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Q.1. Explains the terms vaporization and boiling point.

Ans. Vaporization - The change from liquid state to gaseous (or vapour) state on heating at a constant tempreture by absorption of heat is called vaporization or boiling.

Boiling Point - The temperature at which a liquid changes into vapour without further increases in tempreture is called the boiling point of the liquid The boiling point of water is 100°C

Q.2. A liquid can change into vapour state.

(a) at a fixed temperature, and
at all temperatures

at a fixed temperature - Vaporization or boiling

at all temperature - Evaporation

Q.3. How does melting point of ice and wax depend on pressure?

Ans. As the pressure increases with depth in a glacier

from the weight of the ice above, the pressure melting point of ice decreases within bounds, as shown in the diagram. The level where ice can start melting is where the pressure melting point equals the actual temperature.

Q.4. How does boiling point of water depend on pressure

Ans. The boiling point corresponds temperature at which the vapour pressure of liquid equals the surrounding environmental pressure. Thus the boiling point is dependent on the pressure. At higher altitudes the atmospheric pressure is much lower so, the boiling point is also lower.

Q.5. Explain the process of boiling by molecules

Ans. The molecules move in directions but within the boundary of the container. They exert small forces of attraction on each other. They have low Kinetic energy. On heating (absorbing heat), the average Kinetic energy of molecules of liquid increases. At particular temperature (boiling point) the molecules acquire sufficient Kinetic energy to overcome the forces of attraction

between themselves and they become free to leave the liquid surface. This is called vapourization.

Q 6. Why is it difficult to cook at high altitudes?

Ans. It is difficult to cook at high altitudes because the higher we go up the boiling point decreases as at higher altitudes atmospheric pressure is low and cooking requires so much of boiling to cook the food properly.