# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

## WORKSHEET-10(CLASS-12)

**TOPIC- ALKYL AND ARYL HALIDE**

**SUBTOPIC-CHEMICAL REACTIONS OF ALKYL AND ARYL HALIDE**

**SUBJECT – CHEMISTRY** **F.M. - 15**

**DURATION – 30 mins** **DATE -13.05.20**

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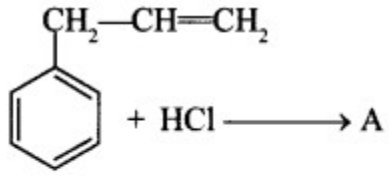
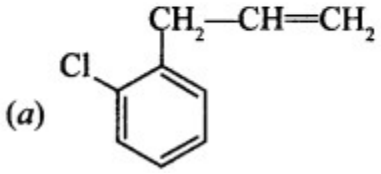
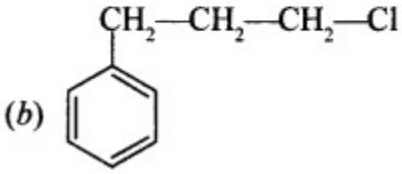
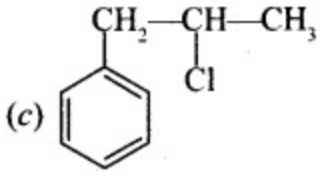
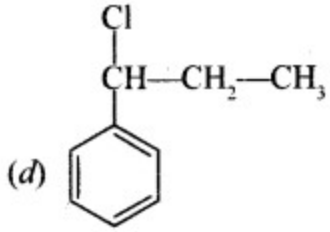
1.1 What is 'A' in the following reaction?



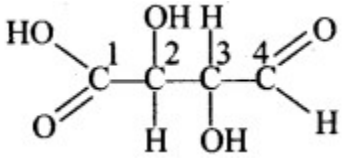




1.2 Which of the carbon atoms present in the molecule given below are asymmetric?




(a) 1, 2, 3, 4 (b) 2, 3 (c) 1, 4 (d) 1, 2, 3

1.3 $S_N1$ reaction of alkyl halides lead to

(a) Retention of configuration (b) Racemisation (c) Inversion of configuration

(d) None of these

1.4 Chloropicrin is formed by the reaction of-

(a) Steam on carbon tetrachloride (b) nitric acid on chlorobenzene

(c) chlorine on picric acid (d) nitric acid on chloroform

1.5 Fittig reaction can be used to prepare-

(a) Toluene (b) Acetophenone (c) Diphenyl (d) Chlorobenzene

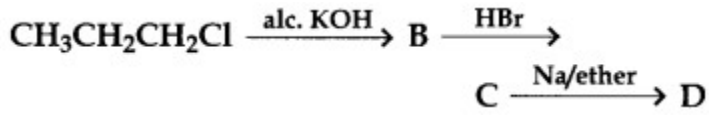
1.6 $CH_3MgI$ reacts with $CH_3OCH_3$ to form-

a) Alcohol b) No product c) Water d) Ester

1.7 Identify the end product (C) in the following sequence:

(a) $C_2H_5CH_2NH_2$ (b) $C_2H_5CONH_2$
(c) $C_2H_5COOH$ (d) $C_2H_5NH_2 + HCOOH$

1.8



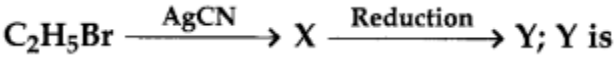
In the above reaction, the product "D" is-

(a) Propane (b) 2, 3-Dimethylbutane (c) Hexane (d) Allyl bromide

1.9 Grignard reagent ($CH_3MgX$) on treatment with $CH_3CH_2CH_2C^{14}OOH$-

a) $CH_3D$ b) $C^{14}H_4$ c) $CH_4$ d) Both b and c

1.10 In the following sequence of reactions:



(a) n-propylamine (b) isopropylamine (c) ethylamine (d) ethylmethylamine

1.11 $^{14}CH_3MgBr$ on treatment with $^{14}CO_2$ generates-

a) $CH_3COOH$ b) $CH_3{}^{14}COOH$ c) $^{14}CH_3{}^{14}COOH$ d) $^{14}CH_3COOH$

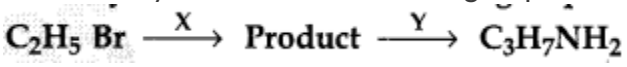
1.12 $CH_3MgI$ reacts with $CH_3COCl$, followed by hydrolysis to form-

a) $3^O$ Alcohol b) $2^O$ Alcohol c) Water d) $1^O$ Alcohol

1.13 $CH_3MgI$ reacts with $CH_3CH_2CN$, followed by hydrolysis to form-

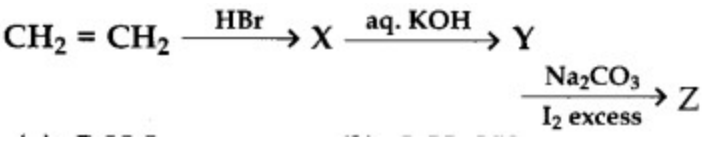
a) $(CH_3)_3COH$ b) $CH_3CH_2(CH_3)_2COH$ c) $CH_3CH_2OH$ d) $(CH_3)_2CHOH$

1.14 Identify X and Y in the following sequence



(a) X = KCN, Y = $LiAlH_4$ (b) X = KCN, Y = $H_3O^+$ (c) X = $CH_3Cl$, Y = $AlCl_3$, HCl
(d) X = $CH_3NH_2$, Y = $[HNO_2]$

1.15 Identify Z in the following series:



(a) $C_2H_5I$
(b) $C_2H_5OH$
(c) $CHI_3$
(d) $CH_3CHO$

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