

**Multiple Choice Questions**

- The process by which water changes into water vapour at room temperature is called**  
(a) Condensation  
(b) Freezing  
(c) Evaporation  
(d) Melting
- The state of water that has no fixed shape and no fixed volume is**  
(a) Solid  
(b) Liquid  
(c) Gas  
(d) Ice
- Water droplets appearing on the outer surface of a cold glass are due to**  
(a) Evaporation  
(b) Condensation  
(c) Melting  
(d) Freezing
- Which factor increases the rate of evaporation the most?**  
(a) High humidity  
(b) Small surface area  
(c) Strong wind  
(d) Low temperature
- The cooling effect of an earthen pot is mainly due to**  
(a) Freezing  
(b) Condensation  
(c) Evaporation  
(d) Melting
- Which of the following is an example of condensation in daily life?**  
(a) Drying of clothes  
(b) Formation of clouds  
(c) Melting of ice  
(d) Boiling of water
- Water exists naturally on Earth in**  
(a) One state  
(b) Two states  
(c) Three states  
(d) Four states
- Which condition slows down evaporation?**  
(a) Windy weather  
(b) Large exposed surface  
(c) High humidity  
(c) High temperature
- The process of conversion of water vapour into liquid water is called**  
(a) Evaporation  
(b) Freezing  
(c) Condensation  
(d) Melting

10. **The continuous movement of water between the Earth's surface and atmosphere is called**
- (a) Evaporation cycle
  - (b) Condensation cycle
  - (c) Water cycle
  - (d) Cooling cycle

### Fill in the blanks :

11. The process of conversion of water into vapour is called \_\_\_\_\_.
12. Water exists in \_\_\_\_\_ different states in nature.

### True / False

13. Water vapour is invisible in air.
14. Evaporation takes place only at boiling temperature.

### Very Short Type Questions

15. What is evaporation?
16. What is condensation?

### Short Type Questions

17. Why do we feel cool when sweat evaporates from our body?
18. Why do clothes dry faster on a windy day?

### Essay Type Questions

19. Explain the different states of water and their properties.
20. Describe the water cycle and explain its importance.

### HOTS

21. **Assertion (A):** Clothes dry faster on a sunny day than on a rainy day.  
**Reason (R):** On sunny days, the rate of evaporation is higher due to heat and low humidity.  
Choose the correct option:
- a) Both A and R are true and R is the correct explanation of A
  - b) Both A and R are true but R is not the correct explanation of A
  - c) A is true but R is false
  - d) A is false but R is true



1. (c) Evaporation
2. (c) Gas
3. (b) Condensation
4. (c) Strong wind
5. (c) Evaporation
6. (b) Formation of clouds
7. (c) Three states
8. (c) High humidity
9. (c) Condensation
10. (c) Water cycle
11. Evaporation
12. Three
13. True
14. False
15. Evaporation is the process by which water slowly changes into water vapour at any temperature.
16. Condensation is the process in which water vapour changes into liquid water on cooling.
17. When sweat evaporates from our skin, it takes heat energy from our body. This loss of heat causes a cooling effect, making us feel cool.
18. On a windy day, moving air carries away water vapour from the surface of clothes. This increases evaporation, so clothes dry faster.
19. Water exists in three different states depending on temperature and conditions: solid, liquid, and gas.
  1. **Solid state (Ice)**
    - In the solid state, water is called ice.
    - Ice has a fixed shape and fixed volume.
    - The particles are closely packed and can only vibrate.
    - Ice is formed when water freezes at  $0^{\circ}\text{C}$  or below.
    - Ice is hard and does not flow.
  2. **Liquid state (Water)**
    - In the liquid state, water has a fixed volume but no fixed shape.
    - It takes the shape of the container in which it is kept.
    - Water can flow easily.
    - The particles are loosely packed and can move around.
    - This is the most commonly used form of water for drinking, washing, and cooking.
  3. **Gaseous state (Water vapour)**
    - In the gaseous state, water is called water vapour.
    - It has neither fixed shape nor fixed volume.
    - Water vapour spreads in all directions.
    - It is formed when water is heated and changes into steam.
    - Water vapour is present in the air but cannot be seen easily.

20. The water cycle is the continuous movement of water between the Earth's surface and the atmosphere.

#### Steps of the Water Cycle

##### 1. Evaporation

- o Heat from the Sun causes water from rivers, lakes, seas, and oceans to change into water vapour.
- o This process is called evaporation.

##### 2. Condensation

- o Water vapour rises up and cools at higher altitudes.
- o It changes back into tiny water droplets forming clouds.
- o This process is called condensation.

##### 3. Precipitation

- o When clouds become heavy, water falls back to the Earth as rain, snow, or hail.
- o This is called precipitation.

##### 4. Collection

- o Rainwater collects in rivers, lakes, ponds, and oceans.
- o Some water also seeps into the ground as groundwater.

#### Importance of the Water Cycle

- It maintains the supply of fresh water on Earth.
- It helps in regulating weather and climate.
- It supports plants, animals, and human life.
- It helps in the distribution of water over the Earth's surface.
- It prevents water from being used up completely.

21. Correct option: a

**Explanation:** The assertion is true because clothes dry faster on sunny days. The reason is also true because higher temperature and lower humidity increase the rate of evaporation. The reason correctly explains the assertion.