Chemistry Fsc Part 1 Chapter 6 Online Test

Sr	Questions	Answers Choice
1	Which one of the following has no tendency of form coordinate covalent bond with H+	A. NH3 B. H2O C. CH4 D. CH3OH
2	Which one of the following correctly describe the shape of NH3 molecules.	A. tetrahedral B. Pyramidal C. Angular D. Square planar
3	What is bond order.	A. Number of unpaired electrons B. Number of paired electrons C. Number of electrons present in antibonding molecular orbital D. Number of bond formed between two atoms after overlap
4	VSEPR theory was proposed by	A. Nyholn and Gillespie B. Kossel C. Lewis D. Sidwick
5	The percentage of s characters in sp3 hybrid orbital is.	A. 25% B. 33.3% C. 50% D. 75%
6	Which of the following molecules have highest bond energy	A. F2 B. Cl2 C. Br2 D. I2
7	The bond order of N2 molecule is.	A. 1 B. 2 C. 3 D. 4
8	Which has zero potential energy.	A. When H atom is independent B. When two H atoms combine to form H2 molecule C. When two H atoms super impose to each other D. When two H atoms have weak attraction between them
9	The shielding effect of the inner electrons is responsible for	A. Increasing ionization energy values B. Decreasing ionization energy values C. Increasing electron affinity D. Increasing electonegativity
10	Those elements whose electronegativities are 1.2 and 3.2, react to form	A. Ionic bond B. Covalent bond C. Gaseous substance D. Definiting a liquid substance
11	How many sigma and pi bonds are present in C2H2.	A. one sigma and two pi B. two pi and one sigma C. Two pi and three sigma D. Three pi and two sigma
12	Along period of periodic table shielding effects.	A. Increases B. Decreases C. Remain constant D. First increases than decreases
13	Bond energy depends upon	A. Electronegativity B. Size of atom C. Bond length D. All of these
14	Which of the following molecules have unpaired electrons is the bonding molecular orbitals.	A. N2 B. O2 C. B2

		D. F2
15	Which of the following molecules contain six bonding electrons.	A. CH4 B. CO2 C. BF3 D. H2S
16	If we want to change $O_2$to O_2^{-1}The electron is to be placed in	
17	Which of the hydrogen halides has the highest percentage of ionic character	A. HF B. HBr C. HCl D. HI
18	Which of the hydrogen halide has the highest percentage of ionic character.	A. HCl B. HBr C. HF D. HI
19	Which of the following molecules has a co-ordinate covalent bond	A. NH₄Cl B. NaCl C. HCl D. AlCl₃
20	Ionic bond is formed by combination of groups	A. IA and VIII B. II A and VII A C. IV A and VA D. VIA and VII A
21	In a period of periodic table, atomic radii	A. Increases B. Decreases C. Remain same D. First decreases than increases
22	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
23	Which one of the following molecule have angle of 120 ^{o}	A. Be Cl2 B. BF3 C. CH4 D. NH3
24	Which of the following has coordinate covalent bond.	A. NH4 B. NaCl C. HCl D. AlCl3
25	Which of the following is true for ionic compounds	A. They are non-electrolytes in the molten state B. They have bonds which are directional C. They conduct electricity in solid state D. They are generally more soluble in polar solvents than in non-polar solvents
26	Suppose a new element 'J' has discovered and has seven electron in the valence shell. Which statement about this element would be correct.	A. It is monatomic B. It form covalent bond with hydrogen C. It forms stable positive ion D. It forms covalent bond with group IA element
27	BF3 has zero while NH3 has 1.49 D dipole moment because.	A. B is less electronegative than N B. F is more electronegative than N C. BF3 is pyramidal while NH3 is planar D. NH3 is pyramidal while BF3 is trigonal planar
28	The number of bonds in nitrogen molecules is.	A. One pi and one sigma B. One pi and two sigma C. Thre sigma only D. Two pi and one sigma
29	The bond angle in NH3 molecule is	A. 109.5^o B. 107.5^o C. 104.5^o

		C. 104.5^o</sup> D. 106^o</sup>
30	In BeCl2, the covalent bond is formed due to overlap of	A. sp -s B. sp -p C. sp2 -p D. sp3 -p
31	Which of the following species has unpaired electrons in anti bonding molecular orbitals	A. O2 B. N2 C. B2 D. F2
32	In methanol, bond between carbon and oxygen.	A. Ionic B. Non polar C. Polar D. Co - ordinate
33	As compared to pure atomic orbitals the hybrid orbitals have.	A. Low energy B. High energy C. Same energy D. None of these
34	Ionic compound do nto show the phenomenon of Isomerism because bond are.	A. Directional and rigid B. Non directional and rigid C. Non directional and non rigid D. All above
35	A molecular orbital can accommodate maximum electron	A. 2 B. 6 C. 8 D. 10
36	Which of the following species has unpaired electrons in antibonding molecular orbitals.	A. O2⁺² B. N2⁻² C. B2 D. F2
37	Which statement is true about Na and Na+	A. size of Na is greater than Na+ B. Size of Na is smaller than Na+ C. Both have equal size D. Both have same properties
38	In a group of periodic table, ionization energy.	A. Decreases B. Increases C. Remains same D. First increases than increases
39	SP^3-hybridization in important in describing the bonding in	
40	Which element has highest ionization potential.	A. Li B. B C. Be D. C
41	The shape of Sncl2 molecule is.	A. Linear B. Angular C. Trigonal planar D. Tetrahedral
42	The number of bonds in nitrogen molecule is	A. One o and oneπ B. One o and twoπ C. Three sigma only D. Two o and twoπ
43	Which pair are iso electronic.	A. Na+ and Cl- B. Na+ and Mg+2 C. N-3 and P-3 D. H+ and H-
44	Forces of attraction between He atoms are.	A. Hydrogen bonding B. London forces C. Debye forces D. Ion dipole forces

		D. Ion dipole forces
45	Which of the following has highest percentage ionic character.	A. HCl B. HF C. HBr D. HI
46	What type of bonding is present in NH4Cl	A. Ionic B. Covalent C. Co ordinate covalent D. All of these
47	Percentage ionic character of HF is.	A. 100% B. 80% C. 43% D. 57%
48	In which of the following Paris, do the elements form a compound by sharing electrons.	A. carbon and chlorine B. Lithium and iodine C. Neon and oxygen D. Potassium ad bromine
49	Which of the following has linear structure.	A. CO2 B. NH3 C. CH4 D. H2O
50	Which of the following has bond angle of 120 ^{o}	A. BeCl2 B. BF3 C. CH4 D. NH3
51	Which molecule has sG2 hybridization.	A. CH4 B. C2H4 C. C2H2 D. C2H5
52	Which of the following is a polar molecule	A. CCl4 B. HCl C. BF3 D. CO2
53	Which of the following molecules has zero dipole moment	A. NH₃ B. CHCl₃ C. H₂O D. BF₃
54	The H - H Bond energy in KJ mole -1 is.	A. 346 B. 436 C. 463 D. 336
55	The tendency of an tom to attract shared pair of electron towards itself is called its.	A. Ionization energy B. Electronegativity C. Electron affinity D. dipole moment
56	A molecule has two ions pairs and two bond pairs around the central atom. The shape of molecule is.	A. Linear B. Pyramidal C. Angular D. Tetrahedral
57	The shape of H_3O is	A. Tetrahedral B. Angular C. Trigonal planer D. Pyramidaj
58	Which of the following molecule obey octet rule.	A. BF3 B. BCl3 C. NH2 D. SF6
59	Dipole moment is defined as.	A. Charge x distance B. Charge x Debye C. Charge x displacement D. Charge x bond energy
60	Molecule in which the distance between two carbon atoms in the largest is.	A. C2H6 B. C2H4 C. C2H2 D. C6H6
61	In which molecule all atoms are coplanar.	A. CH4 B. BF3 C. NH3 D. PH3
		A. H2 B. H2O

62	Which molecules is 100% covalent	C. HF D. NH3
63	Dipole Moment of H2O is.	A. 1.61 D B. 1.85 D C. 0.95 D D. 1.49 D
64	The octet rule in not followed in the formation of	A. NF₃ B. CF₄ C. CCl₄ D. PCl₅
65	Carbon atom in methane in hybridized.	A. sp3 B. Sp2 C. Sp D. dsp3
66	Dipole moment of CO2 is.	A. 1.25 D B. 1.85 D C. 3.1 D D. Zero
67	Fluorine molecule (F_2) is formed by the overlap of	A. s - s orbital B. s - p orbital C. p - p head on overlapping of orbitals D. p - p parallel overlapping of orbitals
68	Which one of the following molecules is paramagnetic.	A. H2 B. He C. N2 D. O2
69	Which of the following molecule has zero dipole moment.	A. NH3 B. CHCl3 C. H2O D. BF3
70	In which one of the following pairs do the molecule have similar shape.	A. BF3 and AlCl3 B. CO2 and H2O C. CH4 and PH3 D. NH3 and BCl3
71	Which bond has more ionic characters in it.	A. C - F B. N - F C. O - F D. F - F
72	The number of bonds in oxygen molecules.	A. One sigma and One pi B. One sigma and two Pi C. Three sigma only D. Two sig and two pi
73	The structure of water molecule is.	A. angular B. Linear C. Trigonal D. Trigonal pyramidal
74	An ionic compound A^+B^- is most likely to be formed when	A. The ionization energy 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. Both 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
75	_____ Molecule has zero dipole moment.	A. CO B. H2S C. SO2 D. CH4
76	Which of the following species has unpaired electrons in anti-bonding molecular orbitals	A. O₂⁺² B. N₂⁻² C. B₂ D. F₂
77	Chlorine atom and chloride Cl- ions	A. Have same chemical and physical properties B. Are allotropes of chlorine C. Have same number of electrons D. Have same number of proton
78	Which element has highest ionization potential	A. Li B. Na C. K D. Rb

79	Which of the hydrogen halides has the highest percentage of ionic character.	A. HF B. HBr C. HCl D. HI
80	Which one of the following has the greater ionic characters in it.	A. HF B. HCl C. H2O D. H2
81	According to MOT, which molecular orbital has highest energy.	A. sigma 1s B. pi+ 2S C. pi 2py D. Pi+ 2px
82	The paramagnetic behaviour of oxygen is well explaned on the basis of.	A. M.O Theory B. N.B Theory C. VSEPR Theory D. CF theory
83	The molecule having zero dipole moment is.	A. NH3 B. CHCl3 C. H2O D. BF3
84	The molecular shape of SO3 is.	A. Triangular planar B. Tetrahedral C. Pyramidal D. Linear
85	Both CH4 and NH3 are four electron pair system the angles of CH4 and NH3 are 109.5^{o} and 107.5^{o} respectively. This deviation is due to.	A. Hydrogen bonding in ammonia B. Lone pair attraction C. Lone pair occupy more space and repel to other bond pairs D. Lone pair lone pair repulsion
86	The nature of bond in diamond is	A. Electrovalent B. Metallic C. Coordinate covalent D. Covalent
87	Which compound does not obey the octet rule.	A. NH3 B. BCl3 C. H2O D. CH4
88	The carbon atom is C2H4 is.	A. sp3 hybridized B. sG2 hybridized C. Sp hybridized D. dsG2 bybridized