

Evaporation and Its Role in Nature

A. Choose the correct answer:

1. What is evaporation?

- a) Conversion of liquid into solid
- b) Conversion of liquid into gas
- c) Conversion of gas into liquid
- d) Conversion of solid into gas

2. Which factor increases the rate of evaporation?

- a) High humidity
- b) Decrease in temperature
- c) Increase in surface area
- d) Less wind movement

3. Why does sweating help cool down the human body?

- a) Because it absorbs heat and evaporates
- b) Because it blocks sunlight
- c) Because it adds moisture to the air
- d) Because it increases body temperature

B. Fill in the Blanks:

1. _____ is the process by which a liquid changes into vapor at the surface.
2. The rate of evaporation increases with an increase in _____ and _____.
3. Evaporation plays an important role in the _____ cycle.

C. Case Study:

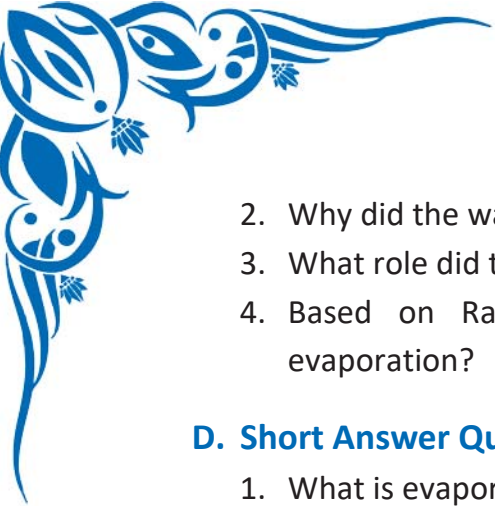
Ravi observed that after washing clothes, they dried faster in the sun than on a cloudy day. He also noticed that water spilled on the floor dried more quickly when a fan was turned on. Curious, he decided to investigate further by placing three bowls of water in different conditions:

- **Bowl A** was kept under direct sunlight.
- **Bowl B** was placed in a shaded, cool area.
- **Bowl C** was kept under a fan.

After a few hours, he measured the remaining water and found that Bowl A had the least amount of water left, followed by Bowl C, while Bowl B had the most.

Questions & Answers:

1. What natural phenomenon was Ravi observing in this experiment?



2. Why did the water in Bowl A evaporate faster than in Bowl B?
3. What role did the fan play in Bowl C's evaporation rate?
4. Based on Ravi's experiment, what are the main factors that affect evaporation?

D. Short Answer Questions:

1. What is evaporation, and how does it occur?
2. Why does water evaporate faster on a hot, dry day compared to a humid day?
3. How does wind speed influence the rate of evaporation?

E. Long Answer Questions:

1. Explain how evaporation is an essential part of the water cycle and its impact on weather patterns.
2. Describe the factors that influence evaporation and provide examples from daily life.
3. Discuss how evaporation helps in cooling processes, such as perspiration in humans and the cooling of water bodies.