

Section A: MCQs (1 mark each)

1. An electric heater works on:
 - a) Magnetic effect
 - b) Sound effect
 - c) Heating effect
 - d) Lighting effect
2. Which of the following is an insulator?
 - a) Iron
 - b) Copper
 - c) Rubber
 - d) Water
3. What completes the flow of electricity in a circuit?
 - a) Break
 - b) Open switch
 - c) Closed path
 - d) Fused bulb

Section B: Assertion-Reason (1 mark each)

4. **A:** Electric current can produce heat.
R: The heating effect of electricity is used in irons and heaters.
5. **A:** Electromagnets are permanent magnets.
R: They remain magnetic even without electricity.

Section C: Case Study (4 marks)**Mini Case Study:**

Rita connected a bulb to a battery using copper wires and added a switch. The bulb only glowed when she flipped the switch on.

- a) What was Rita demonstrating?
- b) Why did the bulb not glow when the switch was off?
- c) What role did copper wires play?
- d) Name one safety rule she should follow.

Section D: Short Answer Questions**2-Mark Questions**

6. Name two devices using heating effect.

7. Define conductor and give one example.
8. Why is it dangerous to use wet hands with electrical appliances?

3-Mark Questions

9. Explain safety rules for using electricity at home.
10. Describe an experiment to show magnetic effect of electricity.

4-Mark Question

11. Draw and explain a labelled diagram of a simple electric circuit.

