

MDCAT Chemistry Chapter 5 Solids Online Test

Sr	Questions	Answers Choice
1	Crystals can be classified into	A. 7 crystal systems B. 4 crystal systems C. 3 crystal systems D. 14 crystal systems
2	Which among the following will show anisotropy?	A. Wood B. Glass C. Paper D. BeCl ₂
3	How many allotropic forms are present in carbon?	A. Two B. Four C. Three D. Five
4	Hardness of diamond is attributed to the	A. strength of the ionic bonds in the structure B. three-dimensional network of covalent bonds C. three-dimensional network of covalent bonds D. absence of valence electrons in carbon atoms
5	In diamond, the carbon atoms are arranged in a	A. tetrahedral manner B. hexagonal manner C. square planar manner D. octahedral manner
6	The examples of a hexagonal system is	A. sugar B. graphite (a=b not equal to c) {Alpha =beta. not equal to gamma} C. sulphur D. diamond
7	Which one is an isomorphous pair?	A. NaNO ₃ , CaCO ₃ , B. NaF, MgO C. K ₂ SO ₄ , K ₂ Cr ₂ O ₇ D. Zn, Cd
8	Polymorphism is shown by AgNO ₃ . Which one of the following options is true for AgNO ₃ ?	A. Orthorhombic and rhombohedral B. Cubic and orthorhombic C. Cubic and tetragonal D. Monoclinic and hexagonal
9	The transition temperature of KNO ₃ , is	A. 13.2°C B. 95.5°C C. 128°C D. 32.02°C
10	The existence of an element in more than one form is called	A. allotropy B. isomorphism C. polymorphism D. isotropy
11	The transition temperature of tin is	A. 95.5 C° B. 13.2 C° C. 13.2°C D. 128.5°
12	K ₂ SO ₄ , and K ₂ Cr ₂ O ₄ , are isomorphous solids and exist in	A. cubic form B. orthorhombic form C. trigonal form D. tetragonal
13	Which impurity makes the shape of NaCl crystal needle like	A. MgSO ₄ B. urea C. glucose D. MgCO ₃
14	The hexagonal closed packing is associated with	A. Ag, Cu, Au B. Zn, Cd, Hg C. Li, Na, K D. NaCl, KBr

15	The most unsymmetrical one in crystal system is	A. triclinic B. Li, Na, K C. monoclinic D. hexagonal
16	Structure of CrO_4^{2-} is	A. triclinic B. cubic C. octahedral D. tetrahedral
17	A crystal system in which all three angles and all three edges are different is called	A. triclinic B. rhombohedral C. cubic D. hexagonal
18	What is the co-ordination number of face centered cubic structure?	A. 12 B. 8 C. 6 D. 10
19	In crystal of sodium chloride, a Cl^- ion present at the corner of cube is shared between how many cubes?	A. 8 B. 4 C. 6 D. 10
20	Which property is associated with ionic solids?	A. Solubility in polar solvents B. Low melting points C. Good conductivity in solid state D. High vapour pressure
21	The structure of sodium chloride is	A. simple cube B. body centered cubic C. face centered cubic D. depends upon conditions
22	An element from the given below exists as discrete small molecules in the solid state. Which is that?	A. Sodium B. Silicon C. Iodine D. Iron
23	One of the following is a ionic solid. Which is that?	A. Fe B. KBr C. Diamond D. Cr
24	LiF is a crystalline substance and has	A. ionic crystal B. metallic crystal C. covalent crystal D. molecular crystal
25	Some of crystals are good conductors of heat and electricity, they may be	A. ionic in nature B. of metallic character C. covalent in nature D. of molecular nature
26	Ionic solids are characterized by which one of the following properties	A. moderately low pressure B. high vapour pressure C. good conductivity in solid state D. solubility in polar solvents
27	Ionic solids don't conduct the electrical current because	A. ion do not have translatory motion B. free electrons are less C. the coordination number of the ion is very high D. strong covalent bonds are present in their structure
28	The number of Cl^- ions per unit cell of NaCl are	A. 6 B. 4 C. 2 D. 8
29	The Cl^- ion present at the corner of the unit cell is NaCl crystal, contributes	A. $1/8$ th B. $1/4$ th C. $1/2$ th D. 1
30	NaCl has face centered cubic structure. The Na ion at the face of the unit cell is shared by	A. 2-unit cells B. 4-units cells C. only one unit cell D. 8-unit cells
31	The number of Na^+ ions which surround each Cl^- ion in the NaCl crystal lattice is	A. 8 B. 12 C. 6 D. 10

32	Substance that does not show the process of sublimation is	A. naphthalene B. iodine C. naphthalene D. NH_4Cl
33	The crystal of diamond is	A. ionic B. molecular C. covalent D. metallic
34	In most of the cases the molecular crystals are	A. very soft B. soft C. extremely hard D. sufficiently hard
35	The crystals formed due to London forces of interaction are	A. ionic B. covalent C. molecular D. metallic
36	The nature of crystal of diamond is	A. metallic B. molecular C. covalent D. ionic
37	The molecules of CO_2 , in dry ice form the	A. covalent crystals B. molecular crystals C. none of these crystals D. ionic crystals
38	The geometry of diamonds is	A. tetragonal B. cubic C. rhombohedral D. none of these
39	Which of the following solids does not have a covalent bond?	A. Silica B. Copper C. Diamond D. Graphite
40	In diamond, which hybridization is there?	A. sp^2 B. dsp^2 C. sp^3 D. sp
41	in diamond a unit cell is tetrahedral and overall crystal structure is	A. face centred cubic B. body centred cubic C. tetrahedral D. hexagonal
42	Which attractive forces cause molecular solids to be formed?	A. Ionic B. Metallic C. Covalent D. van der Waals
43	How temperature affects the electrical conductivity of metals?	A. Does not change at all B. Decreases with increasing temperature C. Increases with increasing temperature D. Decreases with decreasing temperature
44	Metallic bonds have been explained by many theories. Luis Pauling has proposed a theory called	A. molecular orbital theory B. electron gas theory C. band theory D. valence bond theory
45	The electrical conductivity of the metals decreases with the increasing temperature. This is because	A. the number of free electrons decrease B. the bonds of the metal atoms become weak C. the to and fro motion of the metal ions decrease D. the increase of to and fro motion of the metal ions hinders the free movement of electrons
46	All the metal shine when they are freshly cut The reason is	A. the conductivity of the metal is increased B. the process of cutting gives energy to the metal atoms C. the electrons become less delocalized according to valence bond theory D. the electrons are excited at higher energy levels and emit the photons when they fall back

47	The arrangement ABC, ABC is referred as	<ul style="list-style-type: none">A. cubic close packingB. octahedral close packingC. hexagonal close packingD. tetrahedral close packing
48	Amorphous means	<ul style="list-style-type: none">A. arrangedB. orderedC. shapedD. shapeless (no arrangements)
49	Plastics are amorphous solids and	<ul style="list-style-type: none">A. have sharp melting pointsB. undergo clean cleavage when cut with knifeC. do not undergo clean cleavageD. possess orderly arrangement over long distances