

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

QUIZ  
PART-09

1. Which of the following statements about a switch is incorrect?

- A. A switch helps to complete or break a circuit
- B. A switch helps us use electricity as required
- C. A switch is the source of electric current in a circuit
- D. When a switch is OFF, there is an air gap between its terminals (C)

**Explanation :** The source of electric current is an electric cell or battery, not the switch.

2. The lamp will not glow if which type of material is connected between points A and B in a circuit?

- A. Copper
- B. Iron
- C. Aluminium
- D. Insulator (D)

**Explanation :** Insulators do not allow electric current to pass, so the lamp will not glow.

3. In a series circuit with two lamps, what happens if the filament of one lamp breaks?

- A. The other lamp glows brighter
- B. The other lamp continues to glow
- C. Both lamps glow dimly
- D. The other lamp does not glow (D)

**Explanation :** In a series circuit, if one lamp's filament breaks, the circuit is broken and no current flows.

4. A student forgets to remove the insulation from the ends of connecting wires. What will happen?

- A. The lamp glows normally
- B. The lamp glows dimly
- C. The lamp does not glow
- D. The battery gets damaged (C)

**Explanation :** Insulation prevents metal contact, so current cannot flow and the lamp will not glow.

5. In a circuit with two switches  $S_1$  and  $S_2$ , if  $S_2$  is ON and  $S_1$  is OFF, what happens?

- A. Only  $L_1$  glows
- B. Only  $L_2$  glows
- C. Both lamps glow
- D. No lamp glows (D)

**Explanation :** Since  $S_1$  is OFF, the circuit is open and no current flows.

6. If both switches  $S_1$  and  $S_2$  are in the ON position, which lamp(s) will glow?

- A. Only  $L_1$
- B. Only  $L_2$
- C. Both  $L_1$  and  $L_2$
- D. None (C)

**Explanation :** When both switches are ON, the circuit is complete and current flows through both lamps.

7. Which of the following can be a reason for a lamp not glowing even after closing the circuit?

- A. Discharged cell
- B. Fused bulb
- C. Loose wire connections
- D. All of the above (D)

**Explanation :** A discharged cell, fused lamp, or loose connections can all prevent the lamp from glowing.

8. Which of the following is an insulator?

- A. Iron
- B. Copper
- C. Aluminium
- D. Rubber (D)

**Explanation :** Rubber current pass nahi hone deta.

9. If one switch in a circuit is OFF, then:

- A. Current flows partially
- B. Bulb glows dim
- C. Circuit is open
- D. Battery discharges fast (C)

**Explanation :** OFF switch circuit ko open kar deta hai.

10. A bulb may not glow due to:

- A. Discharged cell
- B. Fused bulb
- C. Loose connections
- D. All of these (D)

**Explanation :** In sab reasons se current flow ruk sakta hai.