



MORE QUESTIONS SOLVED

I. Multiple Choice Questions

Choose the correct option:

1. Evaporation of a liquid occurs at
 - (a) boiling point
 - (b) a fixed temperature
 - (c) temperature lower than boiling point
 - (d) all temperatures
2. The conversion of gas into liquid is called
 - (a) freezing
 - (b) condensation
 - (c) sublimation
 - (d) fusion
3. The fusion is the process in which
 - (a) liquid changes into solid
 - (b) solid changes into liquid
 - (c) solid changes into gas
 - (d) gas changes into solid
4. The ice floats on water because
 - (a) its density is more than water
 - (b) its density is less than water
 - (c) it has less intermolecular space
 - (d) none of the above
5. Ice at 0°C is more effective in cooling than water at the same temperature because
 - (a) it holds latent heat
 - (b) the molecules use the heat to overcome the force of attraction
 - (c) both (a) and (b)
 - (d) none of the above
6. The density of water is maximum at
 - (a) 0°C
 - (b) 100°C
 - (c) 4°C
 - (d) 273 K
7. Solids and gases mix/dissolve in water
 - (a) because water is a good solvent
 - (b) because water has intermolecular space
 - (c) diffusion is faster in water
 - (d) all of the above
8. Choose the correct statement from the following:
 - (a) the volume of gas expands on heating
 - (b) two gases cannot diffuse into each other
 - (c) gas is converted into solid, it is called condensation
 - (d) gases cannot diffuse in solids
9. As the pressure of air decreases, the boiling point of the liquid
 - (a) decreases
 - (b) increases
 - (c) does not changes
 - (d) none of these
10. Which among the following can exist in vapour state?

- (a) oxygen
- (b) hydrogen
- (c) carbon dioxide
- (d) water

11. At normal pressure (1 atmospheric pressure) the boiling point of water is

- (a) 98°C
- (b) 100°C
- (c) 110°C
- (d) 90°C

12. The pressure of air is measured in atmosphere and pascal. 1 atmospheric pressure is equal to

- (a) 1.01325×10^5 Pa
- (b) 1.01325×10^4 Pa
- (c) 10.1325×10^5 Pa
- (d) 10.1325×10^6 Pa

13. Cooking of rice at higher altitudes is difficult because

- (a) water boils at 100°C
- (b) water boils at <100°C
- (c) boiling point of water is constant
- (d) none of the above

Answer: 1—(c), 2—(b), 3—(b), 4—(b), 5—(e), 6—(c), 7—(d), 8—(a), 9—(a), 10—(d), 11—(b), 12—(a), 13—(b).

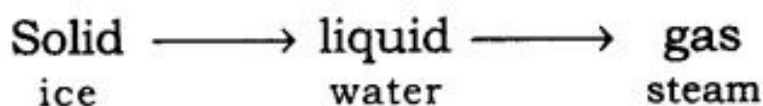
I. Very Short Answer Type Questions

Question 1. Define matter.

Answer: Anything that occupies space and has mass is called matter.

Question 2. State different states of matter with an example.

Answer: Matter has 3 different states



Question 3. What is diffusion?

Answer. The intermingling of molecules of one substance with that of the other is called diffusion.

Question 4. What happen to the rate of diffusion if the temperature is increased?

Answer: With increased temperature, the rate of diffusion also increases as the particles gain energy and vibrate more.

Question 5. Name the state of matter that have the tendency to maintain their shape when subjected to outside force.

Answer: Solid.

Question 6. Define melting point.

Answer: The temperature at which a solid melts to become liquid at the atmospheric pressure is called its melting point.

Question 7. Define boiling point.

Answer: The temperature at which a liquid starts boiling at the atmospheric pressure is known as its boiling point.

Question 8. Define latent heat of vaporization.

Answer: Latent heat of vaporization is the heat energy required to change 1 kg of a liquid to gas at atmospheric pressure at its boiling point.

Question 9. Define latent heat of fusion.

Answer: Latent heat of fusion is the amount of heat energy required to change 1 kg of solid into liquid at its melting point.

Question 10. Define sublimation.

Answer: Sublimation is the change of gaseous state directly to solid state without going through liquid state and vice-versa.

Question 11. What is dry ice?

Answer: Solid carbon dioxide obtained by cooling and applying pressure on carbon dioxide gas. It does not melt so it is called dry ice.

Question 12. What is humidity?

Answer: The air holds water vapour, this air with water is called humid air and the phenomenon is called humidity.

Question.13. Give two properties of solid.

Answer. (1) Solids have fixed shape and are rigid. (2) Solids cannot be compressed.

Question.14. What will happen if the pressure is reduced on solid carbon dioxide (dry ice)?

Answer. If the pressure is reduced on solid carbon dioxide it will directly change into gaseous state without melting.

Question 15. Name any three substances that show sublimation.

Answer: Ammonium chloride, camphor and naphthalene balls.

Question 16. Sponge is solid, but we can still compress it. Why?

Answer: Sponge is a solid with minute pores in it. When we press the sponge the air present in these pores is released out and hence we are able to compress it.

Question 17. What is normal atmospheric pressure?

Answer: The atmospheric pressure at sea level is 1 atmosphere and taken as the normal atmospheric pressure.

Question 18. What is Kelvin?

Answer: Kelvin is the SI unit of temperature ($0^{\circ}\text{C} = 273 \text{ K}$).

Question 19. Give two examples of diffusion.

Answer: Milk drops dissolved in water and perfume sprayed in a room.

Question 20. Give the temperature at which water exists in two different phases/states.

Answer: At 0°C water can be in solid or in liquid state.

At 100°C water can be in liquid or in gaseous state.

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