ECAT Chemistry Chapter 6 Chemical Bonding Online Test

Sr	Questions	Answers Choice
1	Atoms obey octet rule by sharing-electrons making covalent bonds according to	A. Lewis and Kossal theory B. Valance bond theory C. VSEPR theory D. Molecular orbital theory
2	Generally the bond formed by metals with non-metals is	A. Ionic B. Covalent C. Polar D. Non- polar
3	An ionic compound $M_2S_3$is formed by the metal M,, the metal is	A. Ca B. Ba C. K D. Al
4	Atomic number of Al is 13. When it forms ionic bond with oxygen the number of electrons lost by 1 Al atom is	A. 1 B. 2 C. 3 D. 4
5	All covalent bonds formed between the two atoms are non-polar when	A. Covalent bond between two non-metal atoms B. Covalent bond between metal and non-metal C. Covalent bond between two atoms of same element D. Covalent bond between metal atoms
6	The Electro-negatively difference for ionic bond must be greater than	A. 1.6 B. 1.7 C. 1.8 D. 1.0
7	Electronegativity values of the elements F, Cl and Br vary	A. F > Cl > Br B. Br > Cl > F C. Cl > Br > F D. Cl > F > Br
8	From the difference between expected bond energies for the normal covalent bond and experimentally determined values Pauling calculated the values of	A. Ionization potential of elements B. Electron affinity of elements C. Electronegativity of elements D. Bond length
9	The tendency of an atom to attract shared electron pair towards itself is called	A. Covelent bond B. Electronegativity C. Ionization potential D. Electronic affinity
10	When of the following is isolelectronic with krypton	A. Ca⁺⁺ B. Al⁺⁺⁺ C. Br⁻¹ D. I⁻¹
11	The degree of polarity of molecule is known as its	A. Dipole moment B. Moment arm C. Bond energy D. Ionic character
12	Generally electron affinities for elements in a period from left to right	A. Decreases B. Increases C. Remain same D. Increases alternatively
13	When an electron is absorbed in an empty or partially filled orbital of an atom, the energy released is called	A. Ionization energy B. Potential energy C. Electron affinity D. Bond energy
14	In a group the atomic size increase downward due to	A. Addition of electronic shells B. Increase in the proton number C. Repulsion of electrons D. All of the above

15	Ca, Mg, Be, Ba, belong to the same group, the order of their ionization energy values is	A. Be > Mg> Ca > Ba B. Ba > Ca > Mg > Be C. Ca > Mg > Be > Ba D. Ba > Mg > Ca > Be
16	Ionization energies increase from left to right along the period due to	A. Increase in nuclear charge B. Repulsion of electron increases C. Repulsion of protons increase D. Atomic size increase along the period
17	Which of the following charge	A. Li B. Be C. H D. He
18	Generally ionization energy of atoms decreases by	A. Decreases in atomic size B. Increase in atomic size C. Increase in nuclear charge D. None of these
19	Size of an anion is increased as compared to its atom because of the	A. Addition of new shell B. Repulsion of electrons in the valence shell C. Decrease in nuclear charge D. Increase in the unclear charge
20	The ionic bonds are	A. Unidirectional B. Bi-directional C. Non-directional D. Multi-directional
21	Shielding effect intervening electrons causes	A. Decreases in atomic radii in a period from right to left B. Increase in atomic radii in a period from left to righ t C. Decrease in atomic radii down the group D. Increase in atomic radii down the group
22	When elements of group I react with the elements of group VIA theory form	A. Ionic bond B. Covalent bond C. Polar bond D. None
23	Mg becomes isoelectronic with neon when it	A. Loses two electrons B. Gains two electrons C. Loses 1 electron D. Gains 1 electron
24	Two H-atom combine to form a strong H_2molecule due to	A. Increase in potential energy B. Decrease in potential energy C. Energy remains unchanged D. Distance is increased
25	The formation of compounds like PF_5, BCl_3, SF_6indicates that	A. These halides are ionic B. These halides are covalent C. They are Lewis acids D. Octet rule not obeyed so the rule is not universal
26	The covalent bonds are	A. Unidirectional B. Bi-directional C. Non-directional D. Multi-directional
27	Noble gases have the electronic configuration with their valance shell ns^2np^6except one	A. He B. Ne C. Kr D. Xe
28	If two lone pairs are present then bond angle of tetrahedral compound reduces to _____ degrees	A. 109.5° B. 107.5° C. 104.5° D. None
29	Which of the following species has unpaired electrons in antibonding molecular orbitals	
30	Which of the hydrogen halides has the highest percentage of ionic character	A. HCl B. HBr C. HF D. HI