

HIGHER SECONDARY SECOND YEAR CHEMISTRY

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

- 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) $\text{H}_4\text{P}_2\text{O}_7$
 - c) HPO_3 d) H_3PO_4
7. The basicity of pyrophosphorous acid ($\text{H}_4\text{P}_2\text{O}_5$) 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) $\text{HI} > \text{HBr} > \text{HCl} > \text{HF}$ b) $\text{HF} > \text{HCl} > \text{HBr} > \text{HI}$
 - c) $\text{HCl} > \text{HF} > \text{HBr} > \text{HI}$ d) $\text{HI} > \text{HCl} > \text{HF} > \text{HBr}$
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

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) $\text{Br}_2 > \text{I}_2 > \text{F}_2 > \text{Cl}_2$
- b) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$
- c) $\text{I}_2 > \text{Br}_2 > \text{Cl}_2 > \text{F}_2$
- d) $\text{Cl}_2 > \text{Br}_2 > \text{F}_2 > \text{I}_2$

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

- a) $\text{HClO}_2 < \text{HClO} < \text{HClO}_3 < \text{HClO}_4$
- b) $\text{HClO}_4 < \text{HClO}_2 < \text{HClO} < \text{HClO}_3$
- c) $\text{HClO}_3 < \text{HClO}_4 < \text{HClO}_2 < \text{HClO}$
- d) $\text{HClO} < \text{HClO}_2 < \text{HClO}_3 < \text{HClO}_4$

18. When copper is heated with conc HNO_3 it produces

- a) $\text{Cu}(\text{NO}_3)_2$, NO and NO_2
- b) $\text{Cu}(\text{NO}_3)_2$ and N_2O
- c) $\text{Cu}(\text{NO}_3)_2$ and NO_2
- d) $\text{Cu}(\text{NO}_3)_2$ and NO