Haloalkanes and Haloarenes

- 1. $S_N 1$ reaction of alkyl halides lead to
- (a) Retention of configuration
- (b) Racemisation
- (c) Inversion of configuration
- (d) None of these

▼ Answer

Answer: b

- 2. p-djchlorobenzene has higher melting point than its o- and m- isomers because
- (a) p-dichlorobenzene is more polar than o- and m- isomer.
- (b) p-isomer has a symmetrical crystalline structure.
- (c) boiling point of p-isomer is more than o- and m-isomer.
- (d) All of these are correct reasons.

▼ Answer

Answer: b

- 3. 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.

▼ Answer

Answer: d

- 4. Fitting reaction can be used to prepare
- (a) Toluene
- (b) Acetophenon
- (c) Diphenyl
- (d) Chlorobenzene

▼ Answer

Answer: c

5. Identify the end product (C) in the following sequence:

$$C_2H_5OH \xrightarrow{SOCl_2} A \xrightarrow{KCN (alc.)} B \xrightarrow{2H_2 O/H^+} C$$

- (a) $C_2H_5CH_2NH_2$
- (b) C₂H₅CONH₂
- (c) C₂H₅COOH
- (d) $C_2H_5NH_2 + HCOOH$

▼ Answer

Answer: c

6.

$$CH_3CH_2CH_2C1 \xrightarrow{alc. KOH} B \xrightarrow{HBr} C \xrightarrow{Na/ether} D$$

In the above reaction, the product D is

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

▼ Answer

Answer: b

7. Identify X and Y in the following sequence

C_2H_5 Br \xrightarrow{X} Product \xrightarrow{Y} $C_3H_7NH_2$

(a)
$$X = KCN$$
, $Y = LiAlH_4$

(b)
$$X = KCN, Y = H_3O^+$$

(c)
$$X = CH_3Cl$$
, $Y = AlCl_3HCl$

(d)
$$X = CH_3NH_2$$
, $Y = HNO_2$

▼ Answer

Answer: a

8. In the following sequence of reactions:

$$C_2H_5Br \xrightarrow{AgCN} X \xrightarrow{Reduction} Y; Y is$$

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

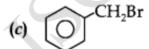
▼ Answer

Answer: d

9.

$$X \xrightarrow{\text{AgNO}_3} \text{Yellow or While ppt}$$

Which of the following cannot be X?



(d)
$$\bigcirc$$
 N_2^+ C

▼ Answer

Answer: a

10.

Identifay Z in the series
$$CH_2 = CH_2 \xrightarrow{HBr} X \xrightarrow{aq. KOH} Y$$

- (a) C₂H₅I
- (b) C_2H_5OH
- (c) CHI₃
- (d) CH₃CHO

▼ Answer

Answer: c