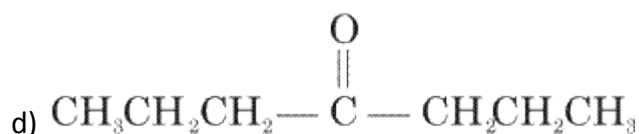
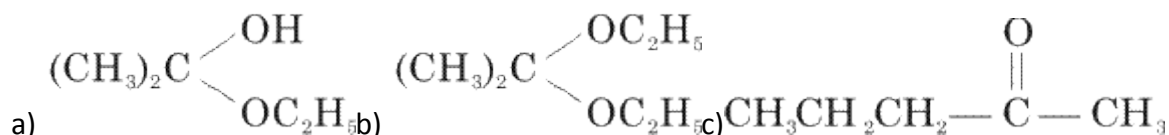




1.1 Acetone is treated with excess of ethanol in the presence of hydrochloric acid. The product obtained is-



1.2 Clemmensen reduction of a ketone is carried out in the presence of which of the following?

- a) H_2 and Pt as catalyst b) Glycol with KOH c) Zn-Hg with HCl d) LiAlH_4

1.3 Identify the product in the reaction-



- a) $\text{PhCH}_2\text{CH}_2\text{CHO}$ b) $\text{PhCOCH}_2\text{CH}_3$ c) $\text{PhCH}_2\text{COCH}_3$ d) PhCOCOMe

1.4 The compound which forms acetaldehyde when heated with dilute NaOH is-

- a) 1 chloro ethane b) 1, 1 dichloro ethane c) 1, 2 dichloro ethane d) 1, 1, 1 trichloro ethane

1.5 An organic compound X is oxidized by using acidified $\text{K}_2\text{Cr}_2\text{O}_7$. The product obtained reacts with phenyl hydrazine but does not answer silver mirror test. The possible structure of X is-

- a) $(\text{CH}_3)_2\text{CHOH}$ b) CH_3CHO c) $\text{CH}_3\text{CH}_2\text{OH}$ d) Acetone

1.6 Reaction of ethyl formate with limited supply of CH_3MgI followed by hydrolysis gives-

- a) Ethanol b) n-propyl alcohol c) Acetaldehyde d) Isopropyl alcohol

1.7 For making distinction between 2-pentanone and 3-pentanone the reagent to be employed is-

a) $K_2Cr_2O_7/H_2SO_4$ b) $Zn-Hg/HCl$ c) SeO_2 d) Iodine/ $NaOH$

1.8 In which of the following reactions new carbon-carbon bond is not formed-

a) Cannizzaro reaction b) Wurth reaction c) Aldol condensation d) Friedel-Crafts reaction

1.9 A strong base can abstract an alpha-hydrogen from –

a) Amine b) Alkane c) Alkene d) Ketone

1.10 Reduction of aldehydes and ketones into hydrocarbons using zinc amalgam and conc. HCl is called –

a) Cope reduction b) Dow reduction c) Wolff-Kishner reduction d) Clemmensen reduction

1.11 The product formed in Aldol condensation is –

a) a beta-hydroxy aldehyde or a beta-hydroxy ketone b) an alpha-hydroxy aldehyde or ketone
c) an alpha, beta unsaturated ester d) a beta-hydroxy acid

1.12 The incorrect IUPAC name is-

a) $\begin{array}{c} CH_3 \\ | \\ CH_3-C-CH-CH_3 \\ || \quad | \\ O \quad CH_3 \end{array}$ 2-Methyl-3-butanone b) $\begin{array}{c} CH_3 \\ | \\ CH-CH-CH-CH_3 \\ | \quad | \\ CH_2 \quad CH_2-CH_3 \end{array}$ 2, 3-Dimethyl pentane c) $CH_3-C \equiv C-CH(CH_3)_2$ 4-methyl-3-butanone d) $\begin{array}{c} CH_3-CH-CH-CH_3 \\ | \quad | \\ Cl \quad Br \end{array}$ 2-bromo-3-chloro butane

1.13 Formalin is an aqueous solution of-

a) Formic acid b) Acetaldehyde c) Formaldehyde d) Ethanoic acid

1.14 Carbonyl groups add flavor and fragrance to nature in the forms given below except-

a) Vanillin b) Salicylaldehyde c) Formic acid d) Cinnamaldehyde

1.15 The geometry of the carbonyl group is-

a) Trigonal planar b) Pyramidal c) Square planar d) Linear

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