

**ST. LAWRENCE HIGH SCHOOL** 

A JESUIT CHRISTIAN MINORITY INSTITUTION SOLUTION-21(CLASS-12)

**TOPIC- ALCOHOL, PHENOL AND ETHER** SUBTOPIC-CHEMICAL REACTIONS OF ALCOHOL SUBJECT – CHEMISTRY **DURATION – 30 mins** 

F.M. - 15 DATE -16.06.20

1.1 Which among the following is an unsymmetrical ether?a)CH<sub>3</sub>OCH<sub>3</sub>b) PhOPhc) PhOCH<sub>3</sub>d) CH<sub>3</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>3</sub> Ans.- c

1.2 Haloform reaction does not take place with-

(a) Acetone(b)Pentan-3-one (c) Ethanol(d) Isopropyl alcohol Ans.- b

1.3 Propene on oxymercuration-demercuration produces: a) CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>OH b) CH<sub>3</sub>CHOHCH<sub>2</sub>OH c) CH<sub>3</sub>CH<sub>2</sub>CHO d) CH<sub>3</sub>CHOHCH<sub>3</sub>

Ans.- d

# 1.4 CH<sub>3</sub> CH<sub>3</sub> OH on treatment with H<sub>2</sub>SO<sub>4</sub> at 413K temperature forms-

(a) Acetone (b) Di ethyl ether (c) Ethanol (d) Isopropyl alcohol

Ans.- b

#### 1.5 The process of converting alcoholinto ether involves-

- a) Addition reaction b) Substitution reaction
- c) Dehydrohalogenation reactiond) Dehydration

Ans.- d

1.6 The type of isomerism(s) that exist for ether-

a) Metamerismb) Functional group isomerismc) Both and b d) Ring-chain isomerism

#### Ans.- c

# 1.7 CH<sub>3</sub>CH<sub>2</sub>I on treatment with Ag<sub>2</sub>O forms-

(a) Acetone (b) Di ethyl ether (c) Isopropyl alcohol (d) Ethanol

#### Ans.- b

# 1.8 Williamson synthesis of ether involves-

a) Preparation of symmetrical ethers b) Preparation of unsymmetrical ethers

c) Preparation of both symmetrical and unsymmetrical ethersd) none of these

Ans.- c

1.9 Which alcohol will undergo elimination reaction to give alkene in the presence of acidic potassium dichromate?

a) Primary alcohol b) Secondary alcohol c)Allyl alcohol d)None of these Ans.- d

1.10The distinction test for primary secondary and tertiary alcohol required to react each of them is-

a)Victor Meyer's test b) Conc. HCI and anhydrous SnCl<sub>2</sub>

b) Cone. HCl and anhydrous  $CaCl_2 d$ )Both a and b

Ans.- a

1.11XCH<sub>2</sub>OCH<sub>3</sub> on treatment with CH<sub>3</sub>MgBr (in Dry ether) followed by hydrolysis formsa)CH<sub>3</sub>OCH<sub>3</sub>b) PhOPh c) PhOCH<sub>3</sub> d) CH<sub>3</sub>CH<sub>2</sub>OCH<sub>3</sub> Ans.- d

1.12Diazomethane on reaction with CH<sub>3</sub>CH<sub>2</sub>OH formsa)CH<sub>3</sub>OCH<sub>3</sub>b) CH<sub>3</sub>CH<sub>2</sub>OCH<sub>3</sub>c) PhOCH<sub>3</sub> d) CH<sub>3</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>3</sub> Ans.- b

# 1.13 Alkene on treatment with alcohol forms-

a) Etherb) Aldehydec) Both a and b d) Alkane

# Ans.- a

# 1.14 Ether can act as a-

a) Solvent b) Hydrating agent c) Dehydrating agentd) none of these **Ans.-** a

# 1.15Ethers are less soluble in water than alcohol, because-

a)Hydrogen bond formationb)Dipolar interactionc)Resonance d)Hyperconjugation Ans.- a

# PREPARED BY: MR. ARNAB PAUL CHOWDHURY