Chemical Bonding

Sr	Questions	Answers Choice
1	An ionic compound A+B is most likely to be formed when	A. The ionization eenrgy 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. Boht the ionization energy of A and electron affinity of B are high D. Both the ionization energy of A and electron affinity of B are low.
2	Dipole moment of CO2 is	A. 1.8 D B. 1.94 D C. 1.0 D D. Zero
3	Which of the followng statemtn not correct regarding bounding molecular oritals.	A. Bonding molecular orbital posses less energy than atomic orbitals from which they are formed B. Bonnding molecular orbitals have low electron density betwene the two nuclie C. Every electron in the boundg molecular orbitals contributes to the attraction between atoms. D. Bonding molecular orbitals are formed whn the electron waves undergo constructive interference
4	Sp3 Hybridiztion ins associated wiht structure.	A. Linear B. Tretrahedral C. Trigonal D. Octahedra
5	The bond distance betwen H-H is	A. 74.5 pm B. 436.45 pm C. 133 pm D. 154 pm
6	Which of the following will show paramagnetic property.	A. O2 B. N2 C. O 2⁻² D. O2 ⁺²
7	Paramagnetic specie is.	A. N2 B. N2⁻¹ C. O2 ⁺² D. O2 ⁻²
8	What is bond angele in NF3?	A. 102^o B. 109.5^o C. 104,5^o D. 107.5^o
9	Which of the following species has unparied electonrs in antibonding molecular orbitals.	A. O2 ²⁺ B. N 2 ²⁻ C. B D. F2
10	Which of the following molecules has a central atom with sp3 hybridization and a tetrahedral electron pair geometry.	A. CCl4 B. BF3 C. SO2 D. PCl5
11	Which one is a non polar molecule.	A. CS2 B. CaC2 C. H2S D. CaCl2
12	The expected bond energy of HCl is lesser than the actual. this is because.	A. Size of hydrogen is very small B. HCl is non polar compund

		C. HCl is a polar comoound D. There exists hydrogen bonding
13	Thnumebr of lone pair of electonrsein ammonium ion is	A. One B. Two C. Three D. Zero
14	The most electronegative atom is	A. F B. Cl C. N D. O
15	The shape of ICl5 according to the VSEPR model is	A. T shape B. Tetrahedral C. Trigonal panar D. Trigonal bipyramidal
16	What is the type of [ICL4] according to the VSEPR model.	A. AB 4 Tetrahederal B. AB 4, Pyramidal C. AB 5, trigonal bipyramidal D. AB6, trigonalbipyramidal
17	Chemical bond formation taken pace when	A. Force of attractio areequal to the force or repulsion B. Forece of repulsion is greater than force of attraction C. Force of attraction overcomes force of repulsion D. None of these
18	Which of the following species contains a dative bond.	A. NH4 B. CH4 C. SO2 D. PCl5
19	Covalent bonds are	A. Right and directional B. Non rigid and directional C. Rigid and non directional D. Non rigid and non directional
20	How many extra electrons than a normal octet are threre in the valence shell of I in ICL5?	A. 2 B. 3 C. 4 D. 5