## HALOALKANES AND HALOARENES NATURE OF CARBON-HALOGEN BOND

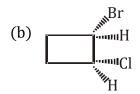
## **BONDING IN ALKYL HALIDE**

Table: Carbon halogen bond lengths

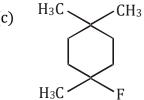
Bond	Bond length(Å)
CH <sub>3</sub> - F	1.39
CH <sub>3</sub> - Cl	1.78
CH <sub>3</sub> - Br	1.93
CH <sub>3</sub> - I	2.14

Classify the compound as a primary, secondary and tertiary halide Ex.

(a) (CH<sub>3</sub>)<sub>2</sub>CH-CH<sub>2</sub>Cl



(c)



- (d)  $CH_3 CH CH_2Cl$  $CH_3$
- (e) Isopentyl bromide
- (f) Neopentyl iodide

- (a) Primary Sol.
- (b) Secondary
- (c) Tertiary

- (d) Primary
- (e) Primary
- (f) Primary