

ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION-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 then ether b) Lower then ether c) Equal to ether d) Nearly same

Ans. a

1.2 Ether on heating with acetyl chloride in presence of anhydrous ZnCl₂ gives-

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

1.3 In ether C-O-C bond angle isa) 110° b) 105° c) 180° d) 120°

Ans. a

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

Ans. c

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

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

Ans. c

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

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

Ans. d

1.7 CH₃I on treatment with dry Ag₂O forms-

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

Ans. d

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

Ans. c

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

a) Hydrolyses RX to ROH b) Reduces RX to ROH c) Destroys the Na metal d) Reacts with R-R Ans. c

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

is-

a) Concentrated H₂SO₄ b) Sodium alkoxide b) Dry silver oxide d) Grignard reagent

Ans. d

1.11 XCH2CH2OCH3 on treatment with CH3MgBr (in Dry ether) followed by hydrolysis forms-

a) CH₃OCH₃ b) PhOPh c) PhOCH₃ d) CH₃CH₂CH₂OCH₃

Ans. d

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

a) CH₃OCH₃ b) CH₃CH₂OCH₃ c) None of these d) CH₃CH₂OCH₃

Ans. c

1.13 Which of the following compounds is resistant to nucleophilic attack by OH⁻ ions?

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

Ans. d

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

Ans. b

1.15 Ethers are obtained by treating alkyl halides with-

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a) Dry Ag<sub>2</sub>O b) Moist Ag<sub>2</sub>O c) Dry ZnO d) Moist ZnO
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Ans. a

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