

Alkane

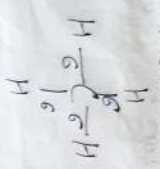
- (i) General Formula C_nH_{2n+2}
Where n = number of Carbon.
- (ii) Carbon-Carbon Single bond.
- (iii) only Sigma bond present.
- (iv) Alkane is also known as paraffins.
(para - little, affix - reactive).

Sigma bond :

Sigma bond can be formed by axial overlapping of orbital.



Methane CH_4



No. of C bonds = 4

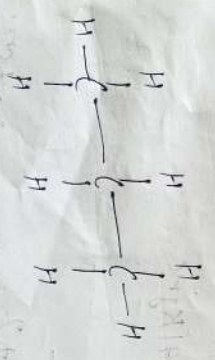
$n=2$

Ethane C_2H_6



$n=3$

Propane C_3H_8



$n=4$

Butane C_4H_{10}

