

MDCAT Chemistry Chapter 4 Liquids Online Test

Sr	Questions	Answers Choice
1	In order to maintain the boiling point of water at 110 C°, the external pressure should be	A. 550 torr B. between 500 and 760 tor C. between 760 and 1500 torr D. any pressure can be maintained
2	At freezing point of water, the density decreases due to	A. change of bond angles B. change of bond lengths C. cubic structure of ice D. empty spaces present in the structure of ice
3	Dipole-induced dipole forces are also called	A. dipole-dipole forces B. ion-dipole forces C. Debye forces D. London-dispersion forces
4	The nature of the attractive force in acetone and chloroform are	A. dipole-induced dipole forces B. dipole-dipole forces C. ion-dipole forces D. instantaneous forces
5	The weakest intermolecular forces present in a liquid may be	A. Dipole-induced dipole forces B. dipole-dipole forces C. instantaneous forces D. electrostatic forces between ions in a ionic solid
6	Halogens form halogen acids. HF is the weakest among all of them This is due to the reason that	A. fluorine is a very small-sized atom B. fluorine is highly electronegative atom C. there is strong hydrogen bonding in HF D. the polarity of HF bond is less
7	The B.P. of compound is mostly raised by	A. dipole-induced dipole interactions B. london dispersion forces C. intramolecular H-bonding D. intermolecular H-bonding
8	The boiling of water may be 120°C, when the external pressure is	A. greater than 760 torr B. less than 760 torr C. equal to 760 torr D. variable
9	The boiling point of higher alkanes are greater than those of lower alkanes due to reason that	A. higher alkanes have greater number of atoms B. the polarizabilities of higher alkanes are greater C. higher alkanes have greater hydrogen bonding D. higher alkanes have zig-zag structures
10	The boiling point of glycerin at 1 atmospheric pressure is:	A. 290°C B. 390°C C. 190C° D. 210°C
11	Point out the substance which has maximum vapour pressure at a given temperature?	A. Acetone B. Water C. Ethanol D. Acetic acid
12	Polarizability is responsible for intermolecular forces and it	A. increases down the group B. decreases down the group C. almost remains the same D. increased along a period
13	Hydrogen bonding is extensively present in proteins which form the spiral. The hydrogen bond being produced is between	A. nitrogen and hydrogen atom B. oxygen and hydrogen atom C. carbon and hydrogen atom D. oxygen and carbon atom
	Oxvaen and sulphur are present in VI-A group of the periodic table The hvdride of oxvaen	A. greater bond angle of water than Hs B. ...

14	Hydrogen sulphide and phosphine belong to the same group in the periodic table but hydrogen sulphide, i.e., H ₂ O is liquid at room temperature but the hydride of sulphur (H ₂ S) is a gas. This is due to	B. greater bond lengths in HS than H ₂ O C. hydrogen bonding in water D. acidic character of HS
15	The B.P of glycerine at 760 torr pressure is	A. 200°C B. 290°C C. 250°C D. 262°C
16	The boiling point of H ₂ O is 100°C while that of C ₂ H ₅ -OH is 78.5°C. The reason is that:	A. H ₂ O molecules are small-sized B. the bond angles at oxygen atom are different C. C ₂ H ₅ -group is electron donating D. the number of H-bonds are greater in H ₂ O, than C ₂ H ₅ -OH
17	Amount of heat absorbed when one mole of a solid melts into liquid form at its melting point is called:	A. heat of vaporization B. latent heat of fusion C. molar heat of fusion D. molar heat of sublimation
18	The nature of crystals formed due to London forces of interaction are	A. molecular B. metallic C. ionic D. covalent
19	Strong dipole-dipole forces among the liquid molecules are responsible for	A. very high heat of vaporization B. very low heat of vaporization C. cannot be predicted D. negligible forces are these
20	Hydrogen bonding is not present in which of following compound?	A. Ammonia B. Ethanol C. Ether D. Water
21	The forces which are present between the ions and the water molecules are known as	A. dipole-induced dipole forces B. dipole-dipole forces C. ion-dipole forces D. London dispersion forces
22	The long chains of amino acids are coiled around one another into a spiral by	A. ionic bond B. Van der Waal's forces C. hydrogen bonding D. overlapping of orbitals
23	The polarizabilities of elements mostly increase down the group due to the reason that	A. the atomic numbers increase B. number of protons increase C. number of shells increase along with increase of shielding effect D. the behaviour of the elements remain the same
24	Ice occupies more space than liquid water	A. 9% B. 10% C. 11% D. 12%
25	H ₂ O and HF are the hydrides of the second period. Fluorine is more electronegative than oxygen. Anyhow, the boiling point of water is greater than that of HF. This is due to:	A. water is more polar than HF B. water has a bent structure C. HF has a zig zag structure after making hydrogen bonding D. the number of hydrogen bonds produced by water are greater than that of HF
26	Dipole-dipole interaction are present in the	A. atoms of the He gas B. molecules of CCl ₄ C. molecules of solid iodine D. molecules of :NH ₃
27	The boiling points of the halogens	A. increases down the group B. decreases down the group C. remains constant D. can not be predicted
28	Saturated hydrocarbons having carbon atoms more than 20 in a molecule are solids due to	A. higher densities B. higher molar masses C. the chain, are more zig-zag D. all are correct
29	Which of the following liquid has highest boiling point	A. HCl B. HBr C. H ₂ O D. Br ₂
		A. rate of evaporation is greater than the rate of condensation

30	Liquids evaporate at every temperature. When the temperature becomes constant for a liquid, then:	<p>the rate of condensation</p> <p>B. the rate of condensation is greater than the rate of evaporation</p> <p>C. The rate of condensation and evaporation become equal</p> <p>D. it depends upon the nature of the liquid</p>
31	H-bonding is maximum in:	<p>A. ethanol</p> <p>B. benzene</p> <p>C. diethyl ether</p> <p>D. water</p>
32	Vapour pressure of a substance does not depend upon:	<p>A. physical state of matter</p> <p>B. temperature</p> <p>C. intermolecular forces</p> <p>D. surface area</p>
33	Which of following factor affect vapour pressure of a liquid?	<p>A. temperature</p> <p>B. inter molecules forces</p> <p>C. size of the molecules</p> <p>D. all of these</p>
34	Liquid hydrocarbon is	<p>A. methane</p> <p>B. propane</p> <p>C. ethane</p> <p>D. hexane</p>
35	The vapour pressure of a liquid depends upon	<p>A. amount of the liquid</p> <p>B. surface area</p> <p>C. temperature</p> <p>D. size of container</p>
36	Ice floats on water because	<p>A. the hydrogen bonding in ice is stronger than that of in water</p> <p>B. empty spaces are left in ice</p> <p>C. ice has two-dimensional structure</p> <p>D. the bond length of the oxygen and hydrogen bond is different in water and ice</p>