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) $(CH_3)_2CHCH(Cl)CH_3$ (ii) $CH_3CH_2CH(CH_3)CH(C_2H_5)Cl$	1
3	Complete the reaction: $CH_3CH_2CH_2OH + SOCl_2 \rightarrow$	1
4	Arrange the compounds of each set in order of reactivity towards SN2 displacement: 1-Bromobutane, 1-Bromo-2,2-dimethylpropane, 1-Bromo-2-methylbutane, 1-Bromo-3-methylbutane.	1
5	Out of $C_6H_5CH_2Cl$ and $C_6H_5CHClC_6H_5$, 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