

HALOALKANES & HALOARENES 1.

11-05-2020 (Lecture-2)

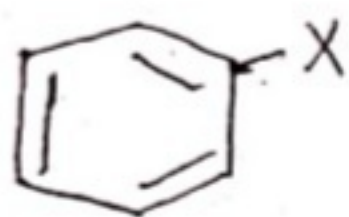
CHEMISTRY
CLASS -XII

TOPIC - HALOARENES Unit -10

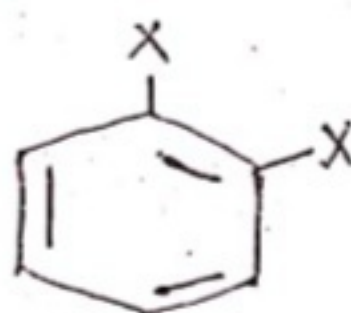
By-Dr.Rinky Kumari.
Dept.of Chemistry.
J.N.College,MDB.

Halogen derivative of benzene is called Haloarenes.

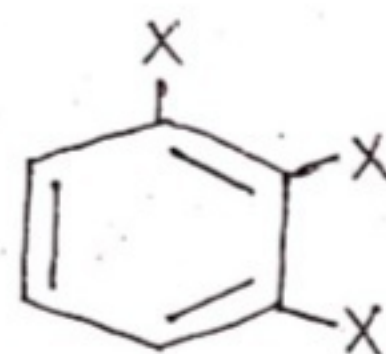
On the basis of no. of Halogen atom Haloarene are of following types: ---



Monohaloarene



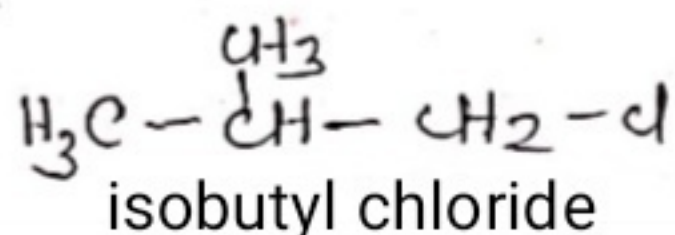
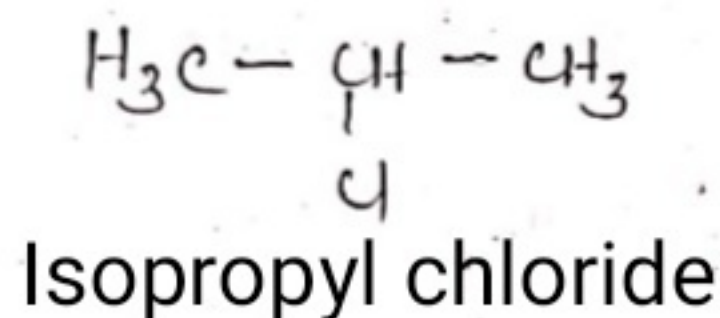
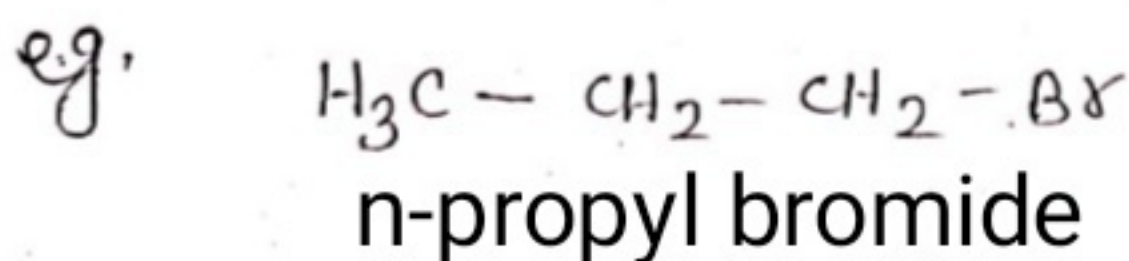
Dihaloarene



Trihaloarene

NOMENCLATURE

Common name — Alkyl halide (Haloalkane) is named as - Name of alkyl group followed by halide.

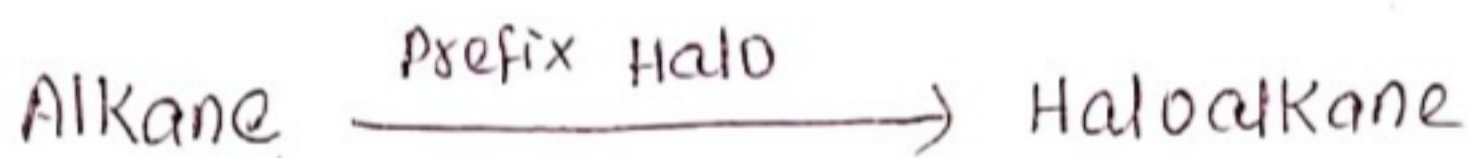


IUPAC Name

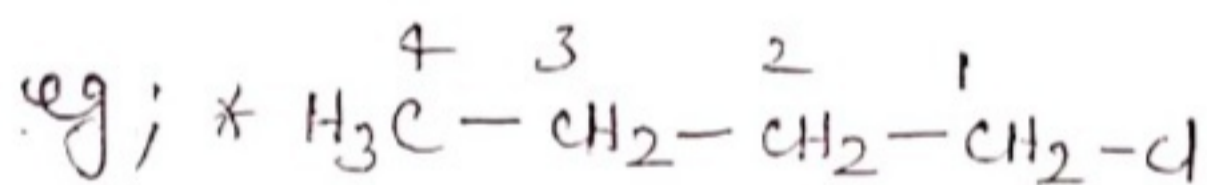
2.

Rule :-

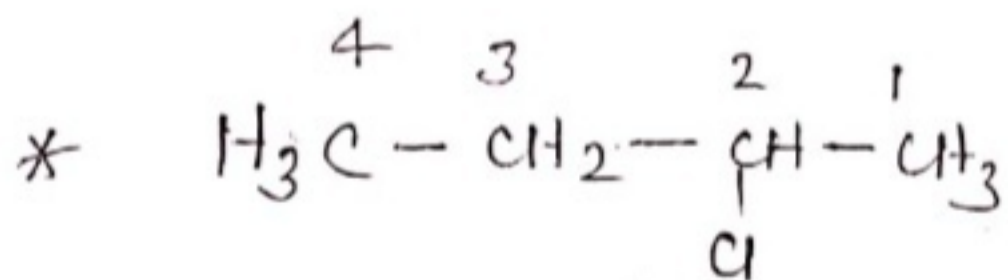
- * Select the longest carbon chain containing functional group.
- * No. the carbon atom in such a way so that functional group falls to lowest position.
- * Name of Haloalkane is written as name of corresponding alkane prefixed by 'Halo'.



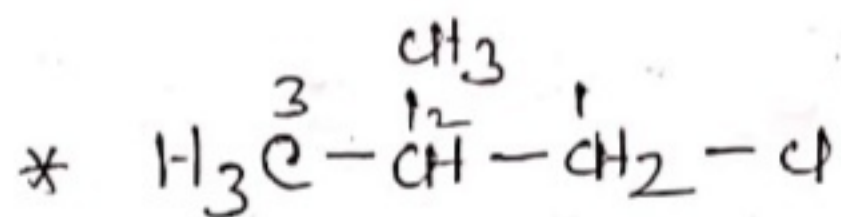
- * Rest rule is similar to as alkane.



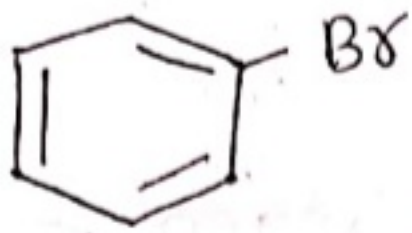
1-chlorobutane



2-chlorobutane

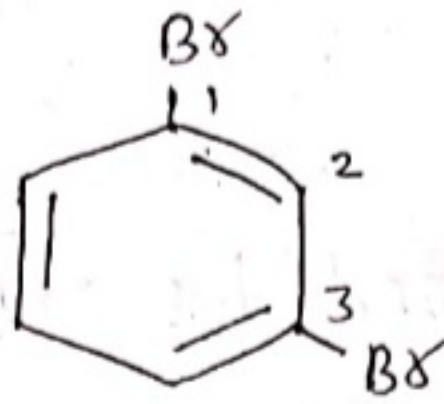


1-chloro-2-methylpropane



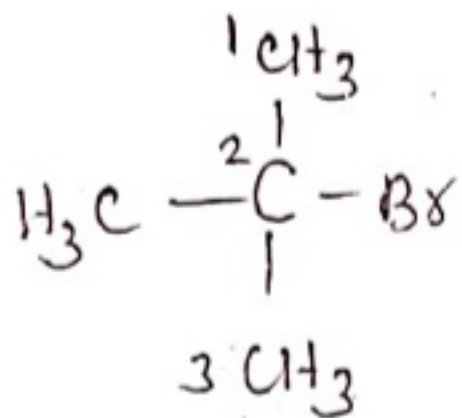
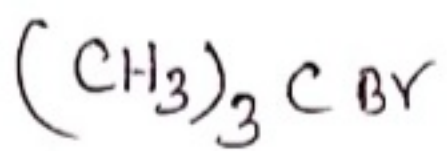
Common - Bromobenzene

IUPAC → Bromobenzene

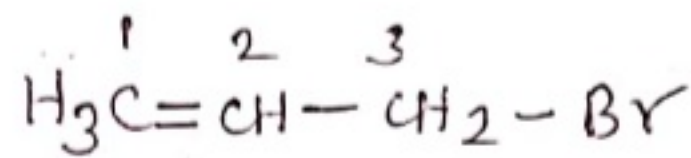


Common :- m-dibromobenzene

IUPAC - 1,3-dibromobenzene

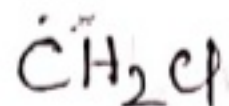


2-bromo-2-methylpropane



3-bromopropane

Note :- In priority table alkene (C=C) is senior than halogen.



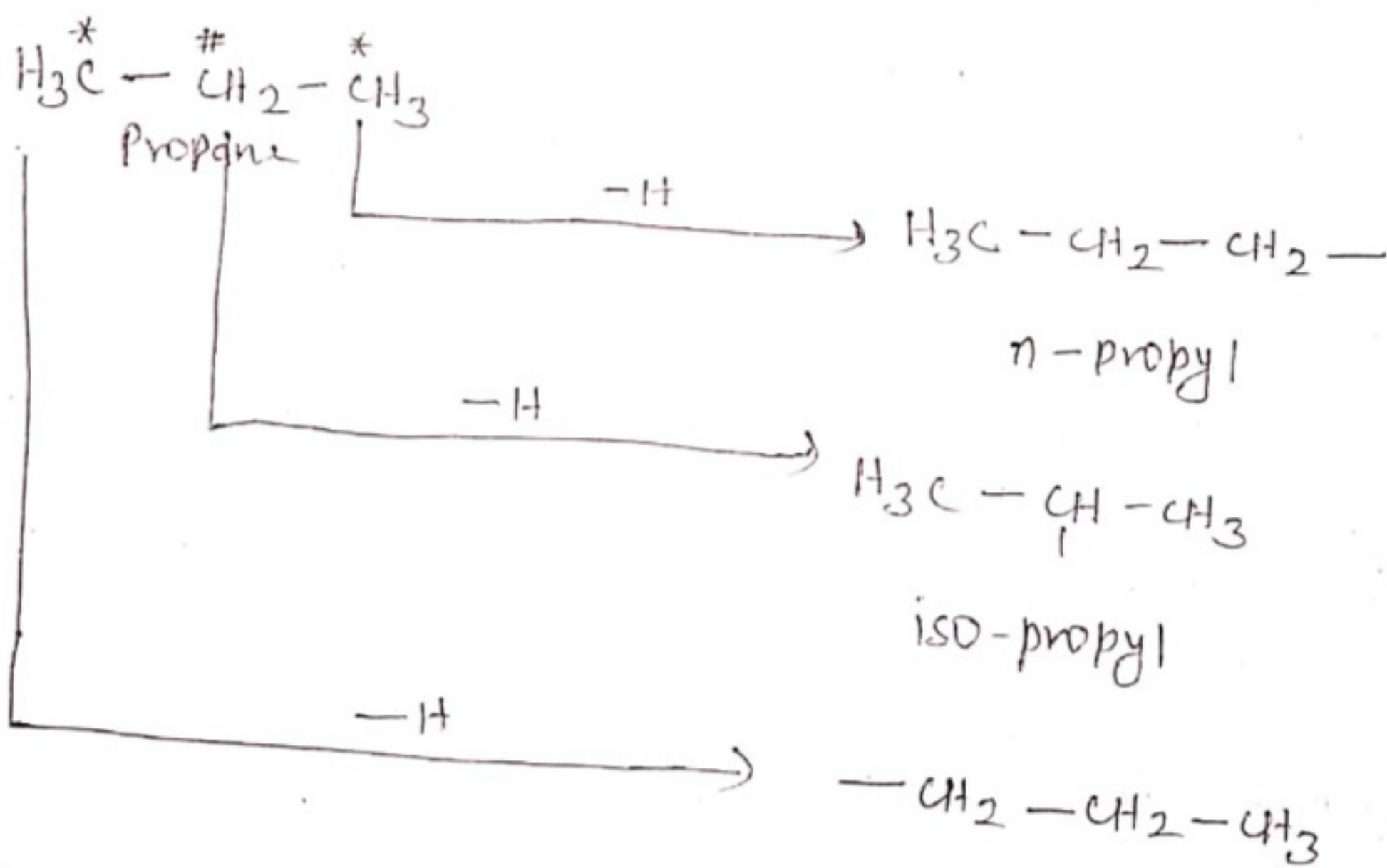
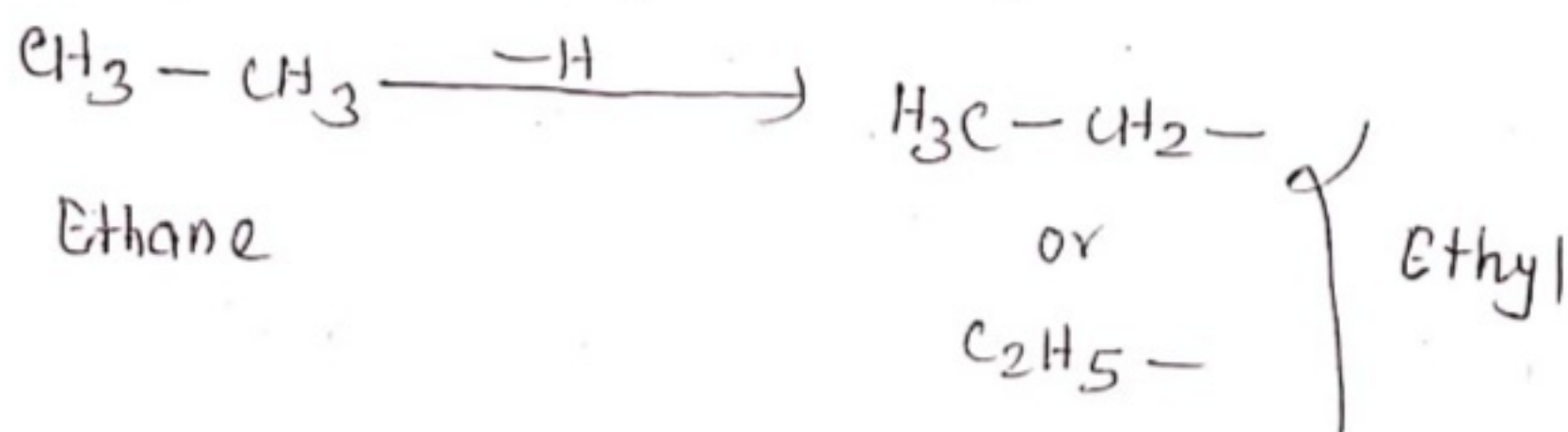
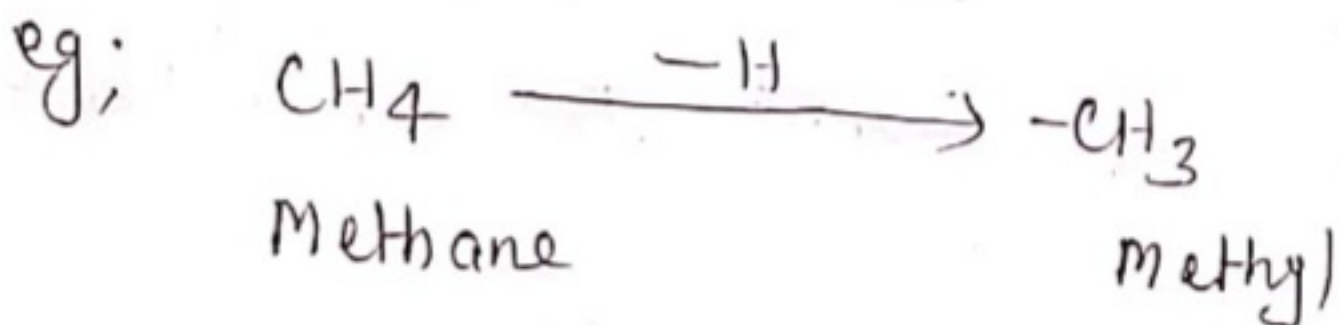
Common : Methylene chloride

IUPAC :- dichloromethane etc.

Alkyl group

4.

Group formed by removal of one Hydrogen from alkane is known as Alkyl group.



* Thus propane gives two types of propyl group: -

1. $\text{H}_3\text{C} - \text{CH}_2 - \text{CH}_2 -$ n-propyl
2. $\text{H}_3\text{C} - \underset{|}{\text{CH}} - \text{CH}_3$ iso-propyl

Continued..