Home Assignment

Chemistry

1) Explain how gases can be liquified?

Ans - Gases can be liquified by increasing the pressure and decreasing the temparationtence. Increasing the temperature will bring the particle closer and cooling will cause the particles to lose energy. So, they will again be attracted towards each other By intermolecular attraction and they form liquids.

2) What is Sublimation?

Ans- Sublimation is the convertion between the solid and the gaseous phase of matter, with no intermediate liquid stage. Ex- dry ice sublimes.

3) Give Reasons :—

(a) liquids and gases flow but solid do not : The intermolecular force is less in liquid and gas as compared to solid so solid donot flow.

(b) Why is an egg kicked out of a bottle when air is blown inside the bottle ? : because it creates high pressure inside the bottle and makes the egg kicked out.

(c) The odour of scent spreades in a room : It happens due to diffusion. The scent fills the space between air molecules and the molecules of air fill the space between scent molecules.

(d) We can walk through air : The molecules of air are far apart so we can walk through air easily.

(e) Liquids have definite volume but no definite shape : The molecules of liquids are loosely packed and intermolecular force of attraction is small but number of molecules in it remains the same.

(f) When a teaspoon of sugar is added to half a glass of water and stirred, the water level in the glass remains unchanged :

Ans. Because the sugar particles are adjusted between the water molecules as intermolecular

gaps are more in liquids.

(g) When an empty gas jar is inverted over a gas jar containing a coloured gas, the gas also spreads into the empty jar: Because gases can diffuse in or flow in all directions.

(h) A red ink drop added to a small amount of water in a glass turns the water red in some time : The particles diffuse with the particles of water slowly but contin-uously and thus after some time the total of water is turns red colour