



1.1 An organic compound A containing C, H and O has a pleasant odour with boiling point of 78°C. On boiling A with concentrated H₂SO₄, a colourless gas is produced which decolourises bromine water and alkaline KMnO₄. The organic liquid A is-

- (a) C₂H₅COOCH₃
(b) C₂H₅OH
(c) C₂H₅Cl
(d) C₂H₆

1.2 The heating of phenyl methyl ether with HI produces-

- (a) Iodobenzene
(b) Phenol
(c) Benzene
(d) Ethyl chloride

1.3 Which of the following gives positive iodoform test?

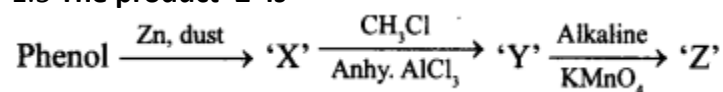
- (a) C₆H₅CH₂CH₂OH
(b) $\text{CH}_3-\underset{\text{CH}_3}{\text{CH}}-\text{CH}_2\text{OH}$
(c) PhCHOHCH₃
(d) CH₃CH₂CH(OH)CH₂CH₃

1.4

C₆H₅CH₂CH(OH)CH(CH₃)₂ $\xrightarrow{\text{Conc. H}_2\text{SO}_4}$ is

- (a) $\text{C}_6\text{H}_5-\underset{\text{H}}{\text{C}}=\underset{\text{H}}{\text{C}}-\text{CH}(\text{CH}_3)_2$
(b) $\text{H}_5\text{C}_6\text{CH}_2\text{CH}_2-\underset{\text{CH}_3}{\text{C}}=\text{CH}_2$
(c) $\text{H}_5\text{C}_6-\underset{\text{H}}{\text{C}}=\underset{\text{H}}{\text{C}}-\text{CH}(\text{CH}_3)_2$
(d) $\text{C}_6\text{H}_5\text{CH}_2-\underset{\text{H}}{\text{C}}=\underset{\text{CH}_3}{\text{C}}-\text{CH}_3$

1.5 The product 'Z' is-

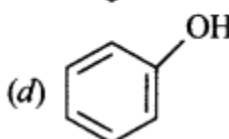
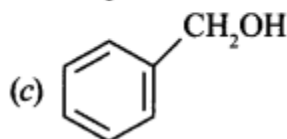
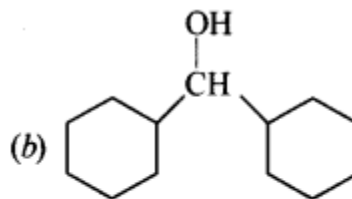
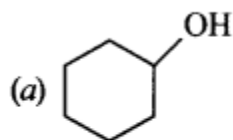


- (a) Benzaldehyde
(b) Benzoic acid

(c) Benzene

(d) Toluene

1.6 Which one of the following compounds has the most acid nature?



1.7 Among the following sets of reactants which one produces phenitol?

(a) CH_3CHO ; RMgX

(b) $\text{C}_6\text{H}_5\text{OH}$; NaOH , $\text{CH}_3\text{CH}_2\text{I}$

(c) $\text{C}_6\text{H}_5\text{OH}$, neutral FeCl_3

(d) $\text{C}_6\text{H}_5-\text{CH}_3$; CH_3COCl ; AlCl_3

1.8 Which one is prepared on large scale by the fermentation of starch or molasses?

(a) Methanol (b) Acetone (c) Ethanol (d) Acetaldehyde

1.9 Which one of the following compound is obtained by the oxidation of primary alcohol with nascent oxygen?

(a) Alkanal (b) Carboxylic acid (c) primary amine (d) Ketone

1.10 Which one is the correct order of reactivity of different types of alcohol?

(a) $1^\circ > 2^\circ > 3^\circ$ (b) $3^\circ > 2^\circ > 1^\circ$ (c) $1^\circ > 3^\circ > 2^\circ$ (d) $2^\circ > 1^\circ > 3^\circ$

1.11 Which bond is cleaved when alcohols are converted to carbonyl compounds?

(a) O-H bond only

(b) Both O-H and C-O bond

(c) C-O bond only

(d) Both O-H and C-H bond

1.12 Which class of compounds cannot be prepared by the cleavage of O-H bond of alcohols?

(a) Esters

(b) Alkanes

(c) Alkoxides

(d) Alkenes

1.13 Which one of the following is the general method of preparation of alcohols?

(a) By the hydrolysis of alkyl halide with aqueous alkali

(b) By the hydrolysis of ester with aqueous alkali or carboxylic acid

(c) By reduction of aldehydes or ketones by nascent hydrogen or By catalytic hydration of alkene

(d) All of the above

1.14 Which class of compounds cannot be prepared by the cleavage of O-H bond of alcohols?

(a) Esters

(b) Alkanes

(c) Alkoxides

(d) Alkenes

1.15 Which class of compounds is prepared by the cleavage of O-H bond of alcohols?

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|------------------------|------------|
| (a) Alkyl halides | (b) Amines |
| (c) Carbonyl compounds | (d) Esters |

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