

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

QUIZ  
PART-03

1. What is a battery made of?

- A. Only wires
- B. Only one electric cell
- C. A group of electric cells
- D. A bulb and a switch (C)

**Explanation :** A battery is defined as a group of two or more electric cells connected together.

2. Why does a battery provide more power than a single electric cell?

- A. It has thicker wires
- B. It contains more cells
- C. It has a bigger bulb
- D. It uses plastic covering (B)

**Explanation :** More electric cells connected together produce more power.

3. Which of the following devices commonly uses batteries?

- A. Electric pole
- B. Torch
- C. Power station
- D. Transformer (B)

**Explanation :** Batteries are commonly used in torches, remotes, and toys.

4. Which two types of electric lamps are mentioned?

- A. Tube light and CFL
- B. Halogen and neon
- C. Incandescent lamp and LED lamp
- D. Sodium and mercury lamps (C)

**Explanation :** The chapter mentions incandescent lamps and LED lamps.

5. What is the filament of an incandescent lamp made of?

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

**Explanation :** The filament in an incandescent lamp is made of tungsten.

6. Why does the filament glow when electric current passes through it?

- A. It melts
- B. It cools down
- C. It heats up
- D. It absorbs light (C)

**Explanation :** The filament heats up when current flows through it, causing it to glow.

7. What form of energy is produced by an incandescent lamp?

- A. Only light
- B. Only heat
- C. Light and heat
- D. Sound and heat (C)

**Explanation :** An incandescent lamp gives off both light and heat.

8. Which part of an incandescent lamp acts as one terminal?

- A. Glass bulb
- B. Insulator
- C. Metal tip
- D. Filament (C)

**Explanation :** The metal tip of the lamp acts as one terminal.

9. Which statement correctly describes an electric cell?

- A. It is a group of lamps
- B. It produces a large amount of electricity
- C. It is a single unit that produces electricity
- D. It is used only in power stations (C)

**Explanation :** An electric cell is a single unit that produces a small amount of electricity.

10. Which of the following is TRUE about a battery?

- A. It produces less electricity than a cell
- B. It is made of plastic only
- C. It provides more power than a single cell
- D. It cannot be used in toys (C)

**Explanation :** A battery provides more power than a single electric cell.