

Ans 4 Electromeric Effect -

- * Due to presence of ~~one~~ n electron in multiple bond the e^- of a bond are loosely held and easily polarisable.
- * The effect involving the complete transfer of shared pair of electrons to one of the atom joined by multiple bond in the requirement of adapting reagent is known as electromeric effect.

* This is a temporary effect and brought into play on the requirement of attacking reagent.

* The carbonyl carbon atom has partial positive charge and oxygen bearing partial negative charge due to greater electronegativity of oxygen.



* The electromeric effect is indicated by symbol E and is represented an arrow (\curvearrowright). The base of arrow indicates the original position of shared pair of electrons and head indicates the position where the e^- migrate.



* It is said to be +E when attacking reagent the e^- displacement is towards attacking reagent and -E when the e^- displacement is away from attacking reagent.



Qualitative list for Aliphatic Amine-

(i) Hinsberg reagent

It is a test for detection of primary, secondary and tertiary amines.

In this amine is shaken with Hinsberg reagent in presence of NaOH in form. A reagent containing an aqueous sodium hydroxide solution and benzenesulfonyl chloride is added to a substrate.

- * 1° amine — soluble sulfonamide salt
- 2° amine — insoluble sulfonamide salt
- 3° amine — not react, but insoluble

↓ HCl

soluble ammonium salt

