

1. What happens inside a torchlight when the switch is moved to the ON position?
- Only the battery gets activated
 - The circuit becomes complete and current flows
 - The filament becomes cold.
 - The lamp gets disconnected (B)

Explanation : When the switch is ON, the circuit becomes complete and current flows, making the lamp glow.

2. Which part of an incandescent lamp glows to produce light?
- Glass bulb
 - Metal case
 - Filament
 - Switch (C)

Explanation : The thin wire called the filament heats up and glows when current flows through it.

3. In an electric cell, which part is the positive terminal?
- The flat metal disc
 - The metal cap
 - The wire attached to the lamp
 - The rubber cover (B)

Explanation : The metal cap on a cell represents the positive terminal.

4. A battery glows the lamp only when cells are connected in which order?
- Positive to positive
 - Negative to negative
 - Positive of one cell to negative of next
 - Side-by-side without connection (C)

Explanation : A battery is formed when the positive terminal of one cell connects to the negative of the next.

5. What happens if the LED's longer wire is connected to the negative terminal of the battery?
- LED glows
 - LED glows brighter
 - LED does not glow
 - Battery stops working (D)

Explanation : LEDs allow current in only one direction; reversing connections prevents it from glowing.

6. Which device is used to break or complete an electric circuit?
- Battery
 - Lamp
 - Switch
 - Cell holder (C)

Explanation : A switch opens or closes the circuit, controlling the flow of current.

7. Which material is a good conductor of electricity?
- Cork
 - Rubber
 - Glass
 - Copper (D)

Explanation : Metals like copper allow current to pass and are used for electrical wires.

8. Why are electric wires covered with materials like plastic or rubber?
- They look colourful
 - They stop electricity completely
 - They are insulators and protect from electric shock
 - They help the wire conduct more electricity (C)

Explanation : Plastic and rubber are insulators and prevent electric shocks.

9. What is a circuit diagram?
- A real picture of a circuit
 - A representation of a circuit using symbols
 - A drawing made with wires
 - A sketch of a torch (B)

Explanation : Circuit diagrams use standard symbols to represent components.

10. In which condition will a lamp glow in a circuit?
- When the circuit is open
 - When there is no battery
 - When there is a complete path for current
 - When both wires touch each other (C)

Explanation : The lamp glows only when the circuit is complete and current flows through it.