyde
15. Among the following the one that gives positive iodoform test upon reaction with I_2 and NaOH is:
- $\text{CH}_3\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{CH}_3$
 - $\text{C}_6\text{H}_5\text{CH}_2\text{CH}_2\text{OH}$
 - $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3-\text{CHCH}_2\text{OH} \end{array}$
 - PhCHOHCH_3

16. 2-bromopentane is heated with potassium ethoxide in ethanol. The major product is:

- a) *trans*-pent-2-ene b) 2-ethoxy pentane c) pent-1-ene d) *cis*-pent-2-ene

297. Bottles containing C_6H_5I and $C_6H_5CH_2I$ lost their original labels. They were labelled *A* and *B* for testing. *A* and *B* were separately taken in a test tube and boiled with NaOH solution. The end solution in each tube was made acidic with dilute HNO_3 and then some $AgNO_3$ solution was added. Substance *B* gave a yellow precipitate. Which one of the following statements is true for this experiment?

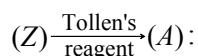
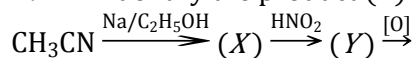
- a) *A* was C_6H_5I b) *A* was $C_6H_5CH_2I$
c) *B* was C_6H_5I d) Addition of HNO_3 was unnecessary

18. $2CHCl_3 + O_2 \xrightarrow{X} 2COCl_2 + 2HCl$

In the above reaction *X* stands for:

- a) An oxidant b) A reductant c) Light and air d) None of these

19. Identify the product (*A*) in following reaction series,



- a) CH_3CHO b) CH_3CONH_2 c) CH_3COOH d) CH_3-CH_2-NHOH

20. Isocyanide test is used to detect:

- a) Primary alcohols b) Primary amines c) Secondary amines d) Secondary alcohols

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