Haloalkanes and Haloarenes

1. S_N1 reaction of alkyl halides lead to
(a) Retention of configuration
(b) Racemisation
(c) Inversion of configuration
(d) None of these

▼ **Answer**

Answer: b

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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

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

▼ **Answer**

Answer: c

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

$$C_2H_5OH \xrightarrow[\text{Pyridine}]{SOCl_2} A \xrightarrow{KCN\ (alc.)} B \xrightarrow{2H_2O/H^+} C$$

(a) $C_2H_5CH_2NH_2$ (b) $C_2H_5CONH_2$
(c) C_2H_5COOH (d) $C_2H_5NH_2 + HCOOH$

▼ **Answer**

Answer: c

6.

$$CH_3CH_2CH_2Cl \xrightarrow{alc.\ KOH} B \xrightarrow{HBr} C \xrightarrow{Na/ether} D$$

In the above reaction, the product D is
(a) Propane
(b) 2, 3-Dimethylbutane
(c) Hexane
(d) Allyl bromide

▼ **Answer**

Answer: b

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7. Identify X and Y in the following sequence

$$C_2H_5Br \xrightarrow{X} \text{Product} \xrightarrow{Y} C_3H_7NH_2$$

(a) X = KCN, Y = $LiAlH_4$
(b) X = KCN, Y = H_3O^+
(c) X = CH_3Cl, Y = $AlCl_3$ HCl
(d) X = CH_3NH_2, Y = HNO_2

▼ **Answer**

Answer: a

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8. In the following sequence of reactions:

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

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

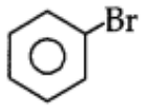
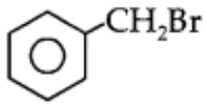
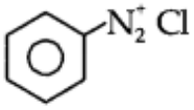
▼ **Answer**

Answer: d

9.

$$X \xrightarrow[HNO_3]{AgNO_3} \text{Yellow or While ppt}$$

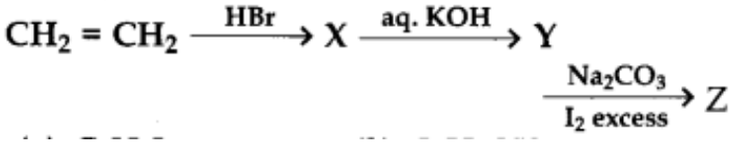
Which of the following cannot be X?

(a) 
(b) $(CH_3)_3$ Cl
(c) 
(d) 

▼ **Answer**

Answer: a

10.
Identifay Z in the series



(a) C_2H_5I
(b) C_2H_5OH
(c) CHI_3
(d) CH_3CHO

▼ **Answer**

Answer: c
