

Class : XIIth
Date :

Subject : CHEMISTRY
DPP No. : 6

Topic :- Alcohols, Phenols & Ethers

- To prepare an ether by Williamson's synthesis, the reactants needed are
 - Ethyl alcohol and tert butyl alcohol
 - Sodium ethoxide and tert butyl bromide
 - Sodium tertiary butoxide and ethyl bromide
 - Sodium ethoxide and sodium tert butoxide
- Fenton's reagent is:
 - $\text{H}_2\text{O} + \text{FeSO}_4$
 - $\text{H}_2\text{O}_2 + \text{FeSO}_4$
 - $\text{H}_2\text{O}_2 + \text{ZnSO}_4$
 - $\text{NaOH} + \text{FeSO}_4$
- Which of the following is simple ether?
 - $\text{C}_6\text{H}_5\text{OCH}_3$
 - $\text{CH}_3\text{OC}_2\text{H}_5$
 - nPrOEt
 - MeOMe
- The number of methoxy groups in a compound can be determined by treating it with:
 - HI and AgNO_3
 - Sodium carbonate
 - Sodium hydroxide
 - Acetic acid
- When $\text{C}_2\text{H}_5\text{OH}$ is mixed with ammonia and passed over heated alumina, the compound formed is:
 - $\text{C}_2\text{H}_5\text{NH}_2$
 - C_2H_4
 - $\text{C}_2\text{H}_5\text{OC}_2\text{H}_5$
 - CH_3OCH_3
- If there be a compound of the formula $\text{CH}_3\text{C}(\text{OH})_3$, which one of the following compounds would be obtained from it without treatment with any reagent?
 - Methanol
 - Ethanol
 - Acetic acid
 - Formaldehyde
- In Lucas test an alcohol reacts immediately and gives insoluble chloride. The alcohol is
 - CH_3OH
 - $\text{CH}_3\text{CH}_2\text{OH}$
 - $(\text{CH}_3)_2\text{CHOH}$
 - $(\text{CH}_3)_3\text{COH}$
- $(\text{CH}_3)_3\text{CONa}$ on reaction with CH_3Br will give:
 - $(\text{CH}_3)_3\text{COC}(\text{CH}_3)_3$
 - CH_3OCH_3
 - $\text{CH}_3\text{CH}_2\text{OCH}_2\text{CH}_3$
 - $(\text{CH}_3)_3\text{COCH}_3$

9. Which one has highest boiling point?
 a) Ethane b) Butane c) Butan-1-ol d) Pentane
10. Glyoxal is:
 a) $\text{CH}_2\text{OH}-\text{CHO}$ b) $\text{CH}_2=\text{OH}$ c) $\text{CHO}-\text{CHO}$ d) $\text{CH}_2=\text{CHCHO}$
11. Methylated spirit is:
 a) Methanol containing some pyridine
 b) Ethanol containing some methanol
 c) Pure methanol
 d) 95% methanol
12. Dehydrogenation of 2-butanol gives:
 a) 2-butene b) Butanone c) Butyraldehyde d) 1-butene
13. The density of glycerol is higher than propanol due to
 a) Van der Waals' attraction b) Hydrogen bonding
 c) Ionic bonding d) More number of covalent bonds
14. Ethyl acetate is treated with double the molar quantity of $\text{C}_2\text{H}_5\text{MgBr}$ and the reaction mixture is hydrolysed with water. The product is:
 a) $\text{C}_2\text{H}_5\text{OH}$ b) $(\text{C}_2\text{H}_5)_2\text{CHOH}$ c) $\text{C}_2\text{H}_5-\overset{\text{CH}_3}{\underset{\text{C}_2\text{H}_5}{\text{C}}}-\text{COH}$ d) $\text{CH}_3\text{COOC}_2\text{H}_5$
15. The correct order of decreasing acidity of nitrophenols will be
 a) *m*-nitrophenol > *p*-nitrophenol > *o*-nitrophenol
 b) *o*-nitrophenol > *m*-nitrophenol > *p*-nitrophenol
 c) *p*-nitrophenol > *m*-nitrophenol > *o*-nitrophenol
 d) *p*-nitrophenol > *o*-nitrophenol > *m*-nitrophenol
16. The reaction of $\text{CH}_3\text{OC}_2\text{H}_5$ with HI gives:
 a) CH_3I only b) $\text{C}_2\text{H}_5\text{OH}$ only c) $\text{CH}_3\text{I} + \text{C}_2\text{H}_5\text{OH}$ d) $\text{C}_2\text{H}_5\text{I} + \text{CH}_3\text{OH}$
17. Glycerol has:
 a) 3 primary alcoholic groups
 b) 3 secondary alcoholic groups
 c) 1 primary alcoholic group and 2 secondary alcoholic groups
 d) 2 primary alcoholic groups and 1 secondary alcoholic group

18. An ether is more volatile than an alcohol having the same molecule formula. This is due to
- a) Intermolecular hydrogen bonding in alcohols
 - b) Dipolar character of ethers
 - c) Alcohols having resonance structures
 - d) Intermolecular hydrogen bonding in ether
19. When phenol is heated with phthalic anhydride and H_2SO_4 , it produces
- a) Phenol red
 - b) Methyl orange
 - c) Salicylic acid
 - d) Phenolphthalein
20. When ethyl alcohol is dissolved in water, it is accompanied with:
- a) Absorption of heat and contraction in volume
 - b) Evolution of heat and contraction in volume
 - c) Absorption of heat and increase in volume
 - d) Evolution of heat and increase in volume

PE