

# Chapter 3

## Current Electricity

### ( Assertion and Reason Questions )

---

**Directions:** These questions consist of two statements, each printed as Assertion and Reason. While answering these questions, you are required to choose any one of the following four responses.

**(a)** If both Assertion and Reason are correct and the Reason is a correct explanation of the Assertion.

**(b)** If both Assertion and Reason are correct but Reason is not a correct explanation of the Assertion.

**(c)** If the Assertion is correct but Reason is incorrect.

**(d)** If both the Assertion and Reason are incorrect.

**Q.1. Assertion:** In a simple battery circuit, the point of the lowest potential is positive terminal of the battery.

**Reason:** The current flows towards the point of the higher potential, as it does in such a circuit from the negative to the positive terminal.

**Q.2. Assertion:** A larger dry cell has higher emf.

**Reason:** The emf of a dry cell is proportional to its size.

**Q.3. Assertion:** A current continues to flow in superconducting coil even after switch is off.

**Reason:** Superconducting coils show Meissner effect.

**Q.4. Assertion:** Voltmeter is connected in parallel with the circuit.

**Reason:** Resistance of a voltmeter is very large.

**Q.5. Assertion:** Ohm's law is applicable for all conducting elements.

**Reason:** Ohm's law is a fundamental law.

**Q.6. Assertion:** An electric bulb becomes dim, when the electric heater in parallel circuit is switched on.

**Reason:** Dimness decreases after sometime.

**-X-X-X-**

### **ANSWER KEY**

**Q.1 :** (d)

**Q.2 :** (d)

**Q.3 :** (b)

**Q.4 :** (b)

**Q.5 :** (c)

**Q.6 :** (b)