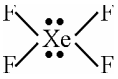
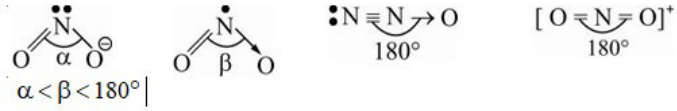
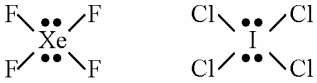
76.(C) Rest all are tetrahedral, whereas XeF_4 is square planar. 

77.(A) 

$\alpha < \beta < 180°$

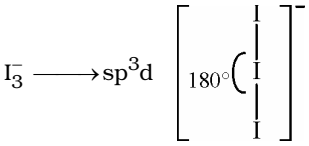
78.(B) $SnCl_2$ and O_3 : angular in shape.

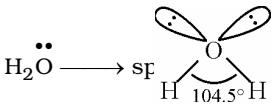
79.(D) All are sp^2 hybridized without any lone pair

80.(C) 

81.(B) In N_2, there is triple covalent bond $[N \equiv N]$.

82.(ABD) NaCl is ionic in nature and ionic bonds are non-directional



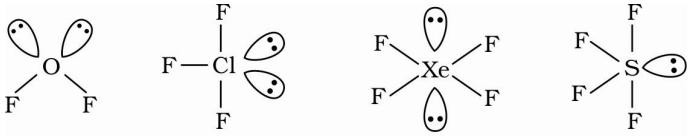


Due to steric hindrance in CCl_4, C – Cl bond weakens as compared to Na – Cl bond.

83.(ABCD) $SF_4 \longrightarrow$ Hybrid = 5, sp^3d (one lone pair) ; $BrCl_3 \longrightarrow$ Hybrid = 5, sp^3d (two lone pair)

$XeOF_2 \longrightarrow$ Hybrid = 5, sp^3d (two lone pair) ; $BrF_3 \longrightarrow$ Hybrid = 5, sp^3d (two lone pairs)

84.(ABC) SF_4 has only one lone pair of electrons on central atom S.



OF_2 ClF_3 XeF_4 SF_4

85.(A) $BCl_3 \longrightarrow sp^2$, trigonal planar ; $NH_4^+ \longrightarrow sp^3$, tetrahedral ; $CH_4 \longrightarrow sp^3$, tetrahedral