

Chapter - 6 | Pressure, Winds, Storms, and Cyclones

QUIZ-01

1. What is the SI unit of pressure?

- A. Newton
- B. Joule
- C. Pascal
- D. Watt (C)

Explanation: Pressure is defined as force per unit area. Its SI unit is newton per metre², also called pascal (Pa).

2. Why is it easier to carry a bag with broad straps?

- A. It looks fashionable
- B. It reduces the pressure on shoulders
- C. It reduces the weight
- D. It balances the load better (B)

Explanation: Broad straps distribute the weight over a larger area, thus reducing pressure.

3. What causes winds to blow from one place to another?

- A. Earth's gravity
- B. Rotation of Earth
- C. Difference in air pressure
- D. Presence of mountains (C)

Explanation: Wind blows from a region of high air pressure to a region of low air pressure.

4. Why are water tanks placed at heights?

- A. To avoid sunlight
- B. To maintain water temperature
- C. To increase water pressure
- D. For space management (C)

Explanation: Greater height increases the water column, which increases pressure in taps.

5. What is the name of the calm region at the center of a cyclone?

- A. Storm eye
- B. Neutral zone
- C. Eye of the cyclone
- D. Cyclone ring (C)

Explanation: The calm region in the center of a cyclone is called the "eye of the cyclone".

6. How is lightning produced in clouds?

- A. Due to heat and humidity
- B. Due to condensation of water
- C. Due to charge separation and discharge
- D. Due to wind pressure (C)

Explanation: Rubbing of particles creates static charges; their discharge causes lightning.

7. What is a thunderstorm?

- A. A storm without wind
- B. A storm with rain only
- C. A storm with lightning and thunder
- D. A cyclone on sea (C)

Explanation: A thunderstorm includes strong winds, lightning, and thunder.

8. Which unit is used in practice to measure air pressure?

- A. Pascal
- B. Hectopascal
- C. Newton
- D. Kilogram (B)

Explanation: Air pressure is commonly measured in hectopascal (hPa), equal to 100 pascal.

9. Which of the following helps in reducing lightning damage?

- A. Plastic poles
- B. Umbrella
- C. Lightning conductor
- D. Tree plantation (C)

Explanation: A lightning conductor provides a path for electric discharge into the ground.

10. What happens when high-speed wind blows over a house?

- A. Air pressure above increases
- B. Roof becomes heavier
- C. Pressure above the roof decreases
- D. Temperature increases (C)

Explanation: High-speed wind creates low pressure above the roof, which can lift it off.