

## MDCAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Which of the following compounds is not known?	A. SbCl B. NCl <sub>3</sub> C. NI <sub>3</sub> D. NCl <sub>5</sub>
2	Which element of group V-A and VII-A does not use d-orbital?	A. Nitrogen B. Sulphur C. Arsenic D. Chlorine
3	Which one of the following doesn't exhibit allotropy?	A. Bi B. As C. N D. P
4	Which pair of following pair is metalloid?	A. Antimony and bismuth B. Phosphorous and arsenic C. Nitrogen and phosphorous D. Arsenic and antimony
5	Which of the following elements is most metallic	A. Bi B. sb C. As D. P
6	The element which exhibits maximum catenation property is	A. C B. Pb C. Ge D. Sn
7	Elements of group IV-A are	A. neither strongly electropositive nor strongly electronegative B. strongly electropositive C. strongly electronegative D. none of these
8	The general electronic configuration of group IV-A elements is	A. ns <sup>2</sup> , np <sup>6</sup> B. ns <sup>2</sup> , np <sup>4</sup> C. ns <sup>2</sup> , np <sup>3</sup> D. ns <sup>2</sup> , np <sup>2</sup>
9	What is the formula of silica?	A. Si <sub>2</sub> O <sub>3</sub> B. SiO <sub>2</sub> C. Si <sub>3</sub> O <sub>4</sub> D. SiO-
10	What is name of hydrated variety of quartz?	A. Rose quartz B. Smokey quartz C. Silica D. Opal
11	About 25% of earth crust mass is made up of element	A. Oxygen B. Silicon C. Aluminium D. Aluminates
12	What is the formula of talc or soapstone?	A. Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> ·10H <sub>2</sub> O B. H <sub>2</sub> Mg <sub>3</sub> (SiO <sub>3</sub> ) <sub>4</sub> C. Cu <sub>2</sub> S D. NaNO <sub>3</sub>
13	What is the formula of magnesite?	A. PbS B. MgSO <sub>4</sub> ·7H <sub>2</sub> O C. MgCO <sub>3</sub> D. CaCO <sub>3</sub>
14	What is the formula of dolomite?	A. CaMg <sub>3</sub> (SiO <sub>3</sub> ) <sub>4</sub> B. MgCO <sub>3</sub> C. MgCO <sub>3</sub> ·CaCO <sub>3</sub> D. MgSO <sub>4</sub>
15	Which is not mineral of Al?	A. Diaspore B. Corundam C. Bauxite D. ...

16	Formula of sodium beryllite is	A. $\text{Na}_2\text{B}_4\text{O}_7$ B. $\text{Na}_2\text{BeO}_2$ C. $\text{BeONa}$ D. $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10 \text{H}_2\text{O}$
17	What is the formula of clay?	A. Asbestos B. Talc C. $\text{H}_2\text{Al}_2(\text{SiO}_4)_2 \cdot \text{H}_2\text{O}$ D. $\text{Na}_2\text{SiO}_3$
18	What is the formula of cryolite?	A. $\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$ B. $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10 \text{H}_2\text{O}$ C. $\text{Na}_3\text{AlF}_6$ D. $\text{Ca}_2\text{B}_6\text{O}_{11} \cdot 5\text{H}_2\text{O}$
19	What is the formula of bauxite?	A. $\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$ B. $\text{Al}_2\text{O}_3$ C. $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10 \text{H}_2\text{O}$ D. $\text{Ca}_2\text{B}_6\text{O}_{11} \cdot 5\text{H}_2\text{O}$
20	Corrundam is ore of which element?	A. Al B. Th C. In D. Mg
21	Which alkaline earth metal makes peroxide?	A. Ba B. Be C. Mg D. Ca
22	Which of the following element has high m.p and b.p, it acts as a reducing agent, and can react with bases?	A. Sr B. Ca C. Be D. Mg
23	How magnesium reacts with water?	A. In frozen ice water B. With cold water C. In with steam D. In hot state
24	One of the following does not give the flame test. Which is that	A. Sr B. Ba C. Be D. Na
25	Asbestos is commonly used in making	A. wall board B. black board C. soft board D. hard board
26	Plaster of Paris is obtained from	A. marble B. bauxite C. gypsum D. limestone
27	Elements of II-A group are called alkaline earth metals due to the reason that	A. they occur in earth only B. they form divalent cations only C. they have $ns^2$ electronic configuration D. their oxides and hydroxides are alkaline in nature and metals are present in earth crust
28	Which of the following configurations corresponds to alkaline earth metals?	A. $[\text{Ar}] 3d^{10}, 4s^2$ B. $[\text{Ne}] 3d^2, 3p^2$ C. $[\text{Ar}] 4s^2$ D. $[\text{Ar}], 3d^{10}, 4s^1$
29	Beryllium differs from other elements of group II-A due to	A. high charge density B. comparatively high nuclear charge C. small radius D. all above
30	Which element differs from rest of elements of its group?	A. Ba B. Mg C. Ca D. Be
31	The alkaline earth metals are called so because they	A. form alkaline solution and are present in earth crust as minerals B. form alkaline solution and are found in nature states C. are present in earth crust D. are present in earth crust as their minerals

32	Elements of group II-A are called	<p>A. f-block elements</p> <p><b>B. s-block elements</b></p> <p>C. p-block elements</p> <p>D. d-block elements</p>
33	Soda lime is often employed to remove both	<p>A. H<sub>2</sub>O and NO<sub>2</sub></p> <p>B. CO<sub>2</sub>, and NO<sub>2</sub>,</p> <p><b>C. H<sub>2</sub>O and CO<sub>2</sub></b></p> <p>D. H<sub>2</sub>S and CO<sub>2</sub></p>
34	Li resembles with Mg, because	<p><b>A. the ratio of their charge to size is nearly the same</b></p> <p>B. both have nearly same size</p> <p>C. both are metallic in nature</p> <p>D. both are found together in nature</p>
35	Compared with alkaline earth metals, the alkali metals exhibit.	<p><b>A. lower ionization energies</b></p> <p>B. greater hardness</p> <p>C. high boiling point</p> <p>D. smaller ionic radii</p>
36	Which of the following belongs to alkaline earth metals	<p>A. Cu</p> <p>B. Zn</p> <p>C. Sn</p> <p><b>D. Mg</b></p>
37	Which of the following are not known to form compounds in more than one oxidation state?	<p>A. Transition metals</p> <p>B. Halogens</p> <p><b>C. Alkali metals</b></p> <p>D. Noble gases</p>
38	Which set of elements is good loser of electrons	<p>A. F<sub>2</sub>, Cl<sub>2</sub>, Br<sub>2</sub></p> <p>B. N, P, As</p> <p>C. O, S, Se</p> <p><b>D. Li, Na, K</b></p>
39	Which one of the following elements is most electropositive out of group I -A and II-A group?	<p><b>A. K</b></p> <p>B. Mg</p> <p>C. Na</p> <p>D. Ca</p>
40	Which of the following does not give flame test?	<p><b>A. Li</b></p> <p>B. Ba</p> <p>C. Mg</p> <p>D. Sr</p>
41	The elements of group I-A react violently with water and make the solution	<p>A. neutral</p> <p>B. amphoteric</p> <p>C. acidic</p> <p><b>D. alkaline</b></p>
42	Which is the least reactive of all the alkali metals	<p><b>A. Li</b></p> <p>B. Na</p> <p>C. K</p> <p>D. Cs</p>
43	One of the following metals is the most reactive and form super oxide. Indicate that	<p>A. Mg</p> <p><b>B. K</b></p> <p>C. Be</p> <p>D. Li</p>
44	Lithium differs from rest of members of its group due to which of following reasons	<p>A. High E.N of Li<sup>+</sup></p> <p>B. Small radius</p> <p>C. High charge density</p> <p><b>D. All above are correct</b></p>
45	Which one of following property is not true about alkali metals?	<p>A. Strongest bases due to their hydrides</p> <p>B. Low ionization energy</p> <p>C. Oxidation number more than +1</p> <p><b>D. Form acidic oxides</b></p>
46	Which one of the following elements is not an alkali metal?	<p>A. Na</p> <p><b>B. Sr</b></p> <p>C. Cs</p> <p>D. Rb</p>
47	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	<p>A. Tetrahedral</p> <p>B. Trigonal pyramidal</p> <p><b>C. Angular</b></p> <p>D. Linear</p>
48	What will be the shape of a molecule which containstwo sigma bond pairs and one lone pair?	<p>A. Linear</p> <p><b>B. V shape</b></p> <p>C. Tetragonal</p> <p>D. Triangular</p>
49	The addition of alkali metal to liquid ammonia	<p>A. Having no effect on ionization energy</p> <p><b>B. Decreases ionization energy</b></p> <p>C. Increases ionization energy</p> <p>D. Having no effect on electron affinity</p>

49	The shielding effect of inner electron is responsible for	B. Decreasing ionization energy C. Increasing ionization energy D. Increasing electronegativity
50	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
51	The ionization energy of hydrogen atom is	A. Zero B. 131.3kJ/mole C. 13.13kJ/mole D. 1313kJ/mole
52	For formation of ionic bond, electronegativity difference should be	A. Equal to zero B. Equal to 0.5 C. More than 1.7 D. Less than 1.7
53	Which of the following molecule has zero dipole moment?	A. $\text{PCl}_3$ B. $\text{BF}_3$ C. $\text{NH}_3$ D. $\text{H}_2\text{O}$
54	Among the following molecules, which one has coordinate covalent (dative) bond?	A. $\text{CCl}_4$ B. $\text{CO}_2$ C. $\text{CO}$ D. $\text{CH}_4$
55	Which one of the following has zero dipole moment	A. $\text{NH}_3$ B. $\text{CHCl}_3$ C. $\text{H}_2\text{O}$ D. $\text{BF}_3$
56	Low IE is a symbol of	A. high electronegativity B. small size C. High electron affinity D. Metallic character
57	At compromise distance the forces dominating between atoms are	A. repulsive forces B. attractive forces C. Dipole induced dipole force D. H-bonding
58	What is not true for $\text{NH}_4\text{Cl}$	A. It has ionic bond B. It has covalent bond C. It has coordinate bond D. It has hydrogen bond
59	$\text{H}_3\text{O}^+$ 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
60	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