

PRACTICE TEST

Level 1

CLASS: XII

Unit 10: HALOALKANES AND HALOARENES

Full marks: 20

Time: 40 Min

Q.No	Questions	M
1	Write structures of the following compounds: (i) 2-Chloro-3-methylpentane (ii) 1-Chloro-4-ethylcyclohexane	1
2	Name the following halides according to IUPAC system and classify them as alkyl, allyl, benzyl (primary, secondary, tertiary), vinyl or aryl halides: (i) $(\text{CH}_3)_2\text{CHCH}(\text{Cl})\text{CH}_3$ (ii) $\text{CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}(\text{C}_2\text{H}_5)\text{Cl}$	1
3	Complete the reaction: $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH} + \text{SOCl}_2 \rightarrow$	1
4	Arrange the compounds of each set in order of reactivity towards $\text{S}_\text{N}2$ displacement: 1-Bromobutane, 1-Bromo-2,2-dimethylpropane, 1-Bromo-2-methylbutane, 1-Bromo-3-methylbutane.	1
5	Out of $\text{C}_6\text{H}_5\text{CH}_2\text{Cl}$ and $\text{C}_6\text{H}_5\text{CHClC}_6\text{H}_5$, which is more easily hydrolyzed by aqueous KOH ? Explain why?	2
6	Write a chemical test to distinguish between the following pairs of compounds- i. Ethanol and Methanol ii. Penta-2-ol and Penta-3-ol	2
7	What happens when (i) n-butyl chloride is treated with alcoholic KOH , (ii) methyl chloride is treated with KCN ?	2
8	Arrange each set of compounds in order of increasing boiling points. (i) Bromomethane, Bromoform, Chloromethane, Dibromomethane. (ii) 1-Chloropropane, Isopropyl chloride, 1-Chlorobutane.	2
9	How will you bring about the following conversions? (i) Ethanol to but-1-yne (ii) Ethane to bromoethene	2
10	Among the isomeric alkanes of molecular formula C_5H_{12} , identify the one that on photochemical chlorination yields (i) A single monochloride. (ii) Three isomeric monochlorides. (iii) Four isomeric monochlorides.	3
11	Illustrate the following reactions each with one example: i. Wurtz-Fittig reaction ii. Fittig reaction iii. Sandmeyer reaction	3