

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



Ans. d

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 ; $AICI_3$

Ans. b

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

(a)
$$:CCl_2$$
 (b) $\stackrel{\oplus}{C}Cl_3$ (c) $\stackrel{\oplus}{C}HO$ (d) $\stackrel{\oplus}{C}HCl_2$

Ans. a

1.4 Identify 'C' in the following:

$$+ CH_{3} - CH_{3} - CH_{3} - CH_{3} - CH_{3} + CH_{3}$$

(a) Water (b) Ethanol (c) Propanone (d) Cumenehydroperoxide

Ans. c



Ans. b

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

Ans. a

1.7 How many alcohols with molecular formula C₄H₁₀O are chiral in nature?

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

Ans. a

1.8 The correct acidic strength order of the following:



is —

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

Ans. b

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

Ans. a

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

(a) $^{\Theta}OH$ (b) $^{\Theta}OR$ (c) $^{\Theta}OC_{6}H_{5}$ (d) $^{\Theta}O-$

Ans. b

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

- (a) $CH_3I + (CH_3)_2CHOH$
- (b) CH₃OH+(CH₃)₂ CHI

(c)
$$ICH_2 OCH (CH_3)_2$$

(d) $CH_3 - O - C - (CH_3)_2$

Ans. a

1.12The process of converting alkene into alcohols involves-

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

d) Rearrangement reaction

Ans. a

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



Ans. d

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

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

Ans. a

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

Ans.d

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