INDIAN SCHOOL MUSCAT
DEPARTMENT OF CHEMISTRY

CLASS- 11 WORKSHEET-11

THE P-BLOCK ELEMENTS

1	Give reasons: a) There is gradual increase in electro negativity from Al to Tl. b) Boron does not form $[BF_6]^{3-}$ ion. c) BCl_3 is more stable than $TlCl_3$. d) PbI_4 does not exist. e) $PbCl_4$ decomposes easily on heating. f) Aluminium vessels should not be used to store water. g) Al is used in making alloys for aircraft industry. h) Boric acid forms polymeric structure. i) Si does not form graphite like structure. j) Fullerenes are the purest forms of carbon. k) CCl_4 cannot be hydrolysed. l) CO is highly poisonous.
2	Describe with suitable examples: a) Zeolites b) Metal carbonyl c) allotropes
3	What happens when? a) Diborane is heated with ammonia b) Borax is dehydrated c) Boric acid is heated
4	Explain the structures of: a) Boric acid b) Fullerene c) Diborane
5	How are silicones prepared? Give its uses.

6	Compare the structure of: a) Graphite and diamond. b) SiO_2 and CO_2.
7	Give uses of: Boron fibre, Boron isotope ($_{10}B$), Borax, Carbon-14, Graphite fibre, Carbon black, Quartz and Silica gel.
8	Complete and balance the equations: a. $B + O_2 \rightarrow$ b. $B + N_2 \rightarrow$ c. $Al + NaOH + H_2O \rightarrow$ d. $BF_3 + NH_3 \rightarrow$
9	Give the method of preparation of $LiBH_4$
10	A salt A, gives the following results : a. It aqueous solution is alkaline to litmus b. It swells up to a glassy material B on strong heating. c. When conc. H_2SO_4 is added to a hot solution of A, white crystals an acid C separates out. Write equations for all the above reactions and identify A, B and C.