Date Planned : __ / __ / __	Daily Tutorial Sheet-11	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Numerical Value Type	Exact Duration :_____

126. Total number of molecules which can be hydrolysed at room temperature and hybridization of central atom is sp^3d in transition state : CCl_4, $SiCl_4$, NCl_3, PCl_3, $AsCl_3$, SF_6, P_4O_6, P_4O_{10}, SeF_6

127. The difference between total number of lone pairs and total number of σ-bonds in $[B_3O_3(OH)_6]^{3-}$ molecular ion is:

128. Borazine is converted into a distribution product $B_3N_3H_4X_2$(p). Number of isomers of p would be:

129. Consider the structure of Al_2Me_6 compound and find the value of $\frac{x-y}{z}$.

Where x = Maximum number of atoms that can lie in plane having terminal $(Al-Me)$ bonds.

y = Total number of $3c-2e^-$ bonds.

z = Total number of atoms that are sp^3 hybridized.

130. Find the value of x in the tremolite asbestos : $Ca_2Mg_x(Si_4O_{11})_2(OH)_2$

131. Consider the following silicates

(a) $BaTi(Si_3O_9)$ **(b)** $ZnCa_2Si_2O_7$

Calculate $X \div Y$, where X is sum of O atoms in both molecules having one bond only and Y is sum of O atoms in both molecules having two bonds only

132. Consider $Al_2(OH)_6$ compound and calculate the value of $(X+Y) \div Z$

Where X = Total number of $(2c-2e^-)$ bond.

Where Y = Total number of $(3c-2e^-)$ bond.

Where Z = Total number of $(3c-4e^-)$ bond.

133. Number of hydroxyl groups present in $H_4P_2O_6$ are :

134. Consider the following species :

(i)	CH_3^+	**(ii)**	$(C_3H_5)_3Al$	**(iii)**	HCHO	**(iv)**	CH_4
(v)	$(C_2H_5)_3N$	**(vi)**	$TiCl_4$	**(vii)**	CO_2	**(viii)**	$SiCl_4$
(ix)	BF_3						

Find out total number of species which can act as Lewis acid.

135. Consider the following species CF_4, GeH_4, BCl_3, $AlBr_3$, H_2O, PH_3, PCl_5, CO_2, CH_4 and calculate value of $(x-y)^2$.

Where, x : Total number of species which can act as only Lewis acid.

y : Total number of species which can act as Lewis acid as well as Lewis base.

136. In the given reaction the value of x is_____. $B + x\,HNO_3 \longrightarrow H_3BO_3 + x\,NO_2$

137. In borazine, the number of delocalized electrons are_____.

138. The number of bridge chlorine in Al_2Cl_6 is_____.

139. In borax number of sp^2 hybridised atoms are_____.

140. One mole aluminium carbide reacts with water to given _____ moles of methane.