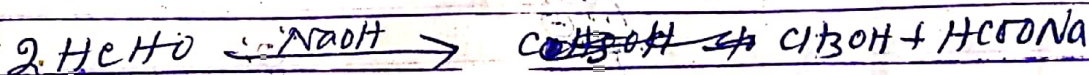
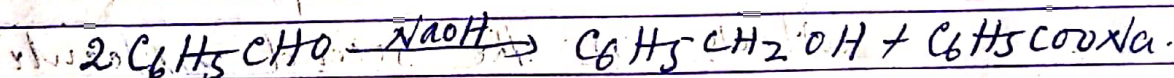


## CANNIZZARO REACTION.

The disproportionation of aldehyde which does not have  $\alpha$ -hydrogen i.e. Benzaldehyde,  $\text{HCHO}$  to acid and primary alcohol is known as Cannizzaro reaction.



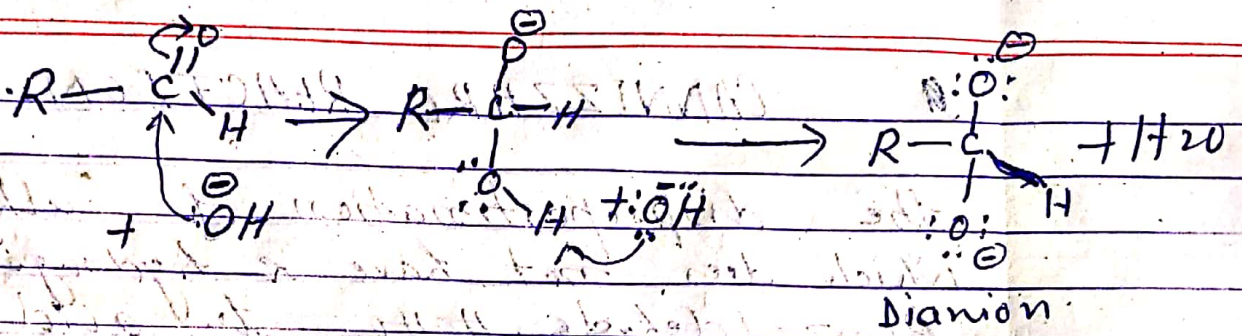
Here one molecule of aldehyde is oxidised to acid while the other molecule reduced to alcohol.

This oxidation-reduction reaction is called ~~disproportionation~~ disproportionation reaction.

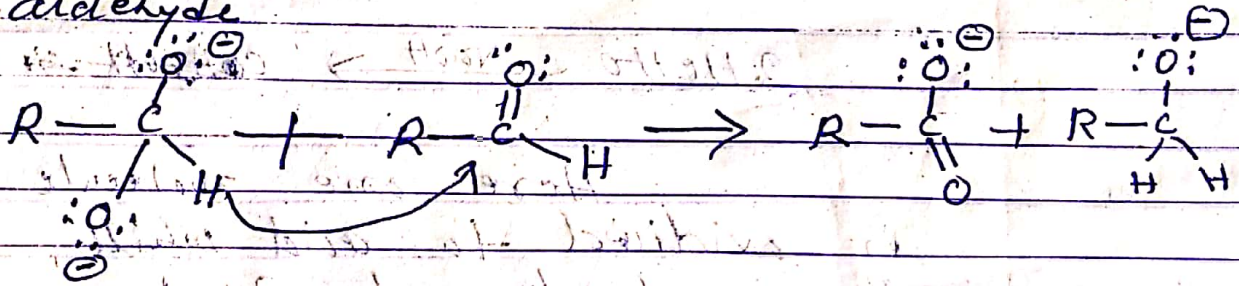
Mechanism :- Mechanism of Cannizzaro reaction is occurred in following steps.

1) 1st step - A nucleophile such as a hydroxide group attack the carbonyl group of aldehyde forming an anion carrying two negative charge due to disproportionation.





Second step - This dianion is an unstable anion which release hydride anion which (attack on) the second molecule of aldehyde



third step

