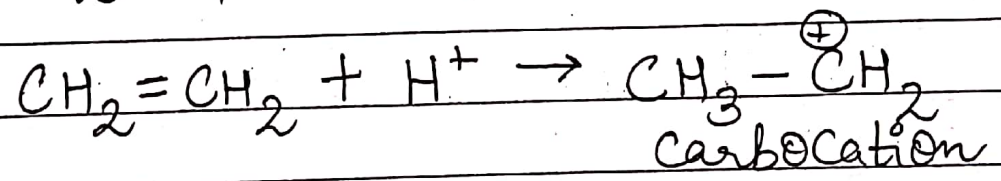
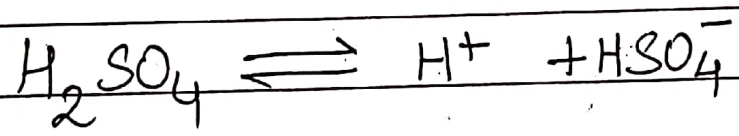


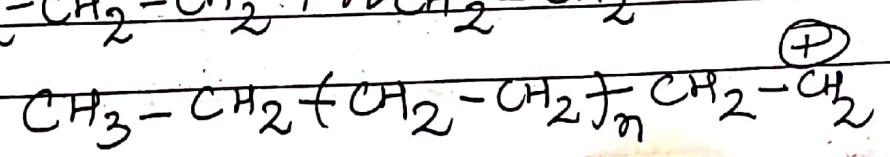
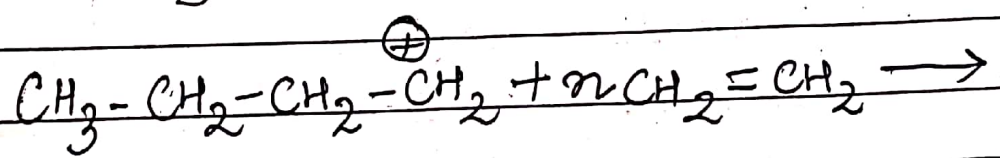
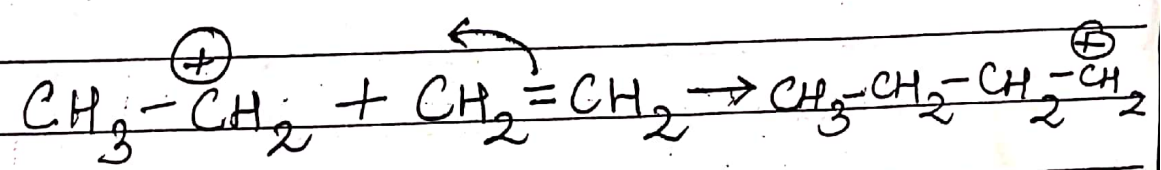
Mechanism of Ionic Polymerisation Or Cationic Polymerisation :-

In this process of polymerisation, reaction is initiated by acid catalysts such as H_2SO_4 , HF , BF_3 etc. In this process, following steps are involved.

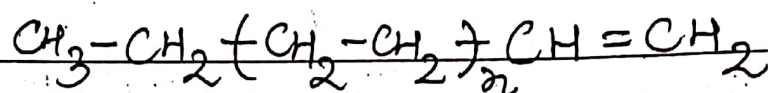
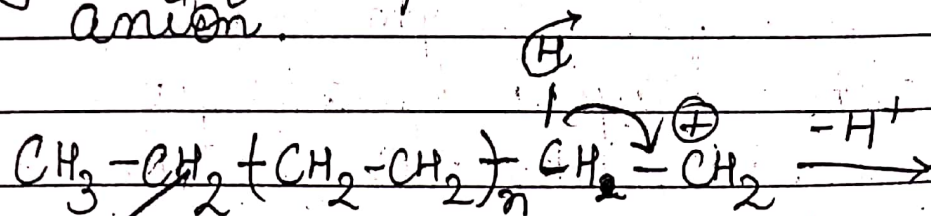
- ① Chain initiation \rightarrow Proton released from acid adds to the ~~carb~~ $C=C$ to give a stable Carbocation.



- ② Chain propagation \rightarrow The Carbocation adds to another molecule of alkene to produce a new Carbocation which can similarly add to another molecule of alkene and so on.



③ Chain Termination → The chain reaction can be stopped by loss of a proton or combination of anion.



Polymer

Synthesis of Polymers :-

(A) Polyvinyl chloride (PVC) :-

~~Monomer~~ → vinyl chloride $\text{CH}_2=\text{CH}-\text{Cl}$

Polymeric unit → $\left[\text{CH}_2-\underset{\text{Cl}}{\text{CH}} \right]_n$

~~Synthesis~~ It is an addition polymer of vinyl chloride.

