

Chemical Bonding

Sr	Questions	Answers Choice
1	The covalent bonds are	A. Unidirectional B. Bi-directional C. Non-directional D. Multi-directional
2	Which of the following species has unpaired electrons in antibonding molecular orbitals	
3	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
4	The bond order for He ₂ molecule is	A. zero B. 1/2 C. 1 D. 2
5	Which of the following molecules have multiple bonds	A. CH ₄ B. C ₂ H ₄ C. C ₂ H ₆ D. CCl ₄
6	When two hydrogen atoms approach to form a chemical bond	A. The repulsive forces dominate the attractive forces B. The attractive forces, dominate the repulsive forces C. The energy of atoms increases D. The two atoms start ionization
7	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 ² hybrid orbitals
8	Which one of these is weakest?	A. lonest bond B. Covalent bond C. Metallic bond D. Van der Waal's forces
9	Which of the following is a polar molecules	A. Carbon dioxide B. Carbon tetrachloride C. Methanol D. Ethane
10	The number of bonds in nitrogen molecule is	
11	Which carbon is more electronegative?	A. sp ³ - hybridized carbon B. sp-hybridized carbon C. sp ² -hybridized carbon D. always same irrespective of its hybrid state
12	The equation for the first ionization energy of hydrogen is	
13	Which of the following hydrides has the lowest boiling point?	A. H ₂ 0 B. H ₂ S C. H ₂ S3 D. H ₂ Te
14	The atomic radius of hydrogen is 37	A. Pecometer B. Manometer C. Angstrom D. Micrometer
15	When of the following is isolelectronic with krypton	A. Ca ⁺⁺ B. Al ⁺⁺⁺ C. Br ⁻¹ D. I ⁻¹
16	The shape of the molecule SF ₂ Cl ₂ is	A. Trigonal bipyradmidal B. Cubic C. Octahedral

		D. Tetrahedral
7	Elements have the tendency to attain 8 electrons in their valence shell. This is known as	A. Octer rule B. Hunds rule C. Pauli exclusion principle D. Auf ban principle
8	Generally electron affinities for elements in a period from left to right	A. Decreases B. Increases C. Remain same D. Increases alternatively
9	The shape of gaseous SnCl ₂ is	A. Tetrahedral B. Linear C. Angular D. T-shaped
0	The overlapping of two partially filled atomic orbital is in such a way that the probability of finding the electron pair is maximum along the axis joining the two nuclei, the bond is	A. Sigma bond B. Pi bond C. lonic bond D. Non-polar bond