ECAT Chemistry Chapter 6 Chemical Bonding

Sr	Questions	Answers Choice
1	The number of electron pairs shared in carbon tetrachloride molecule is	A. 2 B. 3 C. 4 D. 1
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	Which of the following species has unpaired electrons in antibonding molecular orbitals	
4	Which of the following is a polar molecules	A. Carbon dioxide B. Carbon tetrachloride C. Methanol D. Ethane
5	One of the following bonds is polar but compound is non-polar	A. H₂O B. NH₃ C. HCl D. CO₂
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	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
8	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 sp²hybrid orbitals
9	The electronegativity of elements in a period from left to right	A. Decreases B. Increases C. First decreases then increases D. First increases then decreases
10	During the formation of a chemical bond the potential energy of the system	A. Decreases B. Increases C. Does not change D. None of these
11	In which of the following theories the hybridizationis considered	A. Vsepr B. Lewis C. Molecule orbital D. Valence bond
12	Which of the following has highest bond order	
13	Which of the following charge	A. Li B. Be C. H D. He
14	The shape of the molecule $SF_2Cl_2$is	A. Trigonal bipyradmidal B. Cubic C. Octahedral D. Tetrahedral
15	Which of the following molecules has a net dipole moments	A. CO₂ B. CS₂ C. SO₂ D. CCl₄
		A. 120° , 28[']

16	The bond angle H - O - H in ice ins closest to	 B. 60° C. 90° D. 109°
17	Nitrogen in NH_3 is sp^3 hybridized but the bond angle in NH_3 is 107° and not 109.5° due to	A. sp³orbital planar B. sp³orbital trigonal C. Repulsion between lone pair and bonded pairs D. None of them
18	Coordinate covalent bond is present in the molecules	A. H₂O B. BF₃ C. SiO₂ D. SO₂
19	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
20	Which of the following has polar bond	A. O₂ B. N₂ C. HCl D. Cl₂