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B.Sc. Part I (Hons.)
Organic chemistry
Paper : IC
Topic : Carbanions.

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Carbanions :

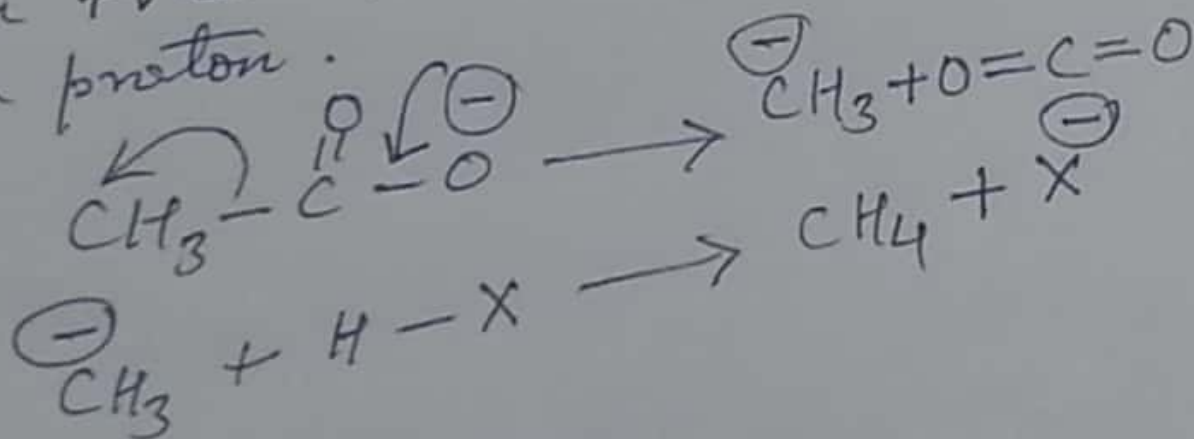
All the anions in which the negative charge is carried by a carbon are called carbanions.

For Example :

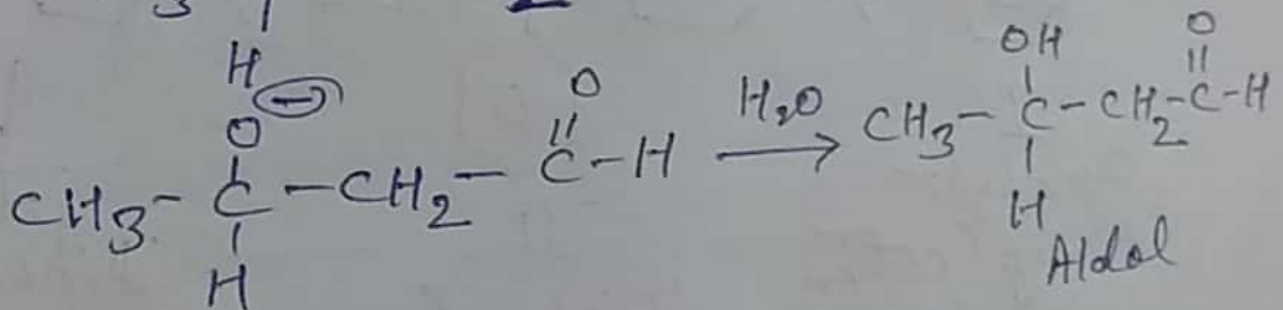
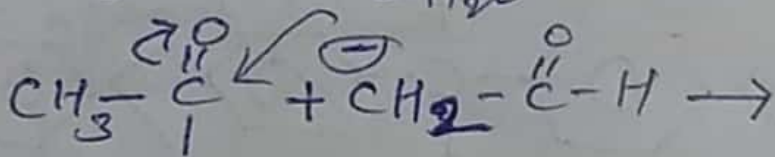
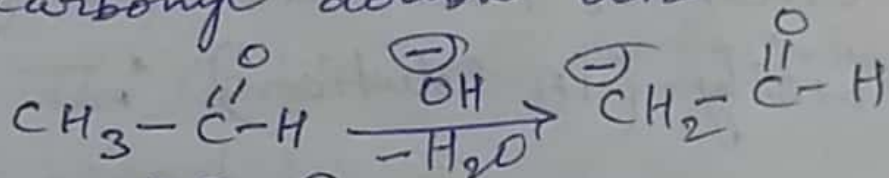
| | | |
|----------------------------|---------------------------|-----------------------------------|
| \ominus CH_3 | CH_3-CH_2 | $(\text{CH}_3)_3\text{C}^\ominus$ |
| Methyl Carbanion | Ethyl Carbanion | t-Butyl Carbanion. |

Reactions of Carbanions :-

The most common reaction of carbanions is combination with a +ve species (electrophile) usually a proton.



Carbanions frequently add to the carbonyl double bond



Usually, carbanions do not undergo rearrangements. However, some rearrangements involving allylic carbanions are known.