

## ECAT Chemistry Chapter 6 Chemical Bonding Online Test

Sr	Questions	Answers Choice
1	The boiling point of heavy water is	A. 108 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> B. 101.4 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> C. 99 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> D. 110 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span>
2	The electronegativeities of F,Cl,Br and I are 4.0,3.0,2.8,2.5 respectively. Hydrogen halide with a high percentage of ionic character is	A. HF B. HCL C. HBr D. HI
3	Fluorine molecule is formed by	A. The axial p-p overlap B. The sidewise p-p overlap C. The axial s-p overlap D. The overlap of two sp <sup>2</sup> hybrid orbitals
4	Generally electron affinities for elements in a period from left to right	A. Decreases B. Increases C. Remain same D. Increases alternatively
5	Number of sigma bonds in P <sub>4</sub> O <sub>10</sub> is	A. 6 B. 7 C. 17 D. 16
6	Which of the hydrogen halides has the highest percentage of ionic character	A. HCI B. HBr C. HF D. HI
7	Question Image	A. Excitantion of an electron from 2s to 2p-orbital B. Transfer of three electrons from B to the other atoms C. Excitation of two electrons form 2s orbital to 2p orbital D. Formation of molecular ion
8	The driving force for making a bond is	A. To attain noble gas electronic configuration B. To make soled compounds C. To make different compounds D. To make gaseous substances
9	Which of the following geometry is associated with the compound in which the central atom assumes $\mbox{sp}^3\mbox{d}$ hybridization?	A. Planar B. Pyramidal C. Angular D. Trigonal bipyramidal
10	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
11	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
12	The geometry of 4 sp <sup>3</sup> hybrid orbitals on an atom is	A. Square planar B. Tetrahedral C. Trigonal planar

		D. Linear
13	The force which holds the atoms together to form a compound is called	A. A chemical bond B. Van der waal's force C. Dispersion force D. London force
14	Inter molecular forces in solid hydrogen are	A. Covalent forces     B. Van der Waal forces or London dispersion forces     C. Hydrogen bonds     D. All of these
15	Question Image	A. The ionization energy of A is high and electron affinity of B is low B. The ionization energy of A is low and electron affinity of B is high C. Both the ionization energy of A and electron off affinity of B are high D. Both the ionization energy of A and electron affinity of B are low
16	The most suitable method of the separation of a mixture of ortho and para-nitrophenol mixed in the ratio of 1: 1 is	A. Distrillation B. Crystallization C. Vapourisation D. Colour spectrum
17	N-atom forms three covalent bonds, its electronic configuration is	
18	Which one of these is weakest?	A. lonest bond B. Covalent bond C. Metallic bond D. Van der Waal's forces
19	Which of the following statements is not correct regarding bonding molecular orbitals?	A. Bonding molecular orbitals possess less energy than atomic orbitals from which they are formed B. Bonding molecular orbitals have low electron density between the two nuclei C. Every electron in the bonding molecular orbitals contributes to the attraction between atoms D. Bonding molecular orbitals are formed when the electron waves undergo constructive interference
20	Which for the following has no dipole moment	A. HCI B. H <sub>2</sub> S C. H <sub>2</sub> O D. CO <sub>2</sub>