

NTA → Abhyas

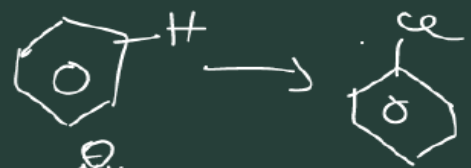
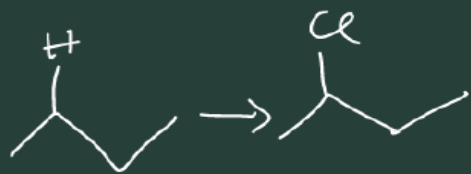
Test → ✓

NCERT → ✓

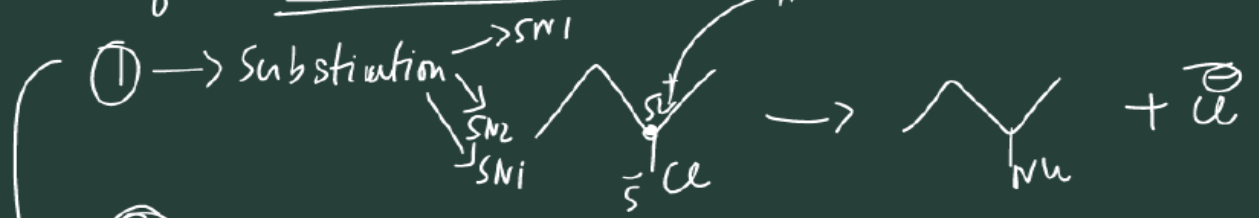
PYQs → ✓

Thu Sunday 1:15 | 1:15 | Sunday 2-4

Haloalkanes / Haloarenes

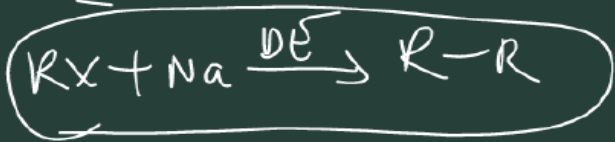


Rxn of ~~the~~ Haloalkanes



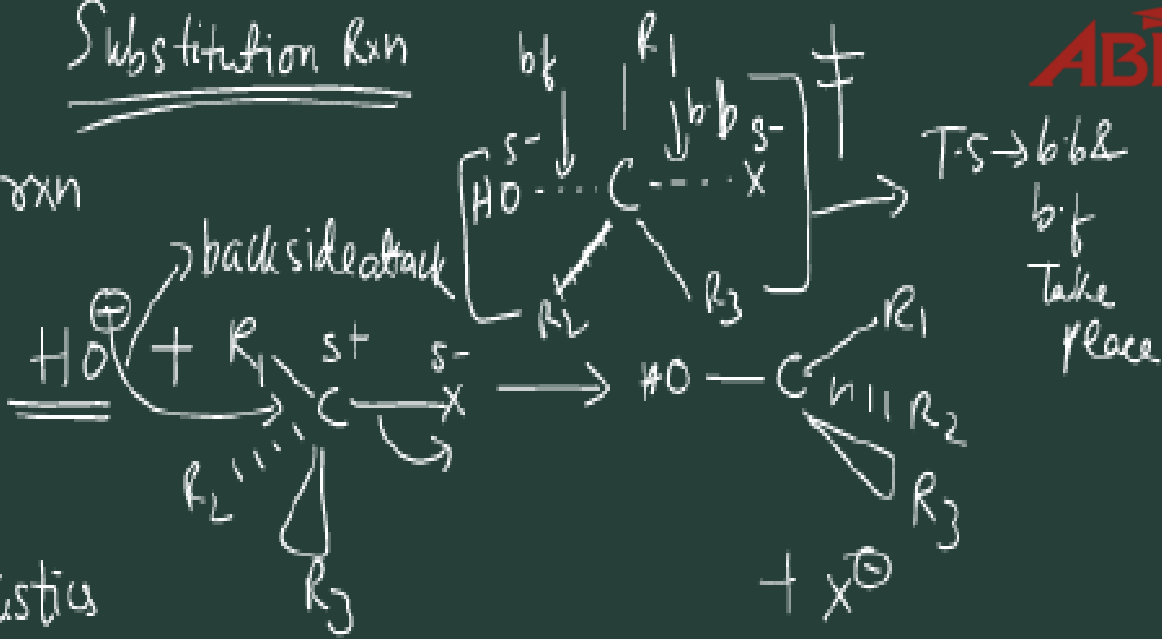
② Elimination \rightarrow E_1

③ Rxn with metals



Substitution Rxn

SN2 rxn
Substitution Nucleophilic Bimolecular



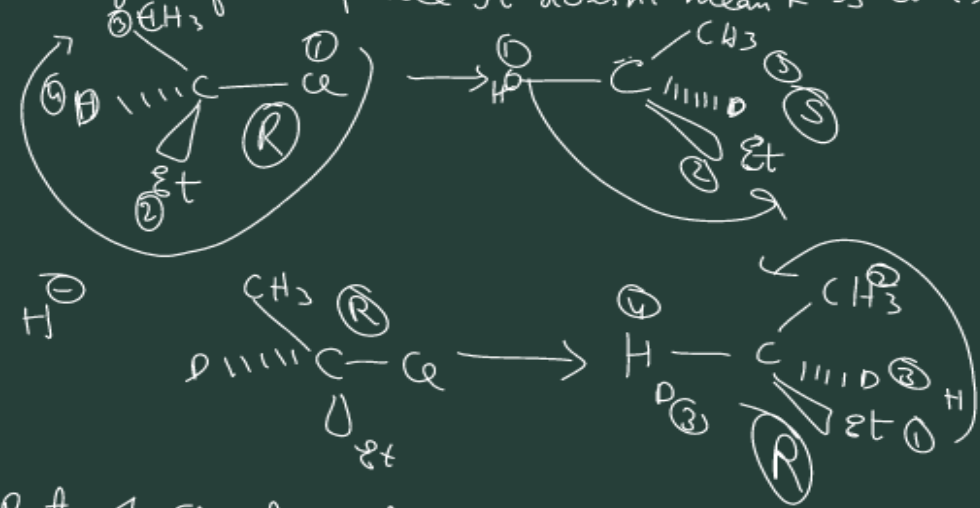
Characteristics

- 1) Single Step Rxn. No intermediate.
- 2) $r \propto [OH^-][R-X]$ order of rxn = 2 molecularity = 2
- 3) Attack of Nu & ~~le~~ departure of L.G take place simultaneously
- 4)

4) T.S is planar in S_N2 rxn. The initial sp^3 hybridised C is converted to sp^2 C in T.S. The Nu & L.G are attached to unhybridised p orbital.

5) The negative charge is spread in T.S

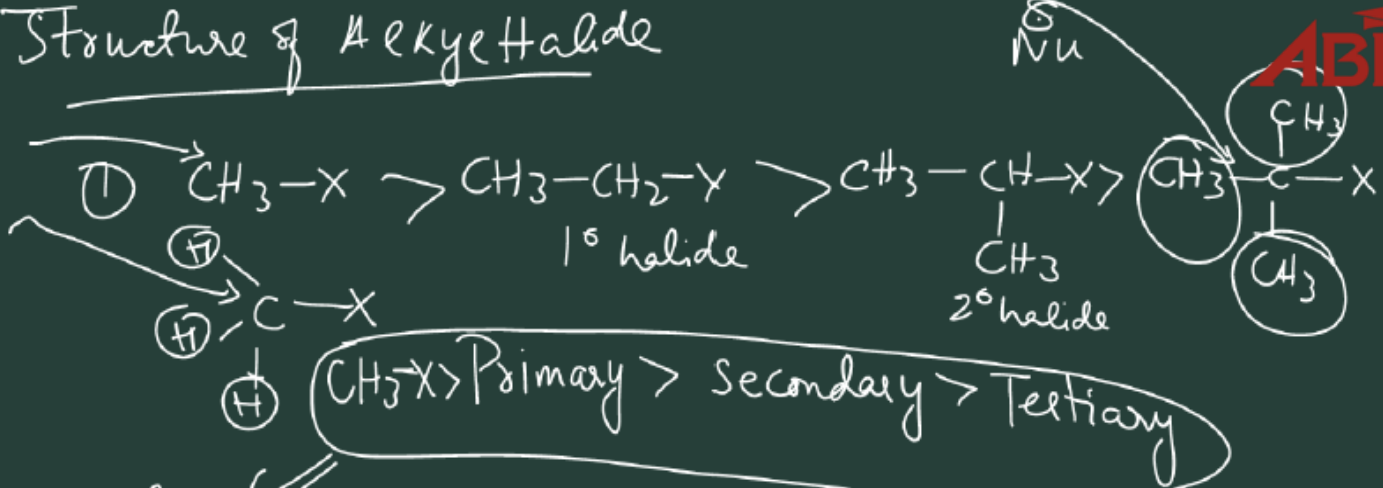
6) Inversion of config take place. It doesn't mean $R \rightarrow S$ or $d \rightarrow l$



Rate of S_N2 depends on

- ① Conc. of Nu⁻, Strength of Nu
- ② Conc. of R-X, Structure of Alkyl halide
- ③ L.G

Structure of Alkyl Halide



Reason \rightarrow Nu can't approach (difficult) 3° Carbon

② Presence of Adjacent $\text{C}=\text{C}$ or $\text{C}=\text{O}$ increase rate of $\text{S}_\text{N}2$

