






Date Planned : __ / __ / __	Daily Tutorial Sheet-1	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-1	Exact Duration : _____

- The correct order of reducing abilities of hydrides of V group elements is :
(A) $\text{NH}_3 < \text{PH}_3 < \text{AsH}_3 < \text{SbH}_3 < \text{BiH}_3$ **(B)** $\text{NH}_3 > \text{PH}_3 > \text{AsH}_3 > \text{SbH}_3 > \text{BiH}_3$
(C) $\text{NH}_3 < \text{PH}_3 > \text{AsH}_3 > \text{SbH}_3 > \text{BiH}_3$ **(D)** $\text{SbH}_3 > \text{BiH}_3 > \text{AsH}_3 > \text{NH}_3 > \text{PH}_3$
- The correct order of acidic nature of oxides is in the order : 
(A) $\text{NO} < \text{N}_2\text{O} < \text{N}_2\text{O}_3 < \text{NO}_2 < \text{N}_2\text{O}_5$ **(B)** $\text{N}_2\text{O} < \text{NO} < \text{N}_2\text{O}_3 < \text{NO}_2 < \text{N}_2\text{O}_5$
(C) $\text{N}_2\text{O}_5 < \text{NO}_2 < \text{N}_2\text{O}_3 < \text{NO} < \text{N}_2\text{O}$ **(D)** $\text{N}_2\text{O}_5 < \text{N}_2\text{O}_3 < \text{NO}_2 < \text{NO} < \text{N}_2\text{O}$
- Which of the following(s) when heated give nitrogen gas ? 
(A) $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$ **(B)** $\text{Ba}(\text{N}_3)_2$ **(C)** NH_4NO_3 **(D)** Both (A) & (B)
- Which of the following pairs is obtained on heating ammonium dichromate ?
(A) N_2 and H_2O **(B)** N_2O and H_2O **(C)** NO_2 and H_2O **(D)** NO and NO_2
- The most stable hydride is :
(A) NH_3 **(B)** PH_3 **(C)** AsH_3 **(D)** SbH_3
- Which of the element of nitrogen family produce maximum number of oxy-acids ?
(A) N **(B)** P **(C)** As **(D)** Sb
- Which of the following is the correct order of increasing enthalpy of vaporization ?
(A) $\text{NH}_3 < \text{PH}_3 < \text{AsH}_3$ **(B)** $\text{AsH}_3 < \text{PH}_3 < \text{NH}_3$
(C) $\text{PH}_3 < \text{AsH}_3 < \text{NH}_3$ **(D)** $\text{NH}_3 < \text{AsH}_3 < \text{PH}_3$
- Correct order of decreasing thermal stability is as :
(A) $\text{NH}_3 > \text{PH}_3 > \text{AsH}_3 > \text{SbH}_3$ **(B)** $\text{PH}_3 > \text{NH}_3 > \text{AsH}_3 > \text{SbH}_3$
(C) $\text{AsH}_3 > \text{PH}_3 > \text{NH}_3 > \text{SbH}_3$ **(D)** $\text{SbH}_3 > \text{AsH}_3 > \text{PH}_3 > \text{NH}_3$
- The following are some statements related to V A group hydrides : 
(I) Reducing property increases from NH_3 to BiH_3
(II) Tendency to donate lone pair decreases from NH_3 to BiH_3
(III) Thermal stability of hydrides decreases from NH_3 to BiH_3
(IV) Bond angle of hydrides decreases from NH_3 to BiH_3
The correct statements are :
(A) (I), (II), (III) and (IV) **(B)** (I), (III) and (IV)
(C) (I), (II) and (IV) **(D)** (I) and (IV)
- The correct order of boiling points of the hydrides of nitrogen family is :
(A) $\text{NH}_3 > \text{PH}_3 > \text{AsH}_3 > \text{SbH}_3$ **(B)** $\text{PH}_3 < \text{AsH}_3 < \text{NH}_3 < \text{SbH}_3$
(C) $\text{NH}_3 < \text{PH}_3 < \text{SbH}_3 < \text{AsH}_3$ **(D)** $\text{NH}_3 < \text{PH}_3 < \text{AsH}_3 < \text{SbH}_3$

11. When plants and animals decay, the organic nitrogen is converted into inorganic nitrogen. The inorganic nitrogen is in the form of :
(A) Ammonia **(B)** Elements of nitrogen
(C) Nitrates **(D)** Nitrides
12. When heated NH_3 is passed over CuO , gas evolved is :
(A) N_2 **(B)** N_2O **(C)** HNO_3 **(D)** NO_2
13. N forms NCl_3 , whereas P can form both PCl_3 and PCl_5 why ? 
(A) P has low lying 3d orbital which can be used for bonding but N_2 does not have low lying 2d orbital
(B) N_2 atom is larger than P in size
(C) P is more reactive towards Cl and N_2
(D) None of above
14. A hydride of nitrogen which is acidic is : 
(A) N_3H **(B)** N_2H_2 **(C)** NH_3 **(D)** N_2H_4
15. Most unstable hydride is :
(A) NH_3 **(B)** PH_3 **(C)** AsH_3 **(D)** BiH_3