

Assertion and Reason

Q.No.1:

Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements? **Assertion (A):** A rainbow is always formed in a direction opposite to that of the Sun.

Reason (R): White light is composed of seven colors.

- **A.** Both A and R are true, and R is correct explanation of the assertion.
- **B.** Both A and R are true, but R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.2: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Addition of water to a drum containing calcium oxide makes the drum hot if touched from outside.

Reason (R): Reaction between calcium oxide and water is an endothermic reaction.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- D. A is false, but R is true.

Q.No.3: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): An incident light ray is passing through the centre of curvature of a concave mirror. After reflection, it retraces its path.

Reason (R): Angle of incidence = Angle of reflection = 0°

- **A.** Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, but R is not the correct explanation of the assertion.
- **C.** A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.4: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Metallic oxides react with acids to form salt and water. **Reason (R)**: Metallic oxides are basic oxides.

- **A.** Both A and R are true, and R is the correct explanation of A.
- **B.** Both A and R are true, and R is not the correct explanation of A.
- **C.** A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.5: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): The melting point of NaCl is high.

Reason (R): Ionic compounds have a strong electrostatic force of attraction.

- **A.** Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, and R is not the correct explanation of the assertion.
- **C.** A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.6: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Translocation of food takes place across the phloem.

Reason (R): Phloem is a vascular tissue that has a flow of materials in upward direction only.

- **A.** Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, and R is not the correct explanation of the assertion.
- **C.** A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.7: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): All arteries carry oxygenated blood from the heart to various organs of the body.

Reason (R): Pulmonary vein carries oxygenated blood to the heart.

- **A.** Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, and R is not the correct explanation of the assertion.
- **C.** A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.8: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): There is no digestion of proteins in the mouth.

Reason (R): Saliva contains salivary amylase.

- **A.** Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.9: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Kidney produces the urine by the process of ultrafiltration. **Reason (R):** Urine is stored in the urinary bladder.

- **A.** Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, and R is not the correct explanation of the assertion.
- **C.** A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.10:

Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements? **Assertion (A):** Water in the deep sea appears blue.

Reason (R): The scattering of the blue component of the white sunlight by tiny

molecules is responsible for blue appearance of ocean.

- **A.** Both A and R are true, and R is correct explanation of the assertion.
- **B.** Both A and R are true, but R is not the correct explanation of the assertion.
- **C.** A is true, but R is false.
- **D.** A is false, but R is true.

Q.No.11: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Water is formed as one of the products on reaction of metal with nitric acid.

Reason (R): Nitric acid is a strong oxidising agent.

- **A.** Both A and R are true, and R is the correct explanation of the assertion.
- **B.** Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- **D.** A is false, but R is true.