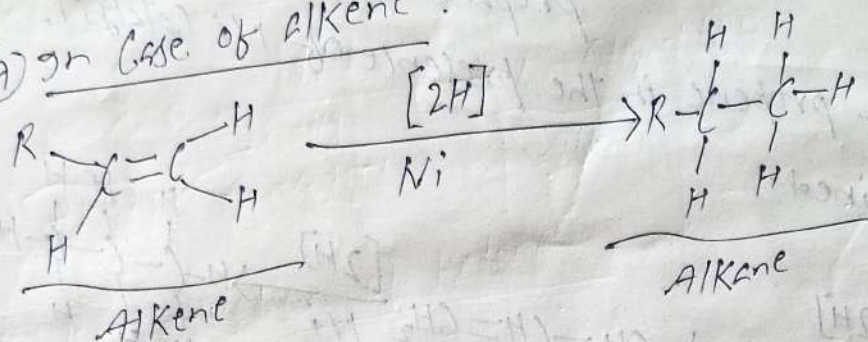


(5)

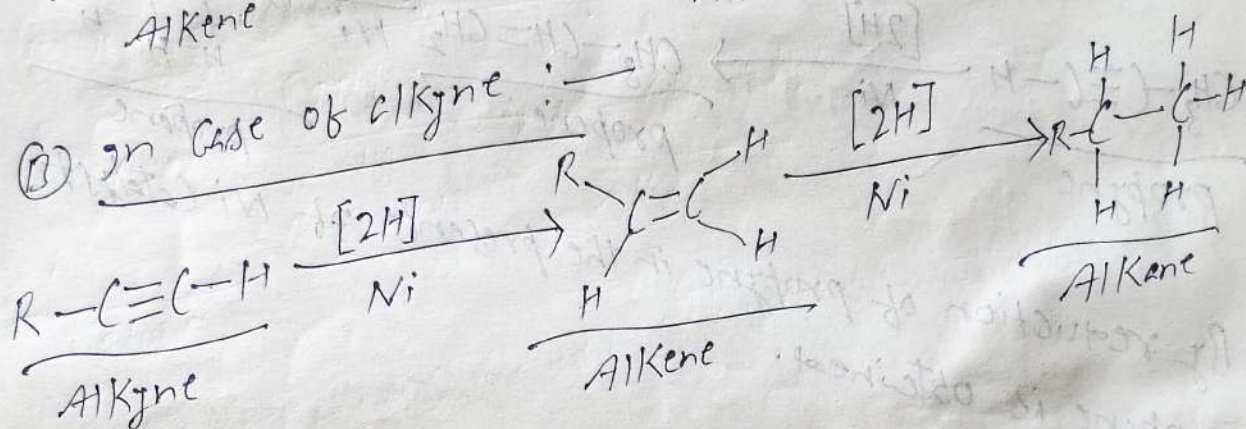
Sasateir and Samiren Reaction

By reduction of alkene or alkyne in the presence of Nickel Catalyst, alkane is obtained.

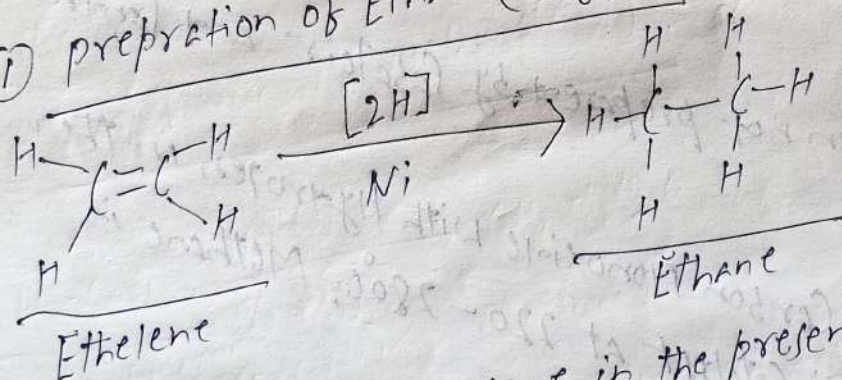
(A) In Case of alkene :-



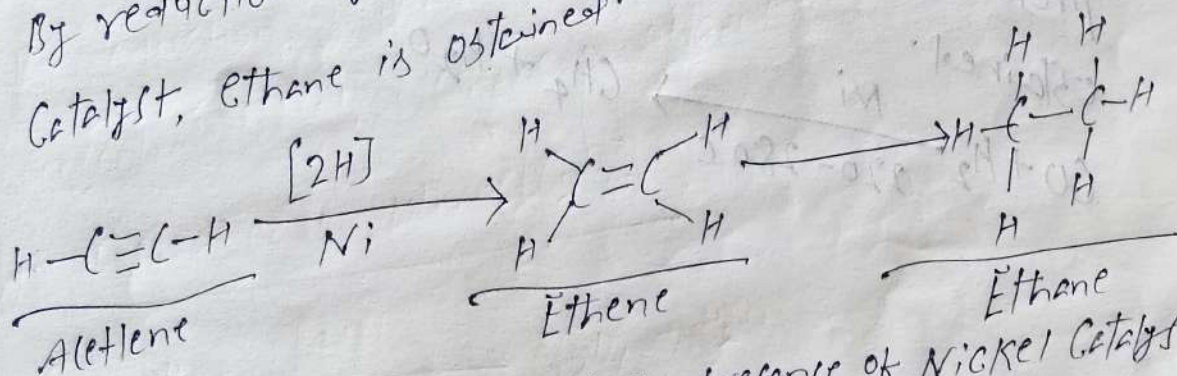
(B) In Case of alkyne :-



(i) preparation of Ethane (C_2H_6) :-



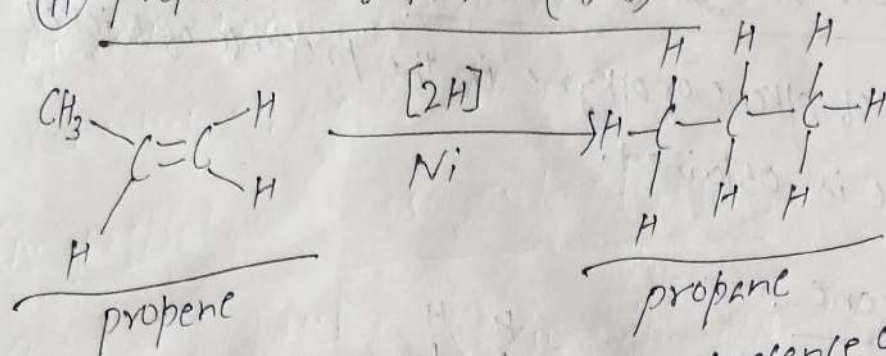
By reduction of ethelene in the presence of Nickel Catalyst, ethane is obtained.



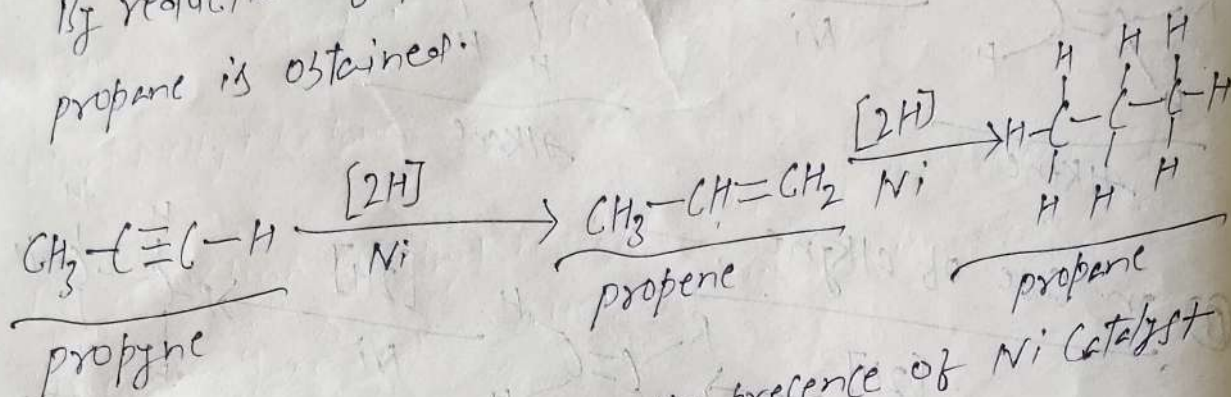
By reduction of acetlene in the presence of Nickel Catalyst
Ethane.

⑥

(ii) preparation of propane (C_3H_8) :—



By reduction of propene in the presence of Ni Catalyst, propane is obtained.



By reduction of propyne in the presence of Ni Catalyst, propane is obtained.

Note :—

(i) Methane can not prepared by Sabatier and Sanjoren reaction.

(ii) By passing Carbon Monoxide with Hydrogen in the presence of Ni Catalyst at $220 - 280^\circ\text{C}$, Methane is obtained.

