

# General Organic Chemistry

GOC

(#) Let us consider A organic reaction



Each organic reaction involves Bond Breaking & Bond formation phenomenon.



# Bond Breaking / Bond Fission / Bond Cleavage!

There are two types of Bond Breaking

(1) Homolytic Bond Breaking: In such type of Bond Breaking Bonding electrons are equally distributed b/w bonding atoms so that

electrically neutral free radicals are obtained.



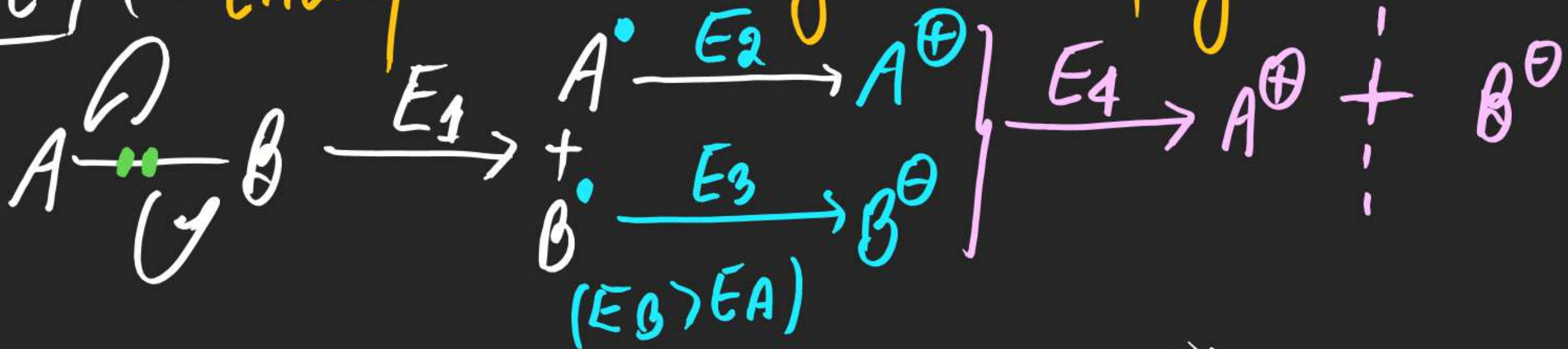
(No concern on  $E_A$  &  $E_B$ )



(#) Heterolytic Bond Breaking: In such kind of Bond Breaking Bonding  $e^-$  are shifted towards more electronegative atom so that Ions are obtained.



Note (i) Energy involved during Bond Breaking



$$\text{Total Energy} = E_1 + E_2 + E_3 + E_4$$

Bond  
Energy

Ionisation  
Enthalpy

Electron  
gain  
Enthalpy

Lattice  
Energy

paper  $\Rightarrow$  discuss

BB (70-100)

Sheet Ex-2

Remaining  
1