

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



1.2 Among the following sets of reactants which one produces anisole?

(a) CH₃CHO, RMgX (b) C₆H₅OH, NaOH, CH₃I (c) C₆H₅OH, neutral FeCl₃

(d)
$$C_6H_5 - CH_3$$
, CH_3COCI ; $AICI_3$

1.3 The electrophile involved in Riemer-Tiemann reaction of phenol with CHCl₃ in presence of NaOH-

(a) :CCl₂ (b)
$$\stackrel{\oplus}{C}$$
Cl₃ (c) $\stackrel{\oplus}{C}$ HO (d) $\stackrel{\oplus}{C}$ HCl₂
1.4 Identify 'C' in the following:

$$\begin{array}{c} & & \\ & &$$



1.6 Monochlorination of toluene in sunlight followed by hydrolysis with aq. NaOH yields.

(a) o-Cresol (b) m-Cresol (c) 2, 4-Dihydroxytoluene (d) Benzyl alcohol

1.7 How many alcohols with molecular formula $C_4H_{10}O$ are chiral in nature?

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

1.8 The correct acidic strength order of the following:



is—

(a) | > || > ||| (b) ||| > | > ||| (c) || > ||| > ||| (d) || > ||| > |||

1.9 Phenols are more acidic than alcohols because-

(a) Phenoxide ion is stablised by resonance (b) Phenols are more soluble in polar solvents (c) Phenoxide ion does not exhibit resonanced) Alcohols do not lose H atoms at all

1.10 Which of the following species can act as the strongest base?

(a) $^{\Theta}OH$ (b) $^{\Theta}OR$

(c) [⊖]OC₆H,



1.11The major organic product in the reaction, $CH_3 - O - CH(CH_3)_2 + HI \rightarrow product is/are-$

- (a) CH₃I + (CH₃)₂CHOH
- (b) CH₃OH+(CH₃)₂ CHI
- (c) ICH2 OCH (CH3)2
- (d) $CH_3 O C (CH_3)_2$

1.12The process of converting alkene into alcohols involves-

a) Addition reaction b) Substitution reaction c) Dehydrohalogenation reaction

d) Rearrangement reaction

1.13 Which of the following reactions will yield phenol with most difficulty?



1.14 Among the alkenes which one produces tertiary butyl alcohol on acid hydration-

a) $(CH_3)_2C = CH_2 b)CH_3 - CH = CH - CH_3 c) CH_3 - CH_2 - CH = CH_2 d)CH_3 - CH = CH_2$

1.15 An ether is more volatile than an alcohol having the same molecular formula. This is due to-

a)Dipolar character of ethersb)alcohols having resonance structures

c) Inter-molecular hydrogen bonding in ethers d)inter-molecular hydrogen bonding in alcohols

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