

7. Differentiate between melting point and boiling point, giving one example of each.

Ans:- Melting point

Boiling point

The temperature at which a solid changes into liquid without further increase in temperature.

Ex - ice at  $0^{\circ}\text{C}$  melts to form water at  $0^{\circ}\text{C}$  by the absorption of heat.

The temperature at which liquid changes into vapour without further increase in temperature.

Ex - water at  $100^{\circ}\text{C}$  changes to steam at  $100^{\circ}\text{C}$  by absorption of heat.

8. Describe the process of condensation and sublimation with examples.

Ans:- Condensation:- Steam at  $100^{\circ}\text{C}$  condenses to water at  $100^{\circ}\text{C}$  on cooling.

Sublimation:- When ammonium chloride is heated it directly change into its vapour.

9. Explain the terms melting and melting point.

Ans:- Melting :- The change from the solid state to the liquid state on heating at a fixed temperature is called melting.

Melting point :- See Answer 7.

10. Describe an experiment to demonstrate that a substance absorbs heat during melting without change in its temperature.

Ans:- Take a test tube. Put some wax in it. Clamp the test tube in a vertical stand and place it in a beaker of water placed on a wire gauze at a tripod stand. Insert a thermometer in the test tube so that the bulb of the thermometer is inside the wax. Heat the beaker over a flame of a burner and record the temperature.

Observation.

Time (in min)	Temp of wax (in $^{\circ}\text{C}$ )
0	25
1	30
2	35
3	40
4	45
5	50
6	55
7	55
8	55
9	55
10	60
11	65
12	70

11. Explain the terms vaporization and boiling point.

Ans: Vaporization:- The change from liquid state to gaseous state on heating at a constant temperature by absorption

of heat is called vaporization.

**Boiling point :-** The temperature at which liquid changes into vapour without further increase in temperature is called the boiling point of the liquid.

12. A liquid can change into vapour state
- (a) at a fixed temperature
  - (b) at all temperature.

Name the process involved in the two cases.

Ans:- (a) Vaporization.  
(b) Evaporation.

13. What is evaporation?

Ans:- Evaporation:- The change of state from liquid to vapour at all temperatures from the surface of liquid is called evaporation.

14. State three factors which affect the rate of evaporation of a liquid.

- Ans:-
- (i) The temperature of liquid - The rate of evaporation is high if the temperature of liquid is high.
  - (ii) The area of exposed surface - The rate of evaporation increases if the area of surface exposed increases.
  - (iii) The flow of air above the liquid - If air is blown above the liquid surface, the rate of evaporation increases.