

## CHAPTER-3 | Electricity – Circuits and their Components

QUIZ  
PART-06

1. What is the function of a switch in an electric circuit?

- A. To store electricity
- B. To produce light
- C. To open or close the electric circuit
- D. To increase voltage (A)

**Explanation :** A switch is used to open or close an electric circuit, thereby controlling the flow of electric current.

2. Which material is commonly used to make switches?

- A. Plastic
- B. Wood
- C. Rubber
- D. Metal (D)

**Explanation :** Switches are made from conducting materials like metals such as copper or aluminium.

3. What happens when a switch is in the OFF position?

- A. The bulb glows brightly
- B. The circuit is closed
- C. The path is broken and no current flows
- D. The battery stops working (C)

**Explanation :** When the switch is OFF, the circuit is open, the path is broken, and no current flows.

4. In which condition does a bulb glow in a circuit with a switch?

- A. When the switch is OFF
- B. When the circuit is open
- C. When the switch is ON
- D. When the wires are loose (C)

**Explanation :** The bulb glows only when the switch is ON and the circuit is closed.

5. What is meant by an open circuit?

- A. A circuit with flowing current
- B. A circuit with no battery
- C. A circuit where the path is broken
- D. A circuit with extra wires (C)

**Explanation :** An open circuit has a break in the path, so electric current cannot flow.

6. Which statement correctly describes a closed circuit?

- A. Switch is OFF and bulb glows
- B. Switch is ON and current flows
- C. Path is broken and bulb glows
- D. No current flows in the circuit (B)

**Explanation :** In a closed circuit, the switch is ON, the path is complete, and current flows.

7. Why does a bulb not glow in an open circuit?

- A. The bulb is fused
- B. The battery is new
- C. The current cannot flow
- D. The switch is metallic (C)

**Explanation :** In an open circuit, the gap in the path prevents current from flowing, so the bulb does not glow.

8. Are all switches the same in design and working?

- A. Same design and same working
- B. Different design and different working
- C. Same design but different working
- D. Different design but same working (D)

**Explanation :** Switches may look different but they all work in the same way by opening or closing the circuit.

9. What happens to the circuit when the switch is ON?

- A. The circuit breaks
- B. The battery discharges
- C. The circuit is closed
- D. The lamp holder melts (C)

**Explanation :** When the switch is ON, the circuit becomes closed and allows current to flow.

10. Which of the following statements is TRUE?

- A. In an open circuit, current flows
- B. In a closed circuit, the bulb does not glow
- C. A switch helps control electric current
- D. Switches are made of insulators only (C)

**Explanation :** A switch controls the flow of electric current by opening or closing the circuit.