



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

## WORKSHEET-22(CLASS-12)



### TOPIC- ALCOHOL, PHENOL AND ETHER

#### SUBTOPIC-PREPARATION AND CHEMICAL PROPERTIES OF ETHER

SUBJECT – CHEMISTRY

DURATION – 30 mins

F.M. - 15

DATE -17.06.20

1.1 The boiling point of thioether is-

- a) Higher than ether b) Lower than ether c) Equal to ether d) Nearly same

1.2 Ether on heating with acetyl chloride in presence of anhydrous  $\text{ZnCl}_2$  gives-

- (a) Ethyl alcohol (b) Ethyl chloride (c) Ethyl acetate (d) Ethyl chloride and ethyl acetate

1.3 In ether C-O-C bond angle is-

- a)  $110^\circ$  b)  $105^\circ$  c)  $180^\circ$  d)  $120^\circ$

1.4 When diethyl ether is heated with excess sulphuric acid, it forms-

- (a) Propionic acid (b) Acetic acid (c) Ethyl hydrogen sulphate (d) Ethyl alcohol

1.5 According to Lewis acid-base concept, ethers are-

- a) Neutral b) Acidic c) Basic d) Amphoteric

1.6 The type of isomerism that do/does not exist for ether-

- a) Metamerism b) Functional group isomerism c) Both a and b d) Ring-chain isomerism

1.7  $\text{CH}_3\text{I}$  on treatment with dry  $\text{Ag}_2\text{O}$  forms-

- (a) Acetone (b) Diethyl ether (c) Isopropyl alcohol (d) Dimethyl ether

1.8 State the product formed during the chemical reaction between sodium phenoxide and ethyl iodide on heating-

- a) Benzyl alcohol b) Phenol c) Phenitol d) none of these

1.9 Wet ether is not used as a solvent in Wurtz reaction, because the water present in it-

- a) Hydrolyses  $\text{RX}$  to  $\text{ROH}$  b) Reduces  $\text{RX}$  to  $\text{ROH}$  c) Destroys the Na metal d) Reacts with  $\text{R-R}$

1.10 The chemical reaction used for the preparation of higher ethers from halogenated ethers is-

- a) Concentrated  $\text{H}_2\text{SO}_4$  b) Sodium alkoxide c) Dry silver oxide d) Grignard reagent

1.11  $\text{XCH}_2\text{CH}_2\text{OCH}_3$  on treatment with  $\text{CH}_3\text{MgBr}$  (in Dry ether) followed by hydrolysis forms-

- a)  $\text{CH}_3\text{OCH}_3$  b)  $\text{PhOPh}$  c)  $\text{PhOCH}_3$  d)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{OCH}_3$

1.12 Diazomethane on reaction with  $\text{CH}_3\text{CH}_2\text{OCH}_3$  forms-

a)  $\text{CH}_3\text{OCH}_3$  b)  $\text{CH}_3\text{CH}_2\text{OCH}_3$  c) None of these d)  $\text{CH}_3\text{CH}_2\text{OCH}_3$

**1.13 Which of the following compounds is resistant to nucleophilic attack by  $\text{OH}^-$  ions?**

a) Methyl acetate b) Acetonitrile c) Acetamide d) Diethyl ether

**1.14 Ethers are not distilled by dryness for fear of explosion. This is due to the formation of-**

a) Oxides b) Peroxides c) Alcohols d) Ketones

**1.15 Ethers are obtained by treating alkyl halides with-**

a) Dry  $\text{Ag}_2\text{O}$  b) Moist  $\text{Ag}_2\text{O}$  c) Dry  $\text{ZnO}$  d) Moist  $\text{ZnO}$

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