

APOLLO

Halogeno alkanes

FBISE Chemistry Class 11 (HSSC-I)

Domain E: Organic Chemistry

16 questions | questions

Original FBISE question crops. National Curriculum 2022-23 topic.

51.	Compound X is an organic compound. It gives a precipitate with aqueous silver nitrate. All of this precipitate remains undissolved when an excess of dilute or concentrated aqueous ammonia is added. Which of the following could be the identity of X?	1-Chlorobutane	2-Chlorobutane	2-Bromobutane	Iodomethane
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Q5	Define halogenoalkanes. Classify halogenoalkanes based on the position of the halogen-bearing carbon atom, also write example of halogenoalkane in each type.	1+3	OR	Describe dynamic reversible physical change is observed e ⁻ at the molecular level
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12.	Identify the product formed when Ethyl Bromide is warmed with NaOH in ethanol: Which reagent is used for the reduction of	$\text{CH}_2=\text{CH}_2$	$\text{CH}_3\text{-CH}_2\text{-ONa}$	$\text{CH}_3\text{-CHO}$	$\text{CH}_2=\text{CH-Br}$	☐	☐	☐	☐
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(iv)	Write down three differences between limiting and non-limiting reactants.	03	OR	Write down the reaction of Ethyl Bromide with $\text{KOH}_{(aq)}$, NH_3 and AgNO_3 .	03
(v)	State any three differences between crystalline and non-crystalline solids	03	OR	Briefly describe the terms 'shell', 'sub-shell' and 'orbital'	03

(xii)	Briefly describe β – elimination reaction by giving a suitable example.	03	OR	Write down the reactions of 1– Propanol with: a) SOCl_2 b) PCl_5 c) Conc. $\text{H}_2\text{SO}_4/180^\circ$	03
(xiii)	Calculate K_c for the following reaction at equilibrium at 400°C			Calculate total entropy change when NaCl dissolves in water under standard conditions.	

1.5 + 1.5	OR	Write chemical equation for the preparation of alkyl halides: a. From Alkenes b. From Alkanes
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(xii)	Enlist the factors which affect the reactivity of alkyl halides. Write correct order of reactivity for them.	2+1
(xiii)	Write any three differences between boiling and	

		detect presence of carbonyl compounds.
1x3	OR	Complete the given equations by identifying the major products: a. $\text{CH}_3 - \text{Cl} + \text{KCN} \rightarrow$

Q.5	Consider an organic compound with molecular formula $C_5H_{10}O$. it exists in different isomeric forms. Draw possible isomers. Also write types of	06	OR	Classify Halogenoalkanes based on the type of halogen atom and its position in carbon chain.	06
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Q.6	How ethyl chloride can be prepared from the following: a. ethene b. ethane c. ethanol Write complete balanced equations with conditions involved in each reaction.	2x3	OR	Exp ang mol a. b.
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Complete the following equations:	
a. $C_2H_5Cl + NH_3 \rightarrow$	03
b. $CH_3CH_2Br + NaOH \rightarrow$	

OR	Describe nucleophilic substitution reactions. How silver nitrate in ethanol identifies the halogen in alkyl halides? Explain with reaction.	2x3
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How ethyl Bromide can be prepared from the following: a. ethene b. ethane c. ethanol Write complete balanced equations with conditions involved in each reaction.	2x3
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c. ethanol

