

Date Planned : __ / __ / __	Daily Tutorial Sheet-5	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	JEE Advanced (Archive)	Exact Duration : _____

61. What happens when sulphur is precipitated in the reaction of hydrogen sulphide with sodium bisulphite solution ? (1991)
62. Complete and balance the chemical reaction :
Red phosphorus is reacted with iodine in presence of water.
 $P + I_2 + H_2O \rightarrow \dots\dots\dots + \dots\dots\dots$ (1992)
63. Give reason : Bond dissociation energy of F_2 is less than that of Cl_2 . (1992)
64. Complete and balance the chemical reaction : $NH_3 + NaOCl \rightarrow \dots\dots\dots + \dots\dots\dots$ (1993)
65. The major role of fluorspar (CaF_2), which is added in small quantities in the electrolytic reduction of alumina dissolved in fused cryolite (Na_3AlF_6), is : (1993)
- (A) as a catalyst
(B) to make the fused mixture very conducting
(C) to lower the temperature of the melt
(D) to decrease the rate of oxidation of carbon at the anode
66. The material used in the solar cells contains : (1993)
- (A) Cs (B) Si (C) Sn (D) Ti
67. **Statement-1** : Although PF_5 , PCl_5 and PBr_5 are known, the pentahalides of nitrogen have not been observed.
Statement-2 : Phosphorus has lower electronegativity than nitrogen. (1994)
- (A) Statement-1 is True, Statement-2 is True; Statement-2 is a correct explanation for Statement-1
(B) Statement-1 is True, Statement-2 is True; Statement-2 is NOT a correct explanation for Statement-1
(C) Statement-1 is True, Statement-2 is False
(D) Statement-1 is False, Statement-2 is True
68. H_2SO_4 cannot be used to prepare HBr from NaBr as it : (1995)
- (A) reacts slowly with NaBr (B) oxidises HBr
(C) reduce HBr (D) disproportionates HBr
69. In P_4O_{10} each P-atom is linked with O-atom. (1995)
- (A) 2 (B) 3 (C) 4 (D) 5
70. Give reaction : the experimentally determined N – F bond length in NF_3 is greater than the sum of the single bond covalent radii of N and F. (1995)
71. Given reason : Mg_3N_2 when reacted with water gives off NH_3 but HCl is not obtained from $MgCl_2$ on reaction with water at room temperature. (1995)
72. Give reason : $(SiH_3)_3N$ is a weaker base than $(CH_3)_3N$. (1995)

73. KF combines with HF to form KHF_2 . The compound contains the species : (1996)
- (A) K^+ , F^- and H^+ (B) K^+ , F^- and HF
(C) K^+ and $[\text{HF}_2]^-$ (D) $[\text{KHF}]^-$ and F^-
74. Which of the following statements is correct for CsBr_3 ? (1996)
- (A) It is a covalent compound
(B) It contains Cs^{3+} and Br^- ions
(C) It contains Cs^+ and Br_3^- ions
(D) It contains Cs^+ , Br^- and lattice Br_2 molecule
75. Hydrolysis of one mole of peroxodisulphuric acid produces : (1996)
- (A) two moles of sulphuric acid
(B) two moles of peroxomonosulphuric acid
(C) one mole of sulphuric acid, one mole of peroxomonosulphuric acid
(D) one mole of sulphuric acid, one mole of peroxomonosulphuric acid and one mole of hydrogen peroxide