Chemical Bonding

Sr	Questions	Answers Choice
1	Covalent bonds are	A. Right and directional B. Non rigid and directional C. Rigid and non directional D. Non rigid and non directional
		A. One <m:omathpara><m:omath><m:r>σ </m:r><m:r>and one </m:r></m:omath></m:omathpara><m:omathpara><m:omath><m:r> </m:r></m:omath></m:omathpara><m:omathpara><m:omath><m:r>π </m:r><m:r>bonds </m:r></m:omath></m:omathpara> B. The numbers of <m:omathpara><m:omath><m:r>σ and two</m:r></m:omath></m:omathpara><m:omathpara><m:omath><span

2	The numbers of σ *and* π bonds in the N2 molecule are.	style= line-height:107% ><m:r>π </m:r> <m:r>bonds </m:r> </m:omath></m:omathpara> C. Three <m:omathpara><m:omath> <m:r>σ </m:r> </m:omath> </m:omathpara> <m:omathpara><m:omath> <m:r> </m:r> <m:r>bonds ionly</m:r> </m:omath></m:omathpara> D. Two <m:omathpara><m:omath> <m:r>σ and one</m:r> </m:omath> </m:omathpara> <m:omathpara><m:omath> <m:r>π </m:r> </m:omath> </m:omathpara>
3	Which of the followng molecules has zero dipole moment.	A. BF3 B. NH3 C. H2O D. CHCl3
4	Tendency of an atom to attract the shared pair of electrons is called.	A. Electronegativity B. Ionization energy C. Electron Affinity D. Electrpositivity
5	Highest bond order is found in	A. O2 B. O2 ⁻¹ C. O2 ⁺² D. O2 ⁺¹
6	What is molecular geometry of $SO4^{-2}$ ion	A. Tetrahedra B. Trigonal Planar

6	What is molecular geopetry of $SO4^{-}$ Ion.	C. Trigonal pyramidal D. Linear
7	Paramagnetic specie is.	A. N2 B. N2⁻¹ C. O2 ⁺² D. O2 ⁻²
8	Which of the following has all the three characters i.e. ionic, covalent and coordinate covalent.	A. H2O B. NH3 C. KBr D. NH4Cl
9	The bond formation energy of a compund is.	A. Equal to bond idssociation energy B. Less thanbond idssociation energy C. Greater than bond dissociaton energy D. Inverselyproportional to bond dissociation energy
10	How many electrons are presente in the valence shell of P in $PO4^{3}$	A. 8 B. 10 C. 12 D. 14
11	Which of the following hybridizations is found in ethyne.	A. Sp B. sp2 C. sp3 D. No hybridization
12	Which of the following elements has incopleteoctel after making the bond.	A. Be in BeCl2 B. O in H2O C. C in CH4 D. N in NH3
13	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
14	Which one is a non polar molecule.	A. CS2 B. CaC2 C. H2S D. CaCl2
15	Which of the following will show paramagnetic property.	A. O2 B. N2 C. O 2⁻² D. O2 ⁺²
16	Sp3 Hybridiztion ins associated wiht structure.	A. Linear B. Tretrahedral C. Trigonal D. Octahedra
17	If the electronegativity differene between bonded atoms is more than 0.5 but less than 1.7, the bond will be.	A. Ionic B. Polar Covalent C. Non polar covalent D. Coordinate covalent
18	Thnumebr of lone pair of electonrsein ammonium ion is	A. One B. Two C. Three D. Zero
19	In which of the following molecules ionic bond is found.	A. CsI B. NH3 C. HF D. CaC2
20	Which one is a polar molecule	A. HCl B. CO2 C. BF3 D. CCl4