

Date Planned : __ / __ / __	Daily Tutorial Sheet-10	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration : _____

116. Which of the following equation is incorrectly written ?

- (A) $P_4 + 20HNO_3 \longrightarrow 4H_3PO_4 + 20NO_2 + 4H_2O$
 (B) $I_2 + 10HNO_3 \longrightarrow 2HIO_3 + 10NO_2 + 4H_2O$
 (C) $S + 6HNO_3 \longrightarrow 4H_2SO_4 + 6NO_2 + 2H_2O$
 (D) None of these

*117. PH_3 can be obtained by :



- (A) Heating hypophosphorus acid
 (B) Heating orthophosphorus acid
 (C) Reacting white phosphorus with hot conc. NaOH
 (D) Hydrolysis of calcium phosphide

118. When PH_3 is passed through copper sulphate solution, then copper phosphide is obtained. This is because :

- (A) PH_3 is highly unstable
 (B) PH_3 shows acidic behaviour with $Cu(OH)_2$
 (C) PH_3 is a reducing agent
 (D) PH_3 is a strong base

Paragraph for Q. 119 - 120

In each of the following questions two statements are given as statement-1 and statement-2. Examine the statements carefully and answer the questions according to the instructions given below :

- (A) If Statement-1 is True, Statement-2 is True, Statement-2 is a correct explanation for Statement-1.
 (B) If Statement-1 is True, Statement-2 is True, Statement-2 is NOT a correct explanation for Statement-1.
 (C) If Statement-1 is True, Statement-2 is False.
 (D) If Statement-1 is False, Statement-2 is True.

119. **Statement-1 :** H_3PO_4 is most acidic among H_3PO_4 , H_3PO_3 and H_3PO_2 .

Statement-2 : In general acidity of oxyacids increases with increase in percentage of oxygen.

120. **Statement-1 :** Phosphorus reacts with conc., HNO_3 to form orthophosphoric acid.

Statement-2 : H_3PO_4 is a tribasic acid and has three replaceable H^+ ions.

121. Match the Column :



Column-I (Reactant)		Column-II (Dehydration products)	
(A)	H_3PO_4	(p)	HPO_3
(B)	H_3PO_3	(q)	$H_4P_2O_7$
(C)	$H_4P_2O_7$	(r)	P_4O_6
(D)	H_3BO_3	(s)	P_4O_{10}
		(t)	B_2O_3

122. Match the Column :

Column-I (Product)		Column-II (Reactant)	
(A)	XeF_4	(p)	Tetrahedral
(B)	XeO_2F_2	(q)	Trigonal bi-pyramidal
(C)	XeOF_4	(r)	Square pyramidal
(D)	XeO_3F_2	(s)	Square planar
(E)	XeO_4		

***123.** NH_3 can be obtained by :

- (A) Heating NH_4NO_3 or NH_4NO_2
- (B) Heating NH_4Cl or $(\text{NH}_4)_2\text{CO}_3$
- (C) Heating NH_4NO_3 with NaOH
- (D) Reaction of AlN or Mg_3N_2 or CaCN_2 with H_2O

***124.** Which of the following statement are true ?

- (A) Cold and very dil. HNO_3 form NH_4NO_3 with Zn or Sn
- (B) Conc. HNO_3 forms NH_4NO_3 with Sn
- (C) Cold and more conc. HNO_3 forms N_2 with Cu
- (D) HNO_3 can be stored in Al -vessel

***125.** The nitrogen oxide(s) that contain(s) $\text{N} - \text{N}$ bond(s) is(are) :

- (A) N_2O
- (B) N_2O_3
- (C) N_2O_4
- (D) N_2O_5

