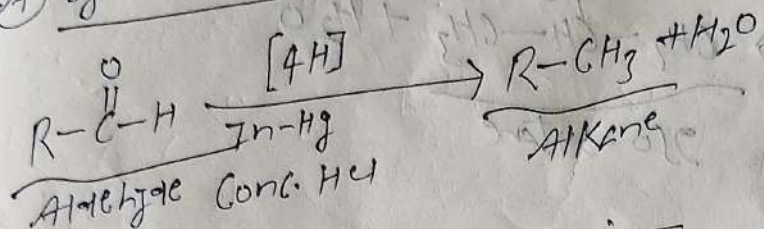


(7)

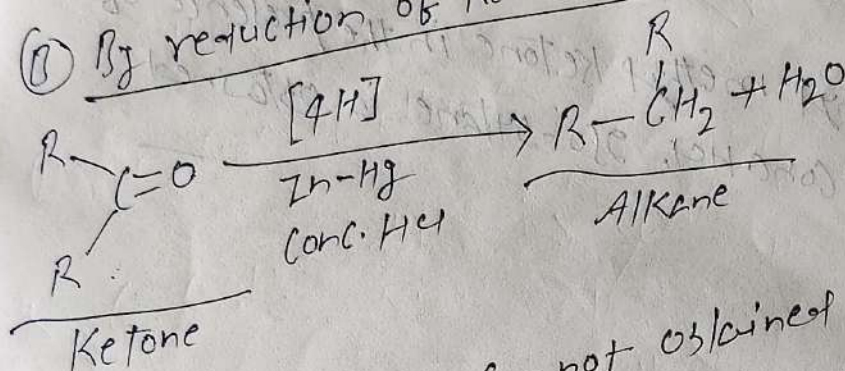
Clemenson Reaction

By the reduction of aldehyde and ketone in the presence of zinc-amalgam and concentrated HCl, alkane is obtained.

(A) By reduction of aldehyde :-

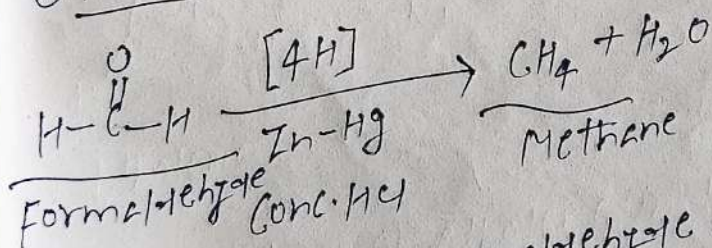


(B) By reduction of Ketone :-



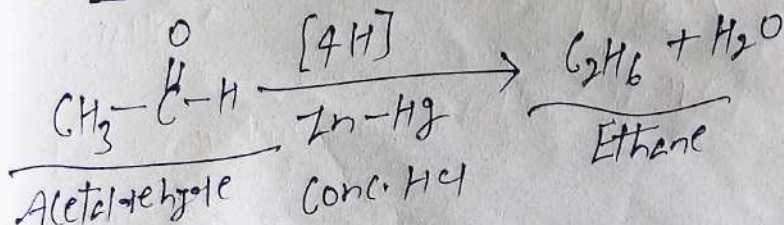
Methane and Ethane can not be obtained by reduction of ketone.

(i) preparation of Methane (CH₄) :-



By reduction of formaldehyde with zinc-amalgam and concentrated HCl, methane is obtained.

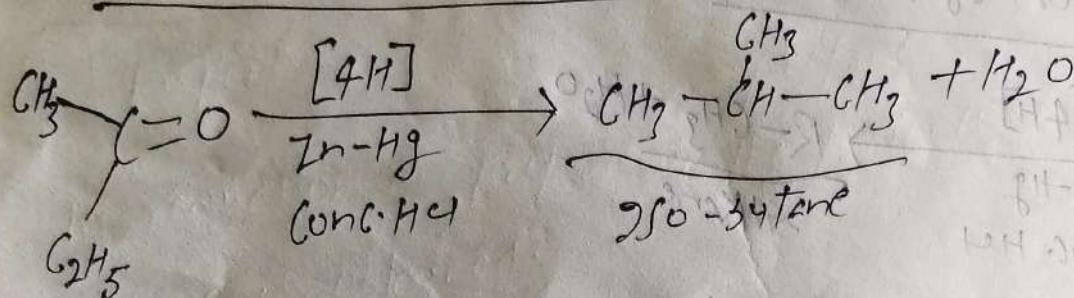
(ii) preparation of Ethane (C₂H₆) :-



8

By reduction of acetone with Zinc-amalgam and conc. HCl, ethane is obtained.

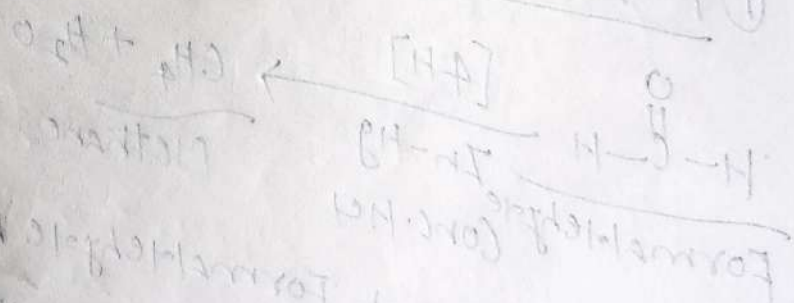
(iii) preparation of 2-methylbutane (C_5H_{12}):



Ethyl Methyl Ketone

By reduction of ethyl methyl ketone in the presence of Zinc-amalgam and conc. HCl, 2-methylbutane is obtained.

(i) preparation of Methyl Ethyl Ketone:



By reduction of Methyl Ethyl Ketone with concentrated HCl, Methyl Ethyl Ketone is obtained.

(ii) preparation of Ethyl Methyl Ketone:

