



Let the mind manage the body
Que l'esprit gère le corps

SCIENCE

(Subject code No. P141/1)

Index Number:

MAURITIUS EXAMINATIONS SYNDICATE Primary School Achievement Certificate Assessment Grade 5 Modular 2023 Time: 1 hour Total Marks: 50

INSTRUCTIONS TO CANDIDATES

1. Check that this assessment booklet contains **6** questions printed on **12** pages numbered 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13.
2. Write your Index Number on the assessment booklet in the space provided above.
3. You should not use red, green or black ink in answering questions.
4. Write all your answers clearly in the assessment booklet.
5. Attempt all questions.

Question	Marking		Revision		Control	
	Marks	Sig	Marks	Sig	Marks	Sig
1						
2						
3						
4						
5						
6						
Total						
Sig (HoG)						

Question 1 (5 marks)

Circle the correct answer. Each item carries one mark.

(a) Which one of the following is a fossil fuel?

- A** Bagasse
- B** Coal
- C** Wax
- D** Wood

(b) **Diagram 1** shows a thermometer.
What is the **shiny** liquid found inside the thermometer?

- A** Alcohol
- B** Kerosene
- C** Mercury
- D** Water

shiny liquid

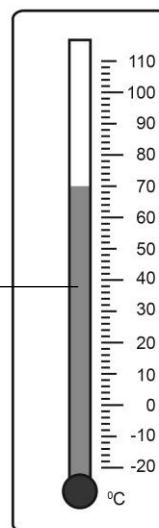


Diagram 1: A thermometer

- (c) **Diagram 2** shows a sailing boat.
What form of energy is needed by **sailing boats** to sail?

- A** Chemical energy
- B** Electrical energy
- C** Movement energy
- D** Light energy



Diagram 2: A sailing boat

- (d) Which part of the Cassava plant is shown in **Diagram 3**?

- A** The fruits
- B** The seeds
- C** The stems
- D** The roots



Diagram 3: Cassava

- (e) Which one of the following birds is endemic to **Rodrigues**?



- A** The Cardinal jaune



- B** The Echo parakeet



- C** The Kestrel



- D** The Pink pigeon

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Question 2 (12 marks)

- (a) What is the **source** of energy used by humans to work?

.....

[1]

- (b) **Diagram 4** shows a man using an electric drilling machine.

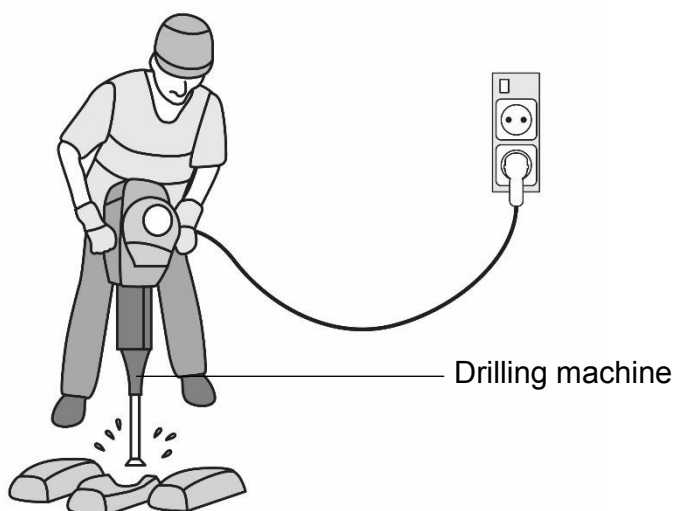


Diagram 4: A man using a drilling machine

- (i) The drilling machine produces sound energy.
State **another** form of energy produced by the drilling machine.

.....

[1]

- (ii) Give one way how continuous exposure to the drilling machine could affect the man's health.

.....

[1]

- (iii) Give one way how sound energy is useful.

.....

.....

[1]

- (b) **Diagram 5** shows solar-powered street lamps.

[1]

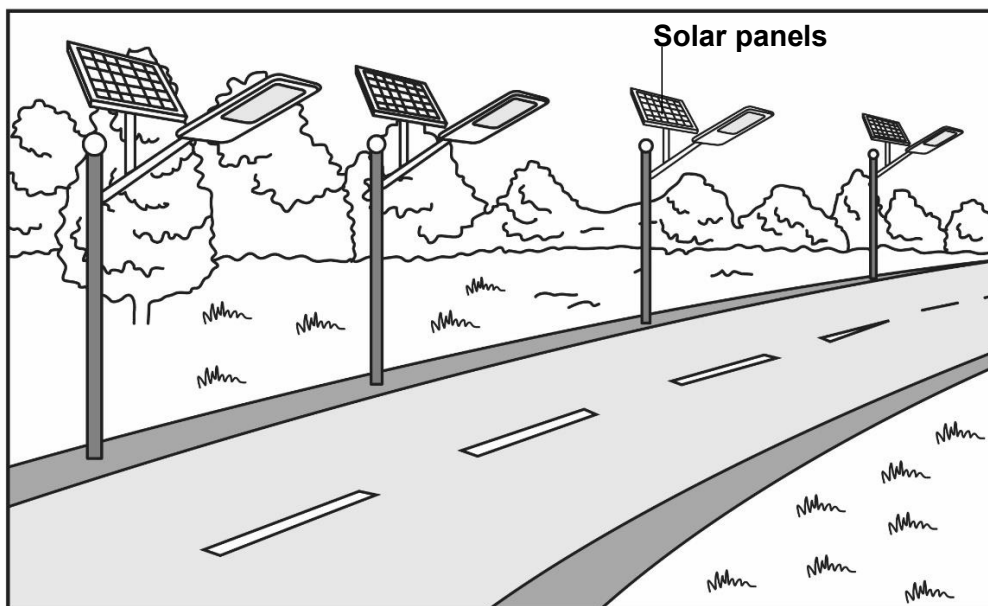


Diagram 5: Solar-powered street lamps

- (i) What is the **source** of energy used by the street lamps in **Diagram 5**?

.....

[1]

- (ii) The street lamps have rechargeable batteries.

State the transformation of energy that takes place in the street lamps.

1. **During the day:**

Transformation from energy to electrical energy to
..... energy in the rechargeable batteries.

2. **At night:**

Transformation from energy to electrical energy to
..... energy in the lamps.

[4]

- (c) Lina sets up an electrical circuit as shown in **Diagram 6**.

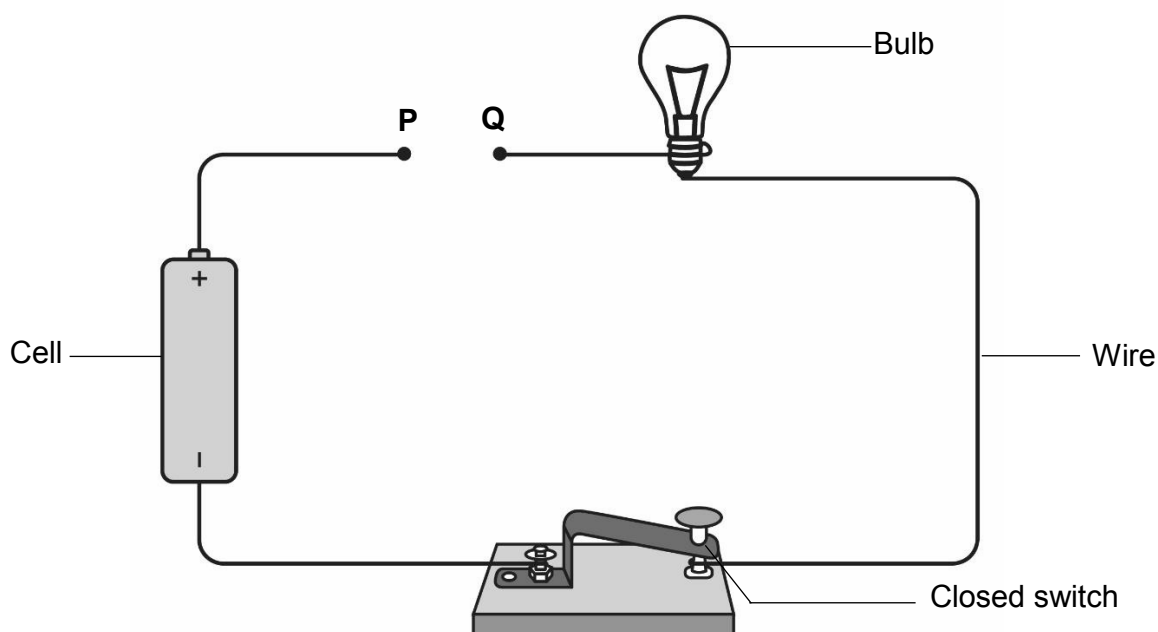


Diagram 6: Lina's electrical circuit

- (i) What is the function of the cell in an electrical circuit?

.....

[1]

- (ii) Lina uses a plastic spoon to connect **P** to **Q**.
The bulb **does not** light up. Explain why.

.....

.....

[1]

- (iii) What should Lina do to make the bulb light up?

.....

.....

[1]

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Question 3 (12 marks)

(a) **Diagram 7** shows a frog and a fish.

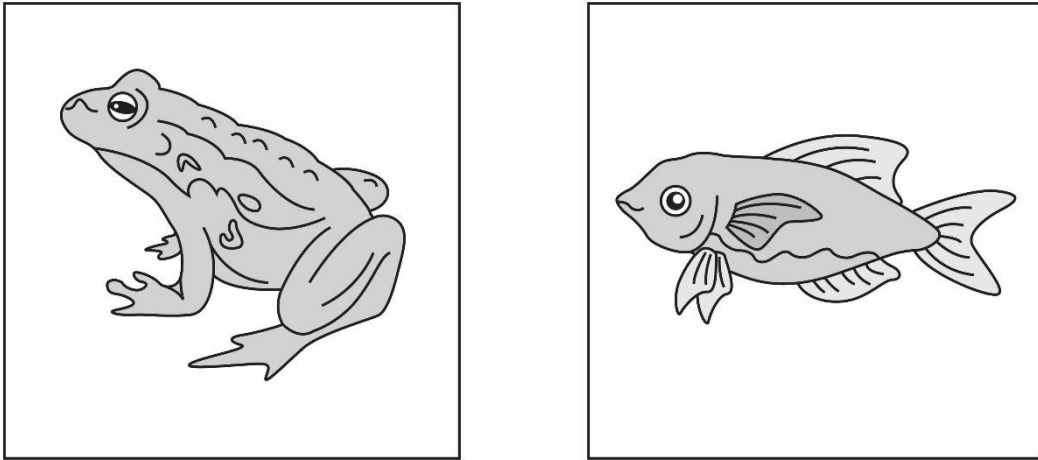


Diagram 7: A frog and a fish

(i) What is the natural habitat of the fish?

Tick (✓) the correct answer.

☐

Air

☐

Land

☐

Water

[1]

(ii) Give two ways how fish are adapted to live in their natural habitat.

1.

2.

[2]

(iii) To which group of animals does the frog belong?

Tick (✓) the correct answer.

☐

Amphibian

☐

Insect

☐

Reptile

[1]

(iv) Why is the frog classified in this group of animals?

.....

.....

[1]

- (b) (i) Name one plant which grows in water.

.....

[1]

- (ii) Give two ways how the plant in (b) (i) is adapted to live in water.

1.

2.

[2]

- (c) **Diagram 8** shows Ile Ronde, a nature reserve.



Diagram 8: Ile Ronde

- (i) Name one endemic animal which lives on Ile Ronde.

.....

[1]

- (ii) Name another nature reserve.

.....

[1]

- (iii) Give one way how nature reserves help to protect rare animals.

.....

.....

[1]

- (iv) Give one precaution that must be taken when visiting a nature reserve.

.....

.....

[1]

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Question 4 (5 marks)

- (a) **Diagram 9** shows an area affected by soil erosion.



Diagram 9: An area affected by soil erosion

- (i) Give one **cause** of soil erosion.

.....

[1]

- (ii) Give two **effects** of soil erosion.

1.

2.

[2]

- (b) Give two reasons why there is almost no soil erosion in dense forests.

1.

.....

2.

.....

[2]

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Question 5 (8 marks)

- (a) **Diagram 10** shows three glasses of water: **A**, **B** and **C**.

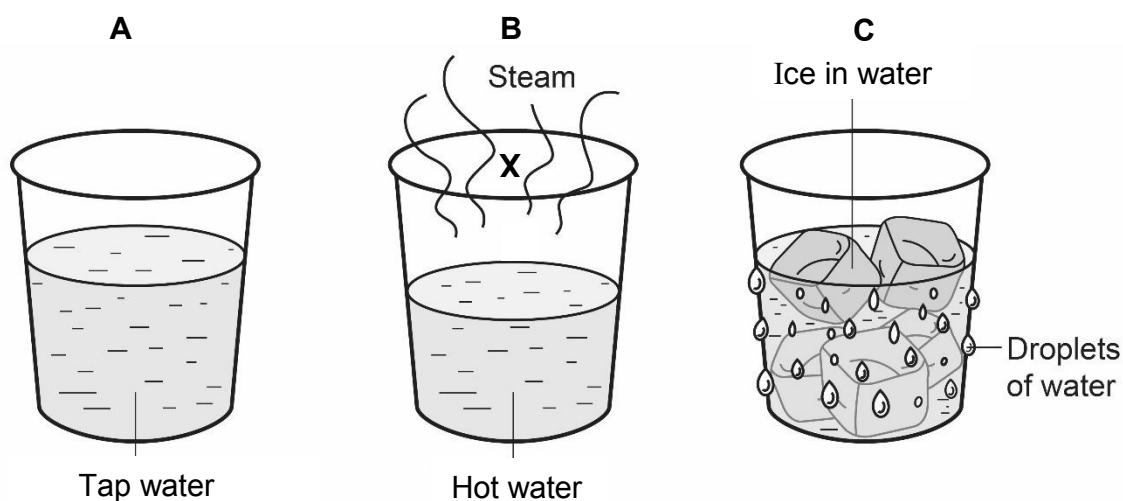


Diagram 10: Glasses **A**, **B** and **C**

- (i) What could be the temperature of water in glass **A**?

Tick (✓) the correct box.

☐

4 °C

☐

24 °C

☐

84 °C

[1]

- (ii) Name the process that is taking place at **X** In glass **B**.

.....

[1]

- (iii) Which change in the **state** of water is taking place at **X** in glass **B**?

.....

[1]

- (iv) In which state is the **ice** found in glass **C**?

Tick (✓) the correct box.

☐

Solid

☐

Liquid

☐

Gas

[1]

(v) Name the process by which the ice in glass **C** turns into water.

[1]

.....

(vi) Describe how droplets of water are formed on the outer surface of glass **C**.

.....

.....

[2]

(b) **Diagram 11** shows a person skating on ice.

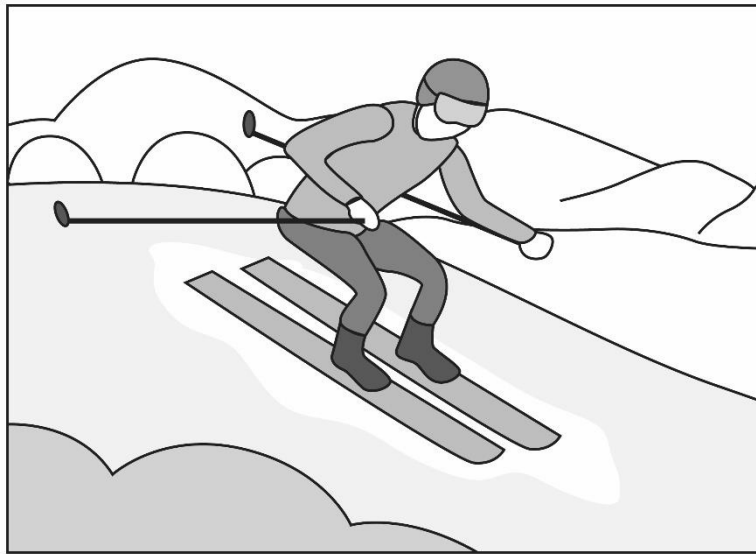


Diagram 11: Person skating on ice

Give one property of ice that makes skating possible.

.....

[1]

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Question 6 (8 marks)

- (a) **Diagram 12** shows part of a hibiscus plant.

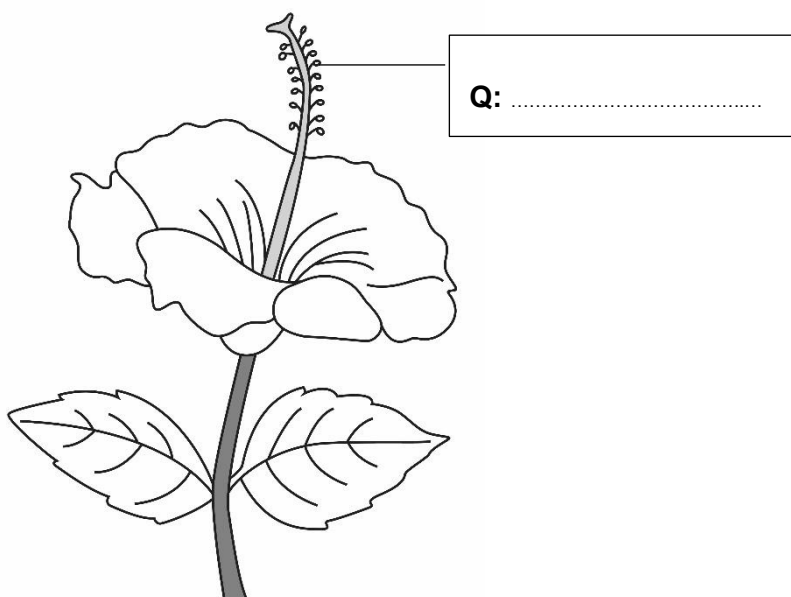


Diagram 12: Part of a hibiscus plant

- (i) Name part **Q** on **Diagram 12**. [1]
- (ii) Name the part of the flower which receives pollen. [1]
.....
- (iii) Give one way how petals of flowers attract insects. [1]
.....
- (iv) Insects help to pollinate flowers.
State **another** way in which pollination occurs. [1]
.....
- (v) Why is the process of pollination necessary for the plant? [1]
.....

- (b) Jim carries an experiment to investigate one function of stems.
He places a balsam plant in red-coloured water as shown in **Diagram 13**.

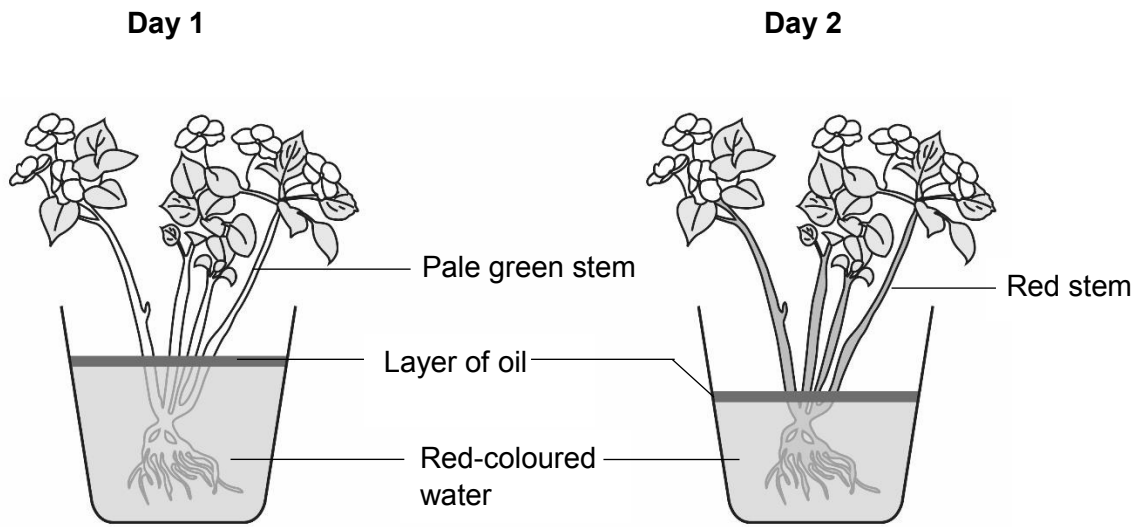


Diagram 13: Balsam plant in red-coloured water

On **Day 2**, Jim finds that the stem of the balsam plant has turned red.

- (i) Which function of the stem did Jim investigate in his experiment?

.....
.....

[1]

- (ii) Give another function of the stem.

.....
.....

[1]

- (iii) Suggest why the level of water in the glass decreased on **Day 2**.

.....

[1]

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