

## States and Phases of Matter

Sr	Questions	Answers Choice
1	Which of the following halogens has the highest boiling point.	A. $I_2$ B. $Cl_2$ C. $F_2$ D. $Br_2$
2	Which one of the following effects explains the cooling during the sudden expansion of a gas.	A. Boyle's Effect B. Joule Thomson Effect C. Charles Effect D. Avogadro's law
3	Which of the following materials is an example of an amorphous solid	A. Glass B. Ice C. Diamond D. Sodium Chloride
4	Which of the following is essential for hydrogen bond formation.	A. Hydrogen bonded to a metal B. Hydrogen bonded to high electronegative atoms F, O, or N C. Hydrogen bonded to non polar atom D. Present of pi bond
5	Liquid crystals exhibit properties.	A. Only like solids B. Only like liquid C. Between solids and liquids D. Unlike solids or liquids
6	What happens to the volume of water when it freezes.	A. Because F is less electronegative B. Because it is non polar C. Because hydrogen bonding in HF traps the $H^+$ ion D. Because HF is a gas
7	Which of the following has greater viscosity than water	A. Glycerine B. Hexane C. Acetone D. Methanol
8	London dispersion forces are the only forces present among.	A. Molecules of water in liquid state B. Atoms of helium in gaseous state at high temperature C. Molecules of solid iodine D. Molecules of hydrogen chloride gas
9	What type of structure do water molecules form in ice.	A. Linear B. Hexagonal close packed C. Regular tetrahedral D. Irregular amorphous
10	Which of the following has the lowest boiling point among pentane isomers.	A. 2,2 Dimethylpropane B. n-Pentane C. 2 Methyl Butane D. Isohexane
11	When a crystalline solid is broken, it does so along specific planes, These planes are known as.	A. Cleavage planes B. Crystal faces C. Surface planes D. Growth planes
12	Which of the following is a unique optical property of liquid crystals.	A. They reflect ultraviolet light B. They are always opaque C. They are anisotropic D. They are isotropic
13	According to Avogadro's Law, volume is directly proportional to.	A. Pressure B. Temperature C. Number of moles D. Density
		A. It becomes needle like

14	What happens to the shae of a NaCl crystal when 10% urea is present in its solution.	<p>B. &lt;p&gt;It becomes larger&lt;/p&gt;</p> <p>C. &lt;p&gt;It reamains the same&lt;/p&gt;</p> <p>D. &lt;p&gt;It becomes cubic&lt;/p&gt;</p>
15	Which of the following statemetns about ideal gases is true.	<p>A. &lt;p&gt;they have strong intermolecular forces&lt;/p&gt;</p> <p>B. &lt;p&gt;Their particles have significant volume&lt;/p&gt;</p> <p>C. &lt;p&gt;Their volume is mainly due to particle size&lt;/p&gt;</p> <p>D. &lt;p&gt;They have negligible intermolecular forces&lt;/p&gt;</p>
16	Why is water's surface tension so high.	<p>A. &lt;p&gt;Due to its ioic nature&lt;/p&gt;</p> <p>B. &lt;p&gt;Because of hydrogen boding pulling surface molecules downward&lt;/p&gt;</p> <p>C. &lt;p&gt;Beacue it has low boiling point&lt;/p&gt;</p> <p>D. &lt;p&gt;Beacuse water molecules are very large&lt;/p&gt;</p>
17	Why is the compression of solids not possible	<p>A. &lt;p&gt;The particles are fixed in place and cannot move closer&lt;/p&gt;</p> <p>B. &lt;p&gt;Their particles are widely spaced&lt;/p&gt;</p> <p>C. &lt;p&gt;The partiles are charged&lt;/p&gt;</p> <p>D. &lt;p&gt;Solids are made of gases&lt;/p&gt;</p>
18	The expansion of liquids increase with temperatur eis.	<p>A. &lt;p&gt;Equa to that of gases&lt;/p&gt;</p> <p>B. &lt;p&gt;Greater than that of gases&lt;/p&gt;</p> <p>C. &lt;p&gt;Negligible copared to gasses&lt;/p&gt;</p> <p>D. &lt;p&gt;Same as solids&lt;/p&gt;</p>
19	What causes the lower compressibility of liquids compared to gaes.	<p>A. &lt;p&gt;Absence of intermolecular forces&lt;/p&gt;</p> <p>B. &lt;p&gt;Larger mollecular size&lt;/p&gt;</p> <p>C. &lt;p&gt;Stonger intermolecuair fores and less empty space&lt;/p&gt;</p> <p>D. &lt;p&gt;High kinetic energy of molecules&lt;/p&gt;</p>
20	Surface tensin of liquid is due to.	<p>A. &lt;p&gt;Inword pull of surface molecule&lt;/p&gt;</p> <p>B. &lt;p&gt;Upard pull from&amp;nbsp; the surface&lt;/p&gt;</p> <p>C. &lt;p&gt;Collision of molecules&lt;/p&gt;</p> <p>D. &lt;p&gt;Repulsive forces&lt;/p&gt;</p>