

## MDCAT Chemistry Chapter 9 Electrochemistry Online Test

Sr	Questions	Answers Choice
1	Geometry of simple molecule with $sp^2$ hybridization	A. Triangular planar B. Trigonal C. Square planner D. Pyramidal
2	Elements of group IA and IIA are	A. electronegative B. neutral C. electropositive D. non-metals
3	Which one of the following has zero dipole moment	A. $NH_3$ B. $CHCl_3$ C. $H_2O$ D. $BF_3$
4	What is true for a molecule with standard geometry	A. It lacks a lp B. It can't be a donor C. It can be an acceptor D. All
5	What is not true for $NH_4Cl$	A. It has ionic bond B. It has covalent bond C. It has coordinate bond D. It has hydrogen bond
6	In a group, the atomic radii from top to bottom	A. increase B. decrease C. don't change D. show variable trend
7	A molecule that has polar bonds but is overall non - polar	A. IF B. $CCl_4$ C. $PCl_3$ D. All
8	Polarity of a molecule is expressed in terms of	A. Bond strength B. Dipole moment C. Bond length D. Shape
9	What will be the shape of a molecule which containstwo sigma bond pairs and one lone pair?	A. Linear B. V shape C. Tetragonal D. Triangular
10	For formation of ionic bond, electronegativity difference should be	A. Equal to zero B. Equal to 0.5 C. More then 1.7 D. Less than 1.7
11	Bond will be covalent when electronegativity difference of bonded atom is	A. Equal to 1.7 B. between 0.5 to 1.7 C. Greater to 1.7 D. zero
12	At compromise distance the forces dominating between atoms are	A. repulsive forces B. attractive forces C. Dipole induced dipole force D. H-bonding
13	The no. of lp's on oxygen in CO are	A. 1 B. 3 C. 4 D. 2
14	Ionic bond is produced after complete transfer of	A. nucleus B. neutrons C. electrons D. protons
15	what is the exact value of angle in $BF_3$	A. 90 B. 104.51 C. 119.5 D. $120^\circ$

16	The elements for which the value of ionization energy is low can	A. Gain electrons readily B. Lose electron less readily C. Gain electrons with difficulty D. Lose electron readily
17	Octet rule is not allowed in the formation of	A. NF <sub>3</sub> B. BCl <sub>4</sub> C. CCl <sub>4</sub> D. PCl <sub>5</sub>
18	Greater shielding effect corresponds to ionization potential value	A. greater B. lesser C. remain same D. no effect
19	Bonding in MgO is an example of	A. Ionic bond B. Polar bond C. Covalent bond D. Coordination covalent bond
20	Energy of atom in compound is	A. Higher than individual atom B. Lower than individual atom C. equal to individual atom D. Impossible to predict
21	Mostly ionic compounds are produced between elements of group	A. IA and IIA B. IB and VIB C. IA, IIA and VII-A D. IA and IB
22	Low IE is a symbol of	A. high electronegativity B. small size C. High electron affinity D. Metallic character
23	H <sub>3</sub> O <sup>+</sup> can't accept a lp because	A. it has positive charge B. The central atom is not electron deficient C. The shell of oxygen has reached its limit D. it already has a coordinate bond
24	Total number of valence electrons in phosphonium ion (PH <sub>4</sub> <sup>+</sup> ) is	A. 8 B. 9 C. 12 D. 10
25	The ionization energy	A. generally increases from left to right in a period B. increases from top to bottom in a group C. does not change in a period D. does not change in a group
26	The ionization energy of hydrogen atom is	A. Zero B. 131.3kJ/mole C. 13.13kJ/mole D. 1313kJ/mole
27	A covalent bond may be	A. 100% covalent B. Partial ionic C. 100% ionic D. Both a and b
28	Energy required to remove electron from an atom	A. Ionization potential B. Electronegativity C. Electropositivity D. Electron affinity
29	Covalent bonds are	A. directional B. Bidirectional C. Multidirectional D. Non directional
30	Which of the following molecule has zero dipole moment?	A. PCl <sub>3</sub> B. BF <sub>3</sub> C. NH <sub>3</sub> D. H <sub>2</sub> O
31	Which one of the followings has polar covalent bonds hut is overall non-polar molecule:	A. HF B. CO <sub>2</sub> C. CH <sub>4</sub> D. N <sub>2</sub>
32	The shielding effect of inner electron is responsible for	A. Having no effect on ionization energy B. Decreasing ionization energy C. Increasing ionization energy

		C. increasing ionization energy D. Increasing electronegativity
33	Elements having high ionization potential values are	A. metals B. non- metal C. liquids D. solid
34	Among the following molecules, which one has coordinate covalent (dative) bond?	A. CCl <sub>4</sub> B. CO <sub>2</sub> C. CO D. CH <sub>4</sub>
35	Which one is a non-polar compound?	A. SnCl <sub>2</sub> B. PH <sub>3</sub> C. GeCl <sub>4</sub> D. H <sub>2</sub> O
36	pi-bond can be formed by sideways overlap of	A. s-orbital B. d-orbital C. p-orbital D. sp orbital
37	A molecule which contains two lone pairs and two bond pairs of electrons in valence shell of central atom, geometrical shape of molecules will be	A. Tetrahedral B. Trigonal pyramidal C. Angular D. Linear
38	Carbon-Carbon double bond length in C <sub>3</sub> H <sub>6</sub>	A. 154 pm B. 134 pm C. 120 pm D. 105 pm
39	In a period the atomic radii	A. increase B. decrease C. remain same D. first increase, then decreased