ECAT Chemistry Chapter 6 Chemical Bonding

Sr	Questions	Answers Choice
1	H-bonding is not present in	A. Glycerine B. Water C. Hydrogen sulphide D. Hydrogen fluride
2	Mg becomes isoelectronic with neon when it	A. Loses two electrons B. Gains two electrons C. Loses 1 electron D. Gains 1 electron
3	Molecular orbital picture of N_2 indicates	A. One unpaired electron B. Two unpaired electron C. No unpaired electron D. None of these
4	The shape of the molecule $SF_2Cl_2$is	A. Trigonal bipyradmidal B. Cubic C. Octahedral D. Tetrahedral
5	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
6	$SnCl_2$have _____ shape	A. Planner B. Tetrahedral C. Angular D. None
7	The ionic bonds are	A. Unidirectional B. Bi-directional C. Non-directional D. Multi-directional
8	The shape of gaseous $SnCl_2$is	A. Tetrahedral B. Linear C. Angular D. T-shaped
9	Which of the following has polar bond	A. O₂ B. N₂ C. HCl D. Cl₂
10	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
11	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
12	Hydrogen chloride molecule contains	A. Covalent bond B. Double bond C. Co-ordinate bond D. Electrovalent bond
13	Antibonding MO is formed by	A. Addition of atomic orbitals B. Substraction of atomic orbitals C. Multiplication of atomic orbitals D. None of these
14	The bond angle depends upon the	A. Types of bonds B. Number of bonds

		C. Non-bonding electron pairs D. All of the above
15	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
16	The Electro-negatively difference for ionic bond must be greater than	A. 1.6 B. 1.7 C. 1.8 D. 1.0
17	Ionic radius, in a period from left to right	A. Increases B. Decreases C. Decreases then increases D. Increases and decreases
18	Water H_2O is liquid while hydrogen sulphide H_2S is a gas beause	A. Water has higher molecular weight B. Hydrogen sulphide is a weak acid C. Sulphure has high electronegativity than oxyhe D. Water molecules associate through hydrogen bonding
19	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
20	The atomic radius of hydrogen is 37	A. Pecometer B. Manometer C. Angstrom D. Micrometer