* No. of covalent bond (–, =, ≡) for
H = 1, O = 2, N = 3 C = 4.

⇒ Valence electron from IA = 1, IIA = 2
IIIA = 3, IVA = 4, VA = 5, VIA = 6,
VIIA = 7, Zero group / inert gas = 8.

⇒ Valency for 1A = 1, IIA = 2, IIIA = 3,
IVA = 4, VA = 8 - 5 = 3, VIA = 8 - 6 = 2,
VIIA = 8 - 7 = 1, & Zero group / inert
gas = 8 - 8 = 0.

⇒ Bonding electron :→ Those Those
electron which make bond.

⇒ None bonding electron or Lone pair
electron :– Those electron which does
not take part in bond formation

⇒ Free radicals :– Odd electron (3, 5, 7)
eg $C^{\odot}$ ← F.R

⇒ In Single bond (–) One σ in
double bond (=) 1σ + 1π in
triple bond 1σ + 2π.

⇒ Structure formula :→ Those formula
in which no. of covalent bond

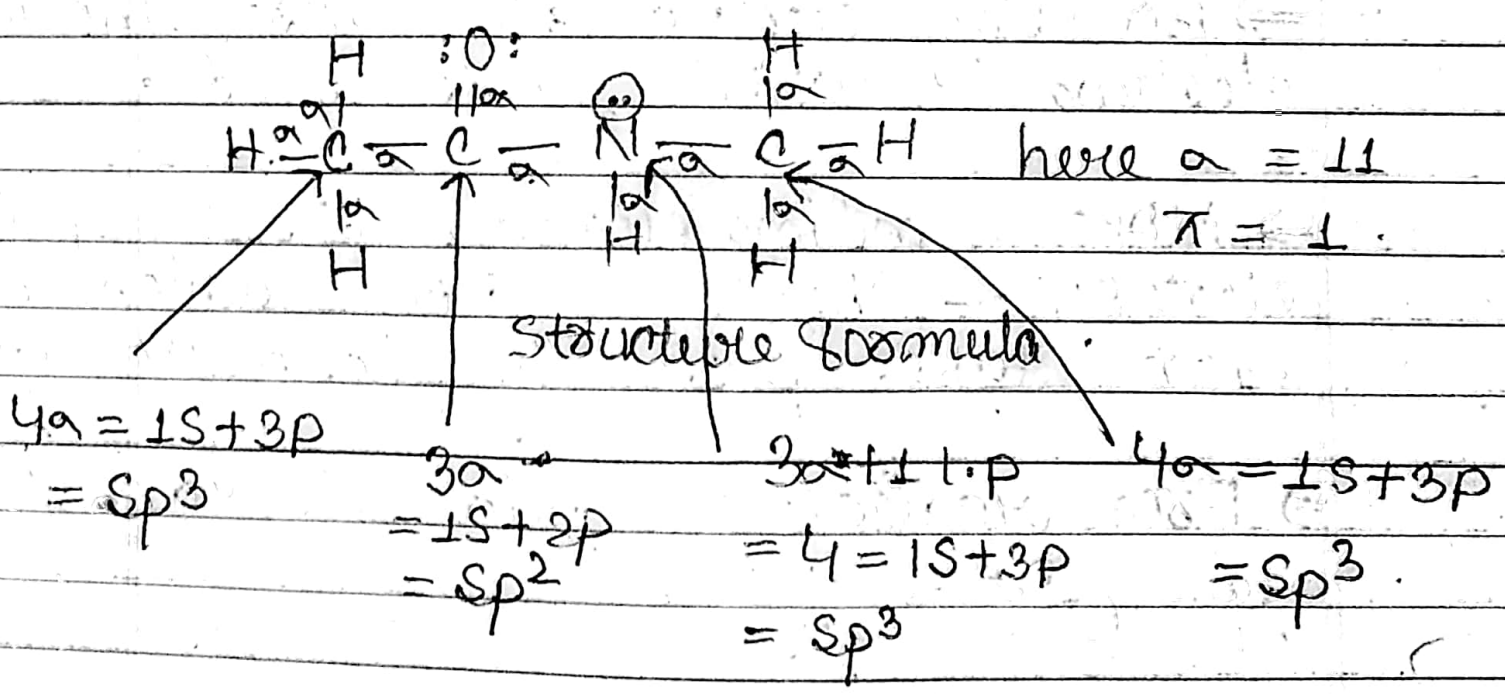
Seen clearly.

⇒ Hybridisation:⇒ No. of σ bond + no. of lone pair ⊙ + no. of free radical ⊙.

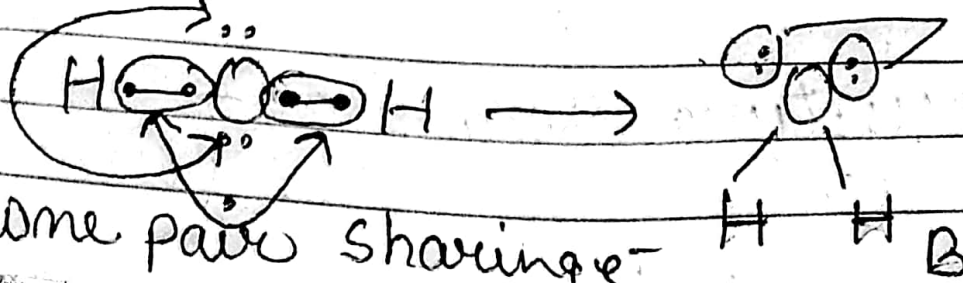
⇒ 9n, S, Subshell Only one Orbital in P, 3 in d, 5 ~ in F, 7.

S	P	d	F
↓	↓	↓	↓
1	3	5	7.

eg:- $CH_3CONHCH_3$ →



→ H_2O → valence electron of H = 1
O = 6



⇒ % of orbitals = No. of orbitals whose % we want

No. of orbitals whose % we want / Total no. of orbit × 100

eg in sp^2 % of s = $\frac{1}{1+2} \times 100$

$= \frac{1}{3} \times 100 = 33.33\%$

in sp^2 % of p = $\frac{2}{1+2} \times 100 =$

$= \frac{200}{3} = 66.67\%$.

Always more S% atom gain electron & show negative charge (-q) while less S% atom lose e⁻ & Show +q.

→ Electronegativity :—

Tendency of an atom to take bonded electron towards itself.

Always more E.N atom gain electron & show -q while less E.N atom lose electron & Show +q.

E.N value →

F = 4, O = 3.5, N = 3, Cl, Br, I, S = 2.8

C = 2.5, H, P = 2.1, S-block = 0.9,

d-block = 2.