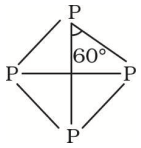
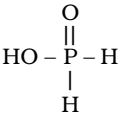
16.(D) Extra pure N_2 is obtained by thermal decomposition of azide salt such as NaN_3, $Ba(N_3)_2$ etc :

17.(B) $5CO + I_2O_5 \longrightarrow 5CO_2 + I_2$

$I_2 + 2Na_2S_2O_3 \longrightarrow 2NaI + Na_2S_4O_6$

18.(B) $NCl_3 + H_2O \longrightarrow NH_4OH + HOCl$

19.(B) P_4 ; 

20.(B) H bonded to phosphorus are non-ionisable 

21.(B) Diprotic acid forms two series of salts.

$H_3PO_2 \rightarrow$ Monoprotic or Monobasic ; $H_3PO_3 \rightarrow$ Diprotic or Dibasic

$H_3PO_4 \rightarrow$ Triprotic or Tribasic ; $H_4P_2O_7 \rightarrow$ Tetraprotic or Tetrabasic

22.(C) Ammonia is manufactured by Haber's process. Catalyst in this process is iron having K_2O and Al_2O_3.

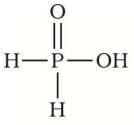
23.(D) $NH_3 + 3Cl_2 \longrightarrow NCl_3 + 3HCl$.

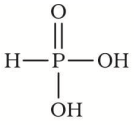
24.(C) $4Zn + 10HNO_3 \xrightarrow[\text{cold, dil}]{} 4Zn(NO_3)_2 + NH_4NO_3 + 3H_2O$.

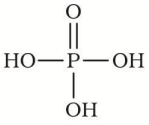
25.(A) Group 15 elements are called as pnicogens.

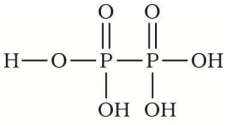
26.(B) $3Cu + 8HNO_3 \longrightarrow 3Cu(NO_3)_2 + 2NO + 4H_2O$.

27.(A) Oxyacid having P – H bond.


Monobasic
Reducing


Dibasic
Reducing


Tribasic


Tetrabasic

28.(A) dil. HNO_3 produce NO when reacts with weak reducing agent like Pb.

29.(C) $CaCN_2 + 3H_2O \longrightarrow CaCO_3 + 2NH_3$.

30.(B)