

b) oxygen

07) The process by which a solid changes into a liquid is called

b) melting

### Exercise - III

1) State the three effects of  $m$  heat on matter.

- Interconversion of states of matter.
- Chemical change.
- Thermal expansion of the substance.

2) Define.

a) Interconversion of states of matter.

b) What are the two conditions on the interconversion of states of matter?

a) Change of one state to another is called interconversion of state of matter.

b) Temperature and pressure are the two conditions on the interconversion of states of matter.

3) Define the following terms:

a) Fusion, (b) Vaporisation, (c) Condensation, (d) Sublimation,  
(e) Diffusion, (f) melting point, (g) boiling point (h) liquefaction.

a) A process of matter by which a solid changes to liquid.

b) Conversion of a liquid into vapour on heating.

c) A process of matter by which a gas changes to liquid.

d) The solid substance into its vapour without undergoing liquid state on heating.

e) Two or more substance get mixed by molecular motion.

f) Temperature at which a solid melts to liquid.

g) Temperature at which a liquid boils into its vapour state.

h) The process by which a gas changes to liquid.

4) Differentiate between.

- a) Solidification and condensation
- b) Melting and boiling.
- c) Gas and vapour
- d) Miscible and immiscible liquids.

a) The process by which a liquid changes to solid is solidification.  
b) The process by which a gas changes to liquid is condensation.

b) The process by which a solid changes to liquid is melting.

• The process by which a liquid changes to vapour.

c) Gas is a state of matter which doesn't have definite volume or shape.

• Substances in gaseous state of matter is called vapour.

d) Liquids which mixes with each other are called miscible liquids.

• Liquids which do not mix with each other are called immiscible liquids.

5) How is interconversion of states of matter different from a chemical reaction?

During the interconversion of states of matter composition of substance remains the same matter changes from one state to another and back to the original state, while chemical reaction involves re-arrangement of the molecular structure.

6) How does a liquid change into its gaseous state? explain.

When a liquid is heated, the particles start moving more vigorously, which increases the space between them and thus a liquid changes to gas.

7) Water cycle is an example of inter conversion of states of matter. Explain.

Water sources get evaporated by the heat of the sun and changes into vapours when temperature increases and enters the atmosphere as clouds when temperature falls, the vapours change into water as rain and some of them fall on the mountain as snow. This snow melt and change into water. And this continues.

8) What happens to a metal ball when it is heated? What does this show?

The metal ball expands when is heated. This shows that a matter can expand on heating.

Q) Why does a candle become smaller on burning with time?

On heating, the wax melts, then turns into vapour which reacts with air to produce ~~to~~ new substances, water and carbondioxide. Thus a candle become smaller on burning with time. And the part of wax which has undergone chemical change cannot be recovered.