

MDCAT Chemistry Chapter 4 Chemical Bonding Online Test

Sr	Questions	Answers Choice
1	Dipole-induced dipole forces are also called	A. dipole-dipole forces B. ion-dipole forces C. Debye forces D. London-dispersion forces
2	Hydrogen bonding is not present in which of following compound?	A. Ammonia B. Ethanol C. Ether D. Water
3	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
4	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
5	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
6	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
7	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
8	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
9	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
10	Liquid hydrocarbon is	A. methane B. propane C. ethane D. hexane
11	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
12	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
13	Point out the substance which has maximum vapour pressure at a given temperature?	A. Acetone B. Water C. Ethanol D. Acetic acid

14	Which of following factor affect vapour pressure of a liquid?	A. temperature B. inter molecules forces C. size of the molecules D. all of these
15	Liquids evaporate at every temperature. When the temperature becomes constant for a liquid, then:	A. rate of evaporation is greater than the rate of condensation B. the rate of condensation is greater than the rate of evaporation C. The rate of condensation and evaporation become equal D. it depends upon the nature of the liquid
16	The vapour pressure of a liquid depends upon	A. amount of the liquid B. surface area C. temperature D. size of container
17	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
18	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
19	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
20	Oxygen and sulphur are present in VI-A group of the periodic table The hydride of oxygen 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	A. greater bond angle of water than H ₂ S B. greater bond lengths in HS than H ₂ O C. hydrogen bonding in water D. acidic character of HS