

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

QUIZ  
PART-05

1. What is an electric circuit?

- A. A device that stores electricity
- B. A complete path through which electric current flows
- C. A source of electricity
- D. A type of electric lamp (B)

**Explanation:** An electric circuit is defined as a complete path through which electric current flows.

2. Which of the following is necessary to build a simple electric circuit?

- A. Plastic box
- B. Electric cell
- C. Mirror
- D. Paper (B)

**Explanation:** An electric cell is one of the essential components required to build a simple electric circuit.

3. Which component helps to start or stop the flow of current in a circuit?

- A. Electric lamp
- B. Connecting wire
- C. Switch
- D. Cell holder (C)

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

4. The lamp in a circuit glows only when \_\_\_\_\_.

- A. The bulb is new
- B. The cell is large
- C. There is a complete path for current
- D. The wires are long (C)

**Explanation:** The lamp glows only when there is a complete path for current in the circuit.

5. Which terminal of an electric cell is marked with a "+" sign?

- A. Negative terminal
- B. Neutral terminal
- C. Positive terminal
- D. Metal base (C)

**Explanation:** The positive terminal of an electric cell is usually marked with a "+" sign.

6. In which direction does electric current flow in a circuit?

- A. From negative to positive terminal
- B. From positive to negative terminal
- C. In both directions
- D. Randomly (B)

**Explanation:** Electric current flows from the positive terminal to the negative terminal of the cell.

7. Why does an incandescent lamp glow in a circuit?

- A. Due to movement of electrons only
- B. Due to chemical reaction
- C. Due to heating of the filament
- D. Due to reflection of light (C)

**Explanation:** In an incandescent lamp, current heats the filament, which then glows and produces light.

8. Which of the following is NOT a component of a simple electric circuit?

- A. Electric cell
- B. Electric lamp
- C. Switch
- D. Plastic box (D)

**Explanation:** A plastic box is not required to build a simple electric circuit.

9. Sometimes a lamp does not glow even when connected correctly. What is the most likely reason?

- A. Weak switch
- B. Long wires
- C. Broken filament
- D. Plastic holder (C)

**Explanation:** A broken filament stops the flow of current, so the lamp does not glow.

10. How many terminals does an electric cell have?

- A. One
- B. Two
- C. Three
- D. Four (B)

**Explanation:** An electric cell has two terminals: one positive and one negative.