

MDCAT Chemistry Chapter 4 Chemical Bonding Online Test

Sr	Questions	Answers Choice
1	Point out the substance which has maximum vapour pressure at a given temperature?	A. Acetone B. Water C. Ethanol D. Acetic acid
2	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 H ₂ S than H ₂ O C. hydrogen bonding in water D. acidic character of H ₂ S
3	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
4	Ice floats on water because	A. the hydrogen bonding in ice is stronger than that of in water B. empty spaces are left in ice C. ice has two-dimensional structure D. the bond length of the oxygen and hydrogen bond is different in water and ice
5	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
6	Ice occupies more space than liquid water	A. 9% B. 10% C. 11% D. 12%
7	Vapour pressure of a substance does not depend upon:	A. physical state of matter B. temperature C. intermolecular forces D. surface area
8	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
9	H-bonding is maximum in:	A. ethanol B. benzene C. diethyl ether D. water
10	The boiling points of the halogens	A. increases down the group B. decreases down the group C. remains constant D. can not be predicted
11	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
12	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
13	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

14	The nature of the attractive force in acetone and chloroform are	<p>A. dipole-induced dipole forces</p> <p>B. dipole-dipole forces</p> <p>C. ion-dipole forces</p> <p>D. instantaneous forces</p>
15	The long chains of amino acids are coiled around one another into a spiral by	<p>A. ionic bond</p> <p>B. Van der Waal's forces</p> <p>C. hydrogen bonding</p> <p>D. overlapping of orbitals</p>
16	Which of the following liquid has highest boiling point	<p>A. HCl</p> <p>B. HBr</p> <p>C. H₂O</p> <p>D. Br₂</p>
17	The boiling point of glycerin at 1 atmospheric pressure is:	<p>A. 290°C</p> <p>B. 390°C</p> <p>C. 190°C</p> <p>D. 210°C</p>
18	The forces which are present between the ions and the water molecules are known as	<p>A. dipole-induced dipole forces</p> <p>B. dipole-dipole forces</p> <p>C. ion-dipole forces</p> <p>D. London dispersion forces</p>
19	Liquids evaporate at every temperature. When the temperature becomes constant for a liquid, then:	<p>A. rate of evaporation is greater than 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>
20	Dipole-induced dipole forces are also called	<p>A. dipole-dipole forces</p> <p>B. ion-dipole forces</p> <p>C. Debye forces</p> <p>D. London-dispersion forces</p>