

## ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Group VA of the periodic table consists of the elements N, P, As, Sb and Bi, On passing from N to Bi, the oxides of the elements of general formula $M_2O_3$ become	A. Stronger reducing agents B. More ionic C. More basic D. More volatile
2	The structure of white phosphorus is	A. Square planar B. Pyramidal C. Tetrahedral D. Trigonal planar
3	Which one of the following pentafluorides cannot be formed?	A. $PF_5$ B. $AsF_5$ C. $SbF_5$ D. $BiF_5$
4	Which of the following elements is most metallic?	A. P B. As C. Sb D. Bi
5	Which of the following fluorides does not exist?	A. $NF_5$ B. $PF_5$ C. $AsF_5$ D. $SbF_5$
6	Phosphorus pentoxide finds use as	A. An oxidizing agent B. A reducing agent C. A bleaching agent D. A dehydrating agent
7	Red P can be obtained from white P by	A. Heating it with a catalyst in an inert atmosphere B. Distilling it in an inert atmosphere C. Dissolving it in $CS_2$ and crystallizing D. Melting it and pouring the liquid into water
8	White P when boiled with strong solution of caustic soda produces	A. Phosphine B. Phosphic acid C. Phosphorous acid D. None
9	Phosphine is not obtained by the reaction when	A. White P is heated with NaOH B. Red P is heated with NaOH C. $Ca_2P_2$ reacts with water D. $PH_4I$ is boiled with water
10	Each of the following is true of white and red phosphorus except that they	A. Are both soluble in $CS_2$ B. Can be oxidized by heating in air C. Consist of the same kind of atoms D. Can be converted into one another
11	Which one of the following compounds does not exist?	A. $NCl_5$ B. $AsF_5$ C. $SbCl_5$ D. $PF_5$
12	$BiCl_3$ on hydrolysis forms a white precipitate of	A. Bismuthic acid B. Bismuth oxychloride C. Bismuth pentachloride D. Bismuth hydroxide
13	Phosphide ion has the electronic structure similar to that of	A. Nitride ion B. Fluoride ion C. Sodium ion D. Chloride ion
14	Which one of the following elements occurs free in nature?	A. N B. P C. As D. Bi

		D. Sb
15	The melting point is lowest for	A. Be B. Mg C. Ca D. Sr
16	The number of elements in the 4th periods of periodic table is	A. 8 B. 10 C. 18 D. 32
17	The oxides of which of the following elements will be acidic in character	A. Mg B. Rb C. Li D. Cl
18	Which of the following is an inert gas?	A. $\text{H}_2$ B. $\text{O}_2$ C. $\text{N}_2$ D. Argon
19	Which of the following oxides is amopheric in character?	A. CaO B. $\text{CO}_2$ C. $\text{SiO}_2$ D. $\text{SnO}_2$
20	Which of the following ion has the highest value of ionic radius?	A. $\text{Li}^{+}$ B. $\text{F}^{-}$ C. $\text{O}^{2-}$ D. $\text{B}^{3+}$
21	The elements with atomic numbers 9, 17, 35, 53, 85 an all	A. Noble gases B. Halogens C. Heavy metals D. Light metals
22	How does the ionization energy of 1st group elements vary?	A. Increases down the group B. Decreases down the group C. Remains unchanged D. Variation is not regular
23	Number of elements present in 5th period is	A. 8 B. 18 C. 32 D. 24
24	Two elements whose electronegativities are 1.2 and 3.0, the formed between them would be	A. Ionic B. Covalent C. Coordinate D. Metallic
25	Electron affinity depends on	A. Atomic size B. Nuclear charge C. Atomic number D. Atomic size and nuclear charge both
26	Which is true about the electronegativity order of the following?	A. P > Si B. C > N C. Br > Cl D. Sr > Ca
27	Eka-aluminium and Eka-silicon are known as	A. Gallium and Germanium B. Aluminium and silicon C. Iron and sulphur D. Proton and silicon
28	Which among the following species has the highest ionization energy?	A. Ne B. F C. Li D. B
29	Which of the following does not exhibit the periodicity in properties of the elements?	A. Ionisation energy B. N/P ratio C. Electronegativity D. Atomic radius
30	Which of the following sets of atomic numbers belong to that of the alkali metals?	A. 1,12,30,4,62 B. 37,19,3,55 C. 9,17,35,53 D. 12,20,56,88