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# INDIAN SCHOOL MUSCAT
# FIRST PERIODIC ASSESSMENT

## CHEMISTRY

CLASS: 12 Sub.Code: 043 TimeAllotted:50mts.

14 .04.2019 Max .Marks: 20

***GENERAL INSTRUCTIONS:***

***a. All questions are compulsory.***

***b. Mark for each question is indicated against it***

1. Give a chemical test to distinguish between benzyl chloride and chlorobenzene 1

2. Draw the structure of 1-Bromo-4-isopropylbenzene 1

3. Which one of the following is more reactive towards nucleophilic substitution by $S_N1$ reaction? 1

   1-Bromopropene or 3-Bromopropene

4. Write the IUPAC name of the following 2
   a) m-$ClCH_2C_6H_4CH_2CH_2CH_3$
   b) Isopentyl iodide

5. Give equations for the following; 2
   a) Methyl chloride is treated with $KNO_2$
   b) Ethyl chloride is treated with magnesium in dry ether followed by hydrolysis.

6. Illustrate the following reactions with suitable example : 2
   a) Finkelstein reaction.
   b) Sandmeyer reaction.

7. Convert 2
   a) Benzene to biphenyl
   b) Chloroethane to Propanoicacid

8. Define the following 3

   a) Freons

   b) Zaitsev rule

   c) Retention

9. Account for the following 3

   a) Dipole moment of chlorobenzene is lower than that of cyclohexylchloride

   b) 1-Chloropentane has more boiling point than 2-Chloro-2-methylbutane.

   c) Thionyl chloride is the preferred reagent for converting ethanol to chloroethane.

10. An optically active compound having molecular formula $C_4H_9Br$ reacts with aqueous KOH to give a racemic mixture of products. Write the mechanism involved for the reaction. 3