Question 5 b (v)

Predict the molecular geometry, bond angle, polarity and type of IMF of the $SnCl_2$

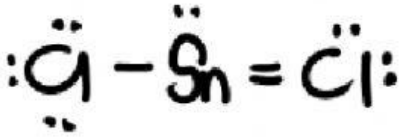


i) Total Valence Electron:____

ii) Calculate the formal charge and choose the correct Lewis structure of **$SnCl_2$** _____



(A)



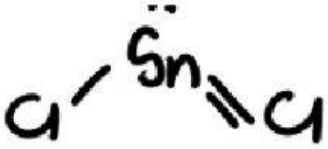
(B)

iii) Number of electron pair arrangement at central atom Sn: _____ **bonding pairs** e + _____ lone pair e.

Basic shape of the molecule:_____

iv) VSEPR: Lone pair- bonding pair repulsion >> bonding pair-bonding pair repulsion.

v) State the shape of molecule: _____
and choose the correct molecular geometry of **CCl_4** __



(D)



(E)



(F)

LIVEWORKSHEETS

vi) Every Cl-Sn-Cl bond angle is less than _____ °



vii) _____is more electronegative than _____

viii) Dipole moment _____cancel each other.

ix) Net dipole moment($\mu \neq 0$)

x) Therefore, it is a _____ molecule.

xi) Intermolecular forces in $SnCl_2$: _____

Note:

Hydrogen bond = HB

Dipole-dipole force= DDF (for polar compound)

London Dispersion forces = LDF (for non-polar compound)

LIVEWORKSHEETS