

Daily Tutorial Sheet 5 Level – 1

- **61.(A)** Fluoro apatite is  $3Ca_3(PO_4)_2 \cdot CaF_2$ .
- **62.(D)** Order of bond dissociation enthalpy  $Cl_2 > F_2 > Br_2 > I_2$
- **63.(B)** conc.  $HNO_3$  is yellow coloured liquid due to presence of dissolved  $NO_2$ .
- 64.(D)
- **65.(D)** Order of reactivity of halogen is  $F_2 > Cl_2 > Br_2 > I_2$ .

**66.(B)** 
$$\begin{array}{ccc} \text{PCl}_5 + \text{H}_2\text{O} & \longrightarrow & \text{POCl}_3 + 2\text{HCl} \\ \text{(A)} & \text{(B)} & \text{(B)} \end{array}$$
 
$$\begin{array}{ccc} \text{POCl}_3 + 3\text{H}_2\text{O} & \longrightarrow & \text{H}_3\text{PO}_4 + 3\text{HCl} \\ \text{(B)} & \text{(C)} & \text{(C)} \end{array}$$

- **67.(D)**  ${}^{\bullet\bullet}PH_3+H^+\longrightarrow PH_4^+$  Bond angle of  $PH_3$  is almost 90°. So, lone pair of P resides in almost pure s-orbital.
- **68.(A)**  $F^-$  can-not be oxidized by  $MnO_2$  because  $F_2$  is strongest oxidizing agent.
- **69.(D)** He is used in gas-cooled nuclear reactors.
- 70.(A) Xenon is most easily liquefiable gas because of stronger intermolecular forces.
- **71.(D)** Metals that not reacts with most of the reagent are called noble metals.
- **72.(C)** All orbitals of inner shell and valence shell are filled and having  $ns^2 np^6$  configuration for valence shell.
- **73.(A)** All the noble gases (except He) are adsorbed on the surface of coconut charcoal. Being light, He is not adsorbed. Ne is also less adsorbed on coconut charcoal.
- 74.(C) The electrical resistance of He is zero and it is used as super conducting liquid.
- **75.(D)** Noble gases are adsorbed by activated coconut charcoal.