

ECAT Chemistry Chapter 6 Chemical Bonding Online Test

Sr	Questions	Answers Choice
1	The bond angle H - O - H in ice is closest to	A. 120° B. 60° C. 90° D. 109°
2	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
3	Water H_2O is liquid while hydrogen sulphide H_2S is a gas because	A. Water has higher molecular weight B. Hydrogen sulphide is a weak acid C. Sulphur has high electronegativity than oxygen D. Water molecules associate through hydrogen bonding
4	In which of the following theories the hybridization is considered	A. VSEPR B. Lewis C. Molecular orbital D. Valence bond
5	The electron affinity of chlorine may be represented by the equation	
6	Which of the following hydrides has the lowest boiling point?	A. H_2O B. H_2S C. H_2S_3 D. H_2Te
7	The ionic bonds are	A. Unidirectional B. Bi-directional C. Non-directional D. Multi-directional
8	Ionic radius, in a period from left to right	A. Increases B. Decreases C. Decreases then increases D. Increases and decreases
9	Question Image	A. 154 pm B. 133 pm C. 120 pm D. 150 pm
10	Two H-atoms combine to form a strong H_2 molecule due to	A. Increase in potential energy B. Decrease in potential energy C. Energy remains unchanged D. Distance is increased
11	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 nuclear charge
12	Which of the hydrogen halides has the highest percentage of ionic character	A. HCl B. HBr C. HF D. HI
13	The driving force for making a bond is	A. To attain noble gas electronic configuration B. To make solid compounds C. To make different compounds D. To make gaseous substances

14	Maximum hydrogen bonds in water are	A. 4 B. 3 C. 2 D. 8
15	Planar geometry of molecules is due to	A. sp^3 hybridization B. sp^2 hybridization C. sp hybridization D. P - p overlap
16	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
17	One of the following bonds is polar but compound is non-polar	A. H_2O B. NH_3 C. HCl D. CO_2
18	The bond angle depends upon the	A. Types of bonds B. Number of bonds C. Non-bonding electron pairs D. All of the above
19	When of the following is isoelectronic with krypton	A. Ca^{++} B. Al^{+++} C. Br^{-1} D. I^{-1}
20	The bond order for He_2 molecule is	A. zero B. $1/2$ C. 1 D. 2