

MARKING SCHEMES

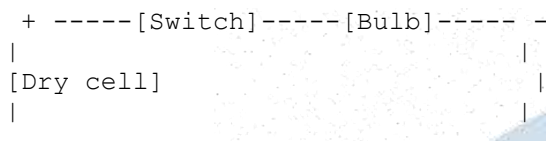
QUESTION 1: PHYSICS (10 MARKS)

a) Name the apparatus provided (5 marks)

- i) Two dry cells – **Cell / Battery**
- ii) Connecting wires – **Copper wires / electrical wires**
- iii) Small electric bulb – **Bulb / Lamp**
- iv) Switch – **Switch**
- v) Bulb holder – **Bulb holder / Lamp holder**

b) Using the apparatus provided

i) Diagram of a simple electric circuit (3 marks)



(Or draw a neat closed circuit showing battery, wires, switch, and bulb connected in series.)

ii) Function of the switch (1 mark)

- To open or close the circuit, controlling the flow of electricity.

iii) Safety precaution (1 mark)

- Do not touch live wires with bare hands.
- Ensure dry hands when handling electrical components.

QUESTION 2: CHEMISTRY (20 Marks)

a) Identify the substances in the mixture (2 marks)

- i) Salt
- ii) Sand

b) Procedure to separate salt from sand (8 marks)

- i) Add water to the mixture of salt and sand in a beaker and stir.
- ii) Filter the mixture using a funnel and filter paper to separate sand from salt solution.
- iii) Collect the filtrate containing salt solution in a clean beaker.
- iv) Evaporate the water from the filtrate using a heat source to obtain salt crystals.

c) Name the separation methods used (4 marks)

- i) **Filtration** – to separate sand from salt solution
- ii) **Evaporation** – to recover salt from the solution

d) Observations made during the experiment (4 marks)

- i) Sand remains on the filter paper
- ii) Salt crystals form in the evaporating dish after heating

e) Daily life applications of separation of mixtures (2 marks)

- i) Purifying drinking water by filtration
- ii) Separating salt from seawater for consumption

