

Ans1. Region C

Ans2. Because of latent heat of vaporisation

Ans3. A) Evaporation- surface phenomena , slow, at all temperature

Boiling- bulk phenomena, fast, AT Boiling point of liquid

B) cage like structure, more volume less density

Ans4. A) X liquid Y gas

B) solid CO₂ because it directly changes into gaseous state on decreasing pressure to 1 atmosphere.

Ans5. A) X < Y < Z

B) 373K as temp increases, k.e. of particles increases. At certain temperature heat supplied is used to overcome force of attraction between particles.

C) Take two beakers filled with water.

- Put a drop of blue ink slowly along the sides of the first beaker and honey in the same way in another beaker.
- Leave it undisturbed.
- We observe that honey diffuses slowly as compared to ink.

This experiment shows that lesser the density, faster the rate of diffusion.