HIGHER SECONDARY SECOND YEAR CHEMISTRY

UNIT 3

p-BLOCK ELEMENTS - II

Choose the best answer:

1. In which of the following , NH_3 is not used?

   a) Nessler's reagent

   b) Reagent for the analysis of IV group basic radical

   c) Reagent for the analysis of III group basic radical

   d) Tollen's reagent

2. Which is true regarding nitrogen?

   a) least electronegative element

   b) has low ionisation enthalpy than oxygen

   c) d- orbitals available

   d) ability to form $p\pi - p\pi$ bonds with itself

3. An element belongs to group 15 and 3 rd period of the periodic table, its electronic configuration would be

   a) $1s^2 2s^2 2p^4$ b) $1s^2 2s^2 2p^3$

   c) $1s^2 2s^2 2p^6 3s^2 3p^2$ d) $1s^2 2s^2 2p^6 3s^2 3p^3$

4. Solid (A) reacts with strong aqueous NaOH liberating a foul smelling gas(B) which spontaneously burn in air giving smoky rings. A and B are respectively

   a) P_4(red) and PH_3 b) P_4(white) and PH_3

   c) S_8 and H_2S d) P_4(white) and H_2S

5. On hydrolysis, PCl_3 gives

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a) H_3PO_3 b) PH_3 c) H_3PO_4 d) $POCl_3$

6. P_4O_6 reacts with cold water to give

a) H_3PO_3 b) $H_4P_2O_7$

c) HPO_3 d) H_3PO_4

7. The basicity of pyrophosphorous acid ($H_4P_2O_5$) is

a) 4 b) 2

c) 3 d) 5

8. The molarity of given orthophosphoric acid solution is 2M. its normality is

a) 6N b) 4N

c) 2N d) none of these

9. Assertion : bond dissociation energy of fluorine is greater than chlorine gas

Reason: chlorine has more electronic repulsion than fluorine

a) Both assertion and reason are true and reason is the correct explanation of assertion.

b) Both assertion and reason are true but reason is not the correct explanation of assertion.

c) Assertion is true but reason is false.

d) Both assertion and reason are false.

10. Among the following, which is the strongest oxidizing agent?

a) Cl_2 b) F_2

c) Br_2 d) I_2

11. The correct order of the thermal stability of hydrogen halide is

a) HI > HBr > HCl > HF b) HF > HCl > HBr > HI

c) HCl > HF > HBr > HI d) HI > HCl > HF > HBr

12. Which one of the following compounds is not formed?

a) $XeOF_4$ b) XeO_3

c) XeF_2 d) NeF_2

13. Most easily liquefiable gas is

a) Ar b) Ne

c) He d) Kr

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14. XeF_6 on complete hydrolysis produces

a) $XeOF_4$ b) XeO_2F_2

c) XeO_3 d) XeO_2

15. Which of the following is strongest acid among all?

a) HI b) HF

c) HBr d) HCl

16. Which one of the following orders is correct for the bond dissociation enthalpy of halogen molecules? (NEET)

a) $Br_2 > I_2 > F_2 > Cl_2$ b) $F_2 > Cl_2 > Br_2 > I_2$

c) $I_2 > Br_2 > Cl_2 > F_2$ d) $Cl_2 > Br_2 > F_2 > I_2$

17. Among the following the correct order of acidity is (NEET)

a) $HClO_2 < HClO < HClO_3 < HClO_4$ b) $HClO_4 < HClO_2 < HClO < HClO_3$

c) $HClO_3 < HClO_4 < HClO_2 < HClO$ d) $HClO < HClO_2 < HClO_3 < HClO_4$

18. When copper is heated with conc HNO_3 it produces

a) $Cu(NO_3)_2$, NO and NO_2 b) $Cu(NO_3)_2$ and N_2O

c) $Cu(NO_3)_2$ and NO_2 d) $Cu(NO_3)_2$ and NO

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