Date Planned : __ / __ / __	Daily Tutorial Sheet-15	Expected Duration : 30 Min
Actual Date of Attempt : __ / __ / __	Level-3	Exact Duration :_____

159. Central atom may exhibits sp^3 hybridisation in how many of the following species :

(a) CO_2 **(b)** Graphite **(c)** Diamond

(d) CO **(e)** $H_3BO_3(aq)$ **(f)** Zeolites (Si-central)

(g) Silicones (Si) **(h)** Chlorosilane (Si) **(i)** Borax (Boron)

(j) Al_2Cl_6 **(k)** B_2H_6 **(m)** SiO_2(solid)

(n) $COCl_2$

160. $Mg + B \longrightarrow Mg_xB_y \xrightarrow{HCl}$ Diborane

Report your answer as $(x + y)$.

161. How many compounds form acidic solution when dissolved in water
H_3PO_4, H_3BO_3, $Na_2B_4O_7 \cdot 10H_2O$, $H_3P_3O_9$, BF_3, $SiCl_4$, PbO, CO

162. Among H_3BO_3, $AlCl_3$, BF_3, B_2H_6, $Li[BH_4]$, AlF_6^{3-}, $[BH_4]^-$; the number of Lewis acids are :

163. In which of compounds octet is complete and incomplete for all atoms : (C for complete octet and IC for incomplete octet)

	Al_2Cl_6	$Al_2(CH_3)_6$	AlF_3	Be_2Cl_4	Be_2H_4
(A)	IC	IC	IC	C	C
(B)	C	IC	IC	C	C
(C)	C	IC	C	IC	IC
(D)	IC	C	IC	IC	IC

164. In which of the following compound B-F bond order is maximum ?

(A) BF_3 **(B)** BF_4^- **(C)** $F_3B \leftarrow NH_3$ **(D)** $F_3B \leftarrow N(CH_3)_3$