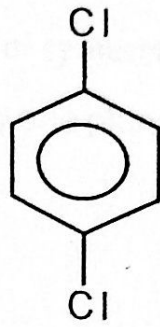
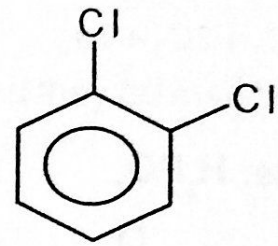


Example:

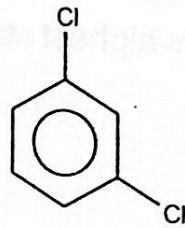


$$D_{2h} = C_2 + 2C_2 + 2\sigma_v + \sigma_h$$



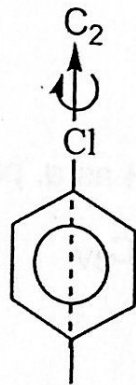
$$C_{2v} = C_2 + 2\sigma_L + h$$

Example:



$$C_{2v} = C_2 + 2\sigma_v$$

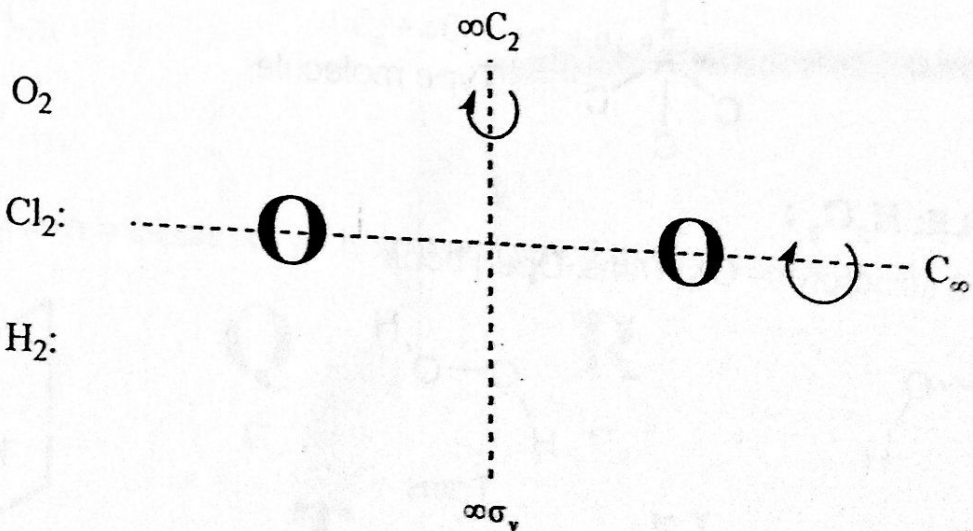
Example:



molecule is planar

$$C_{2v} = C_2 + 2\sigma_v$$

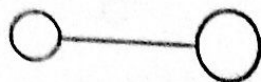
HOMODIATOMIC MOLECULE :



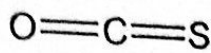
$$C_\infty + \infty C_2 + \infty \sigma_v + \sigma_h = D_{\infty h}$$

HETERODIATOMIC MOLECULE

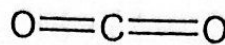
HCl :



$$C_{\infty} + \infty\sigma_v = C_{\infty v}$$

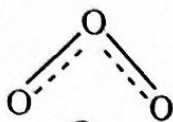


$$C_{\infty v}$$



$$D_{\infty h}$$

OZONE



$$C_{2v}$$

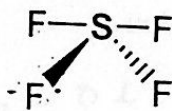
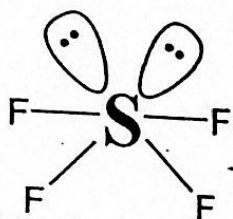
I_3

linear

$$D_{\infty h}$$

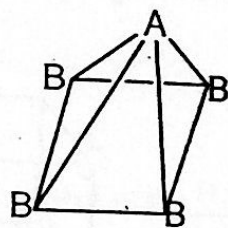
Example:

$SF_4 : C_{2v}$



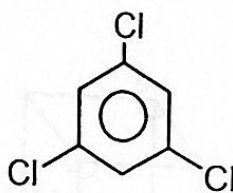
Point group C_{2v}

Example:

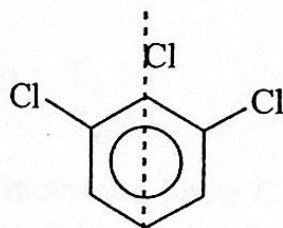


Square planar

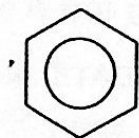
$$C_4 + 4\sigma_v = C_{4v}$$



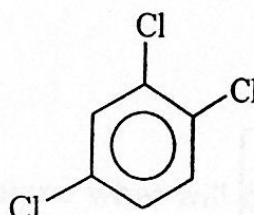
$$C_3 + 3C_2 + 3\sigma_v + \sigma_h = D_{3h}$$



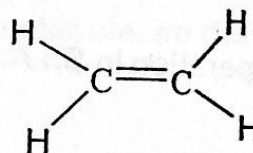
$$C_{2v} = C_2 + 2\sigma_v$$



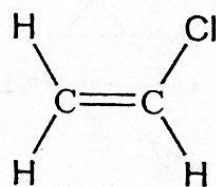
$$C_6 + 6C_2 + 6\sigma_v + \sigma_h = D_{6h}$$



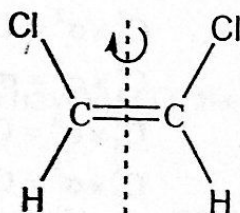
$$C_s$$



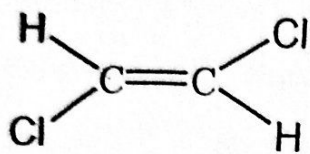
$$C_2 + 2C_2 + 2\sigma_v + \sigma_h = D_{2h}$$



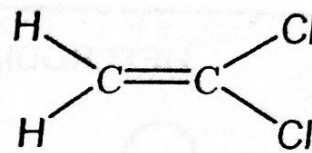
$$C_s$$



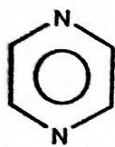
$$C_2 + 2\sigma_v = C_{2v}$$



$$C_2 + \sigma_h = C_{2h}$$



$$C_2 + 2\sigma_v = C_{2v}$$



$$D_{2h} = C_2 + 2C_2 + 2\sigma_v + \sigma_h$$