

Science

Writing Time : 2 Hours
Total Marks : 100

READ THE FOLLOWING DIRECTIONS CAREFULLY:

1. In this **booklet**, you will find 25 questions in Section A and 5 questions in Section B. You must answer **all** the questions. Each question in Section A is worth **2 marks**.
2. All answers for Section 'A' and 'B' **must** be written in the answer sheet provided by the school.
3. Do **not** start writing the answers to questions until you are given permission to do so.
4. You will have 2 hours in which to answer all the questions
5. Once the examination begins, you will not be allowed to ask questions, speak with others or move around.
6. If you finish before the time is over, close the Answer Booklet, and sit quietly. You are allowed to leave the examination room **ONLY** half-an-hour before the completion of the stipulated time of the paper.

DO NOT forget to write your name and class/section.

IF YOU HAVE ANY QUESTIONS, ASK THEM NOW!

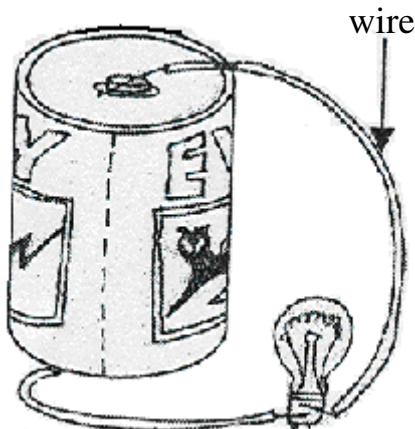
TURN PAGE

(15 Minutes is to be allowed for reading as well as for teachers on duty to explain the instructions)

SECTION A
25 Questions – 50 Marks
Answer ALL questions

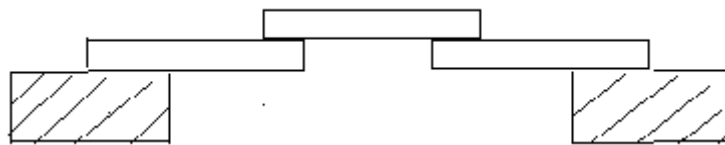
Direction: Each question in this section is followed by four possible choices of answers. Choose the correct answer and write it down in the answer sheets provided by the school.

1. Which of the following is **NOT** a solid?
A ice
B snow
C honey
D butter
2. A common conductor of electricity is
A wood.
B metal.
C rubber.
D plastic.
3. Flowers have brightly coloured petals and scent
A to attract insects.
B to distract insects.
C for slow pollination.
D for quick pollination.
4. What is wrong with the circuit in the diagram given below?



- A** Three batteries are required to complete the circuit.
- B** Two batteries are required to complete the circuit.
- C** Three wires are required to complete the circuit.
- D** The connections of the wires are wrong.

5. Stretching of a rubber band is an example of
 - A compressive force.
 - B magnetic force.
 - C tensile force.
 - D shear force.
6. Salt dissolves faster in
 - A cold water.
 - B hot water.
 - C alcohol.
 - D oil.
7. Look at the model of a cantilever bridge given below.

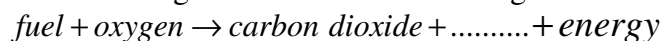


- If we increase the overlapping gap of the planks in the model, the strength of the bridge will become
- A weaker.
 - B durable.
 - C flexible.
 - D stronger.
8. People take antacids after eating acidic food to
 - A make the food less acidic.
 - B digest the food properly.
 - C neutralise the alkali.
 - D neutralise the acid.
 9. In an egg, the nutrients to a growing chick are provided by the
 - A yolk and shell.
 - B yolk and egg white.
 - C membrane and yolk.
 - D membrane and egg white.
 10. Triangles are used in structures
 - A to make the structure look beautiful.
 - B to make the structure stronger.
 - C because they can easily form any shape.
 - D because they are cheap.

11. 'Yellow haldi paper changes to red in a soap solution'.

This is an example of a
A chemical change.
B physical change.
C natural change.
D colour change.

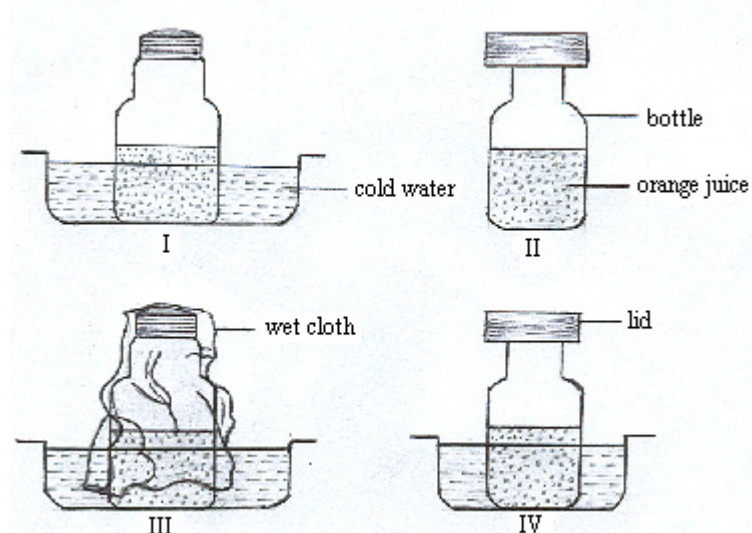
12. The reaction given below shows burning.



The missing product in the above reaction is

A heat.
B light.
C water.
D oxygen.

13. The diagrams below show the different ways to keep orange juice cool.



Which is the best way to keep orange juice cool?

A I
B II
C III
D IV

14. Travellers use a magnetic compass to

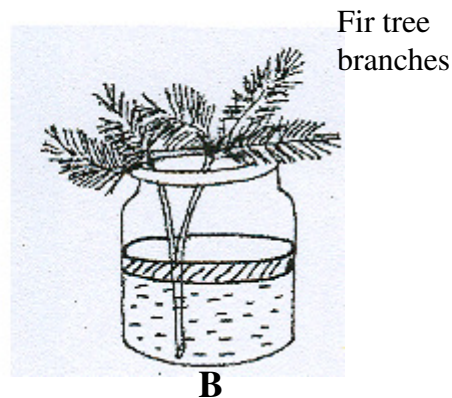
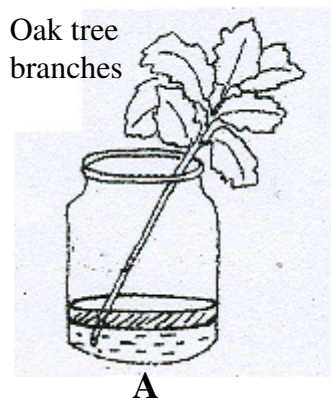
A make a game.
B attract iron filings.
C produce electricity.
D find the north and south poles.

15. Pema did an experiment with a rubber band and a paper pellet. She recorded the results as shown in the table given below.

| Elastic band pulled/stretched | Distance travelled by the paper pellet. |
|-------------------------------|-----------------------------------------|
| 3 cm | 9 cm |
| 9 cm | 27 cm |
| 12 cm | X |
| 15 cm | 45 cm |

The value of **X** in the table above is

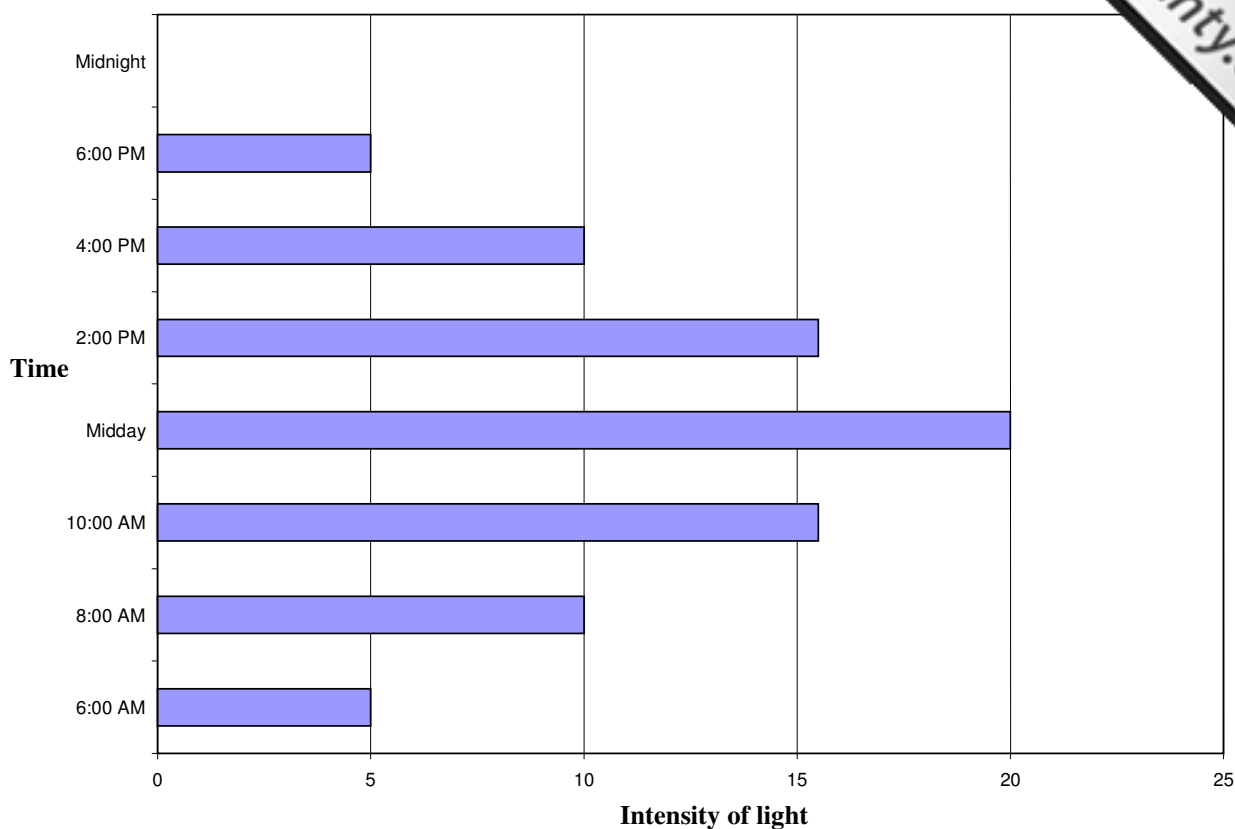
- A** 38 cm.
 - B** 37 cm.
 - C** 36 cm.
 - D** 35 cm.
16. The diagram given below shows transpiration in plants.



Which statement correctly matches with diagram B?

- A** Plants having large leaves transpire more.
 - B** Plants having small leaves transpire less.
 - C** Both plants transpire more in wet weather.
 - D** Both plants transpire at the same rate.
17. The sound of thunder travels 1km in 3 seconds. If you hear the sound of thunder 36 seconds after lightning, how far is the storm?
- A** 13 km
 - B** 12 km
 - C** 11 km
 - D** 10 km

18. The graph below shows the rate of photosynthesis during the course of the day.



According to the graph above, the part of the day when photosynthesis is maximum is at

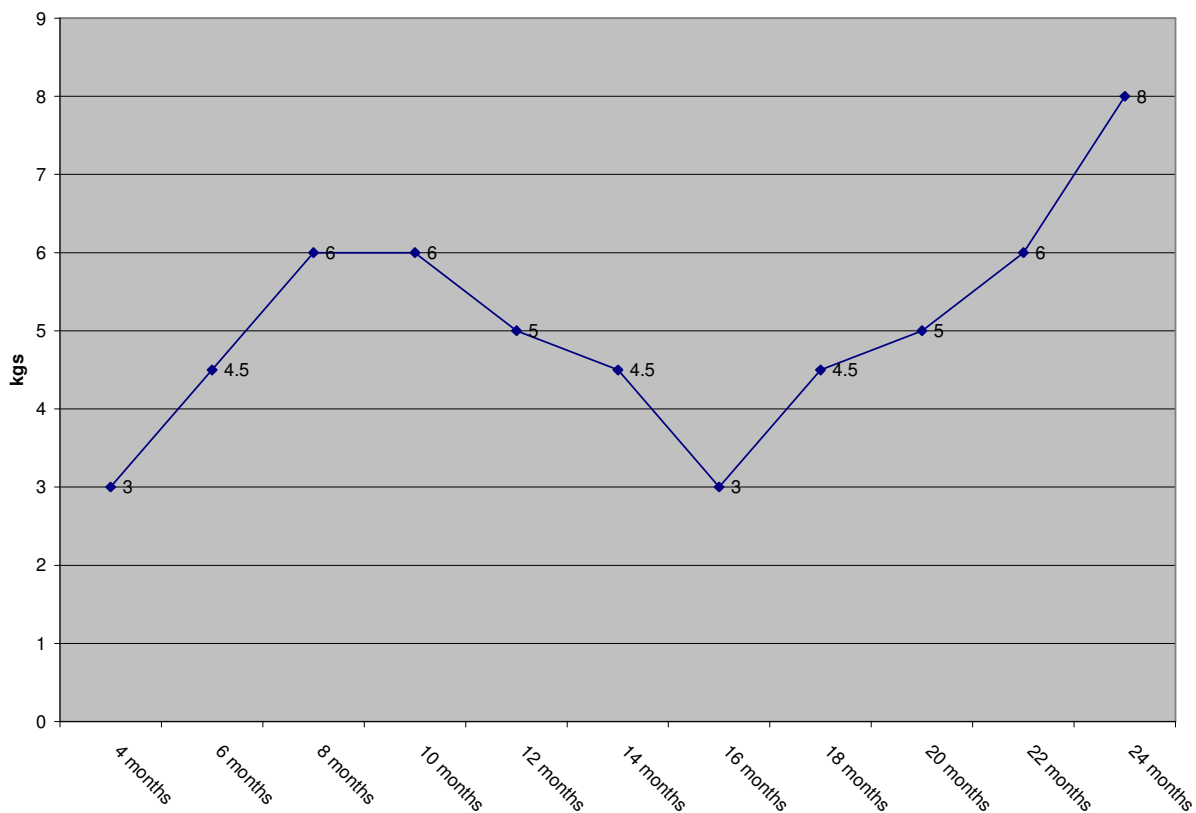
- A midnight.
 - B 4.00 PM.
 - C midday.
 - D 8.00 AM.
19. If a tube is a hollow structure, which of the following statements is **NOT TRUE**?
- A A bottle is tube shaped.
 - B A plastic pipe is tube shaped.
 - C An electric pole is tube shaped.
 - D A solid cylinder is tube shaped.

20. The strength of an electromagnet can be increased by
- I. increasing the number of turns of the wire
 - II. decreasing the number of turns of the wire
 - III. decreasing the number of batteries
 - IV. increasing the number of batteries

Which of the following is **TRUE** ?

- A** I and II.
- B** I and IV.
- C** II and III.
- D** II and IV.

21. Study the growth chart given below.



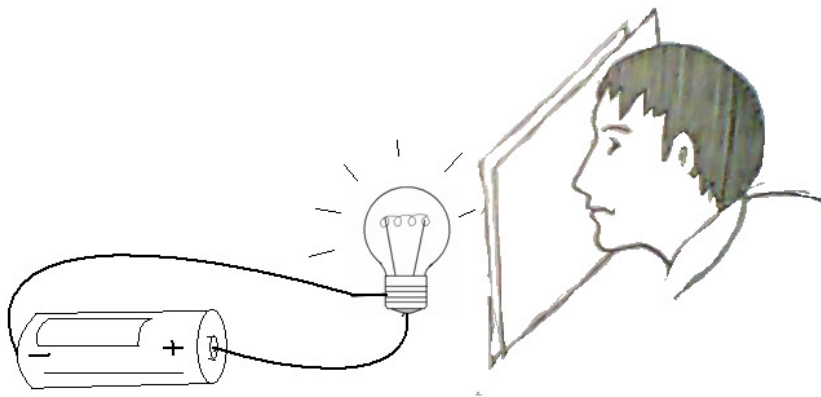
From the chart, after 16 months Leela

- A** was still sick.
- B** lost her health completely.
- C** started regaining her health.
- D** neither improved nor lost her health.

22. An empty glass bottle will float on water because
- A the bottle contains air.
 - B the bottle is empty and it is light.
 - C empty containers are always light.
 - D bottle shaped containers float on water.

23. Which of the following is **NOT TRUE**?
- A Yeast can respire without oxygen.
 - B Yeast cannot respire without sugar.
 - C Yeast respire better in warm places.
 - D Yeast produces oxygen during respiration.

24.



The experiment given above is used to check the

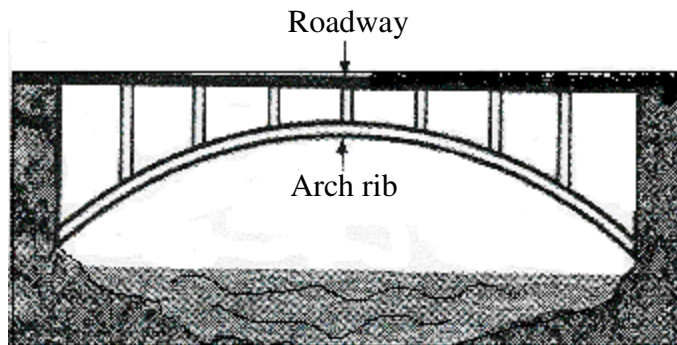
- A quality of wire.
 - B quality of paper.
 - C voltage of battery.
 - D brightness of a bulb.
25. 'A mother should eat food rich in proteins for her baby to grow healthy in the womb'. Which of the following groups of food is rich in proteins?
- A eggs, pulses and milk
 - B eggs, rice and tomatoes
 - C eggs, maize and mangoes
 - D eggs, spinach and bananas

SECTION B
5 Questions – 50 Marks
Answer ALL questions

Direction: Answer the questions given below as directed. All answers must be written in the answer sheets provided by the school. The intended marks for each question is given in brackets [].

Question 26

- (a) Fill in the blanks. [5]
- (i) The protects the seed.
 - (ii) The is the distance a bridge crosses.
 - (iii) The band of colours in a rainbow is called
 - (iv) A does not have a definite shape and volume.
 - (v) The of a magnet have stronger magnetic force.
- (b) Look at the diagram of a bridge given below and answer the questions that follow.



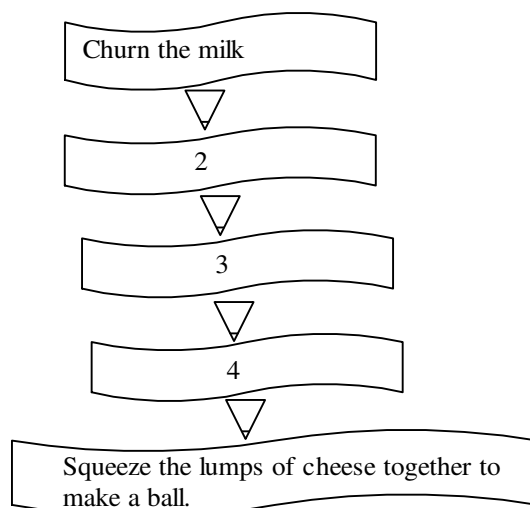
- (i) Name the type of bridge. [1]
 - (ii) How can the bridge be made stronger? [2]
- (c) Copy and complete the table given below. [2]

| Part | Function |
|-------------|----------|
| Womb | |
| Birth canal | |

Question 27

- (a) (i) Study the names of plants and animals given below. Use **FOUR** names from the list to make a food chain. [2]
- eagle, snake, grasshopper, seeds, leaves, mice, owl*

- (ii) The flow chart below shows the process of making cheese. Copy and write the missing information.



- (b) Match the following and rewrite the correct matching pairs.

[5]

| Column A | Column B |
|--------------------|----------------|
| 1. Bulb | hinge joint |
| 2. Elbow | cave |
| 3. Crystals | salt and sugar |
| 4. Natural rubbish | dead animals |
| 5. Habitat | filament |
| | sliding joint |

Question 28

- (a) State whether the following sentences are **TRUE** or **FALSE**.

[5]

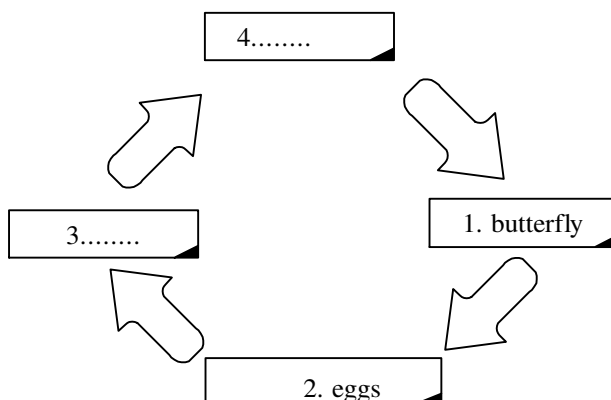
- The electricity that does not flow is called static electricity.
- The earth does not have magnetic force.
- Parallel connections decrease the brightness of a bulb.
- The seeds having hooks are scattered by animals.
- Things dry by the process of evaporation.

- (b) (i) Define the following terms.

[3]

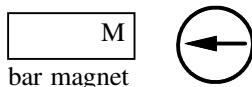
- switch
- germination
- matter

- (ii) The diagram given below shows the life cycle of a butterfly. Copy the diagram and complete it.



Question 29

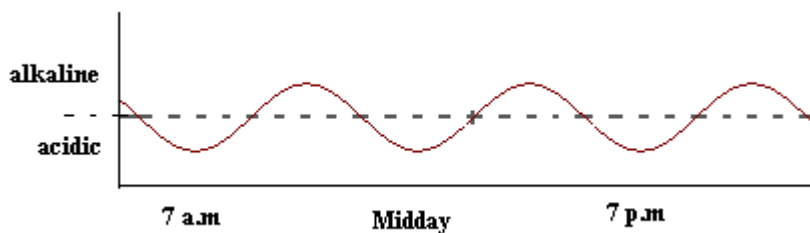
- (a) (i) Draw a diagram to show the position of the sun at 5 PM. [1]
- (ii) You are provided with the following materials: *bowl, water, plasticine*. With the help of diagrams, explain how a plasticine ball floats on the surface of water. [2]
- (b) Answer the following questions.
- (i) What are the sources of producing electricity? Name **FOUR** sources. [2]
- (ii) Give **ONE** example each of a chemical and a physical change. [1]
- (iii) What type of energy is stored in a torch battery? [1]
- (iv) Name **TWO** forces a suspension bridge responds to. [1]
- (v) Will the bulb light when a plastic bag is put between the drawing pins in a circuit? Why? [1]
- (vi) Given below are a magnet and a compass. What pole is 'M' in the diagram? [1]



Question 30

- (a) (i) '*Bamboo is an extremely important and useful material*'. Give **TWO** reasons to support the statement. [2]
- (ii) '*Forest is an example of renewable source of energy*.' Explain the statement. [2]

- (iii) The diagram below shows how pH in the mouth changes frequently.



When is the best time to clean our teeth? Why?

[2]

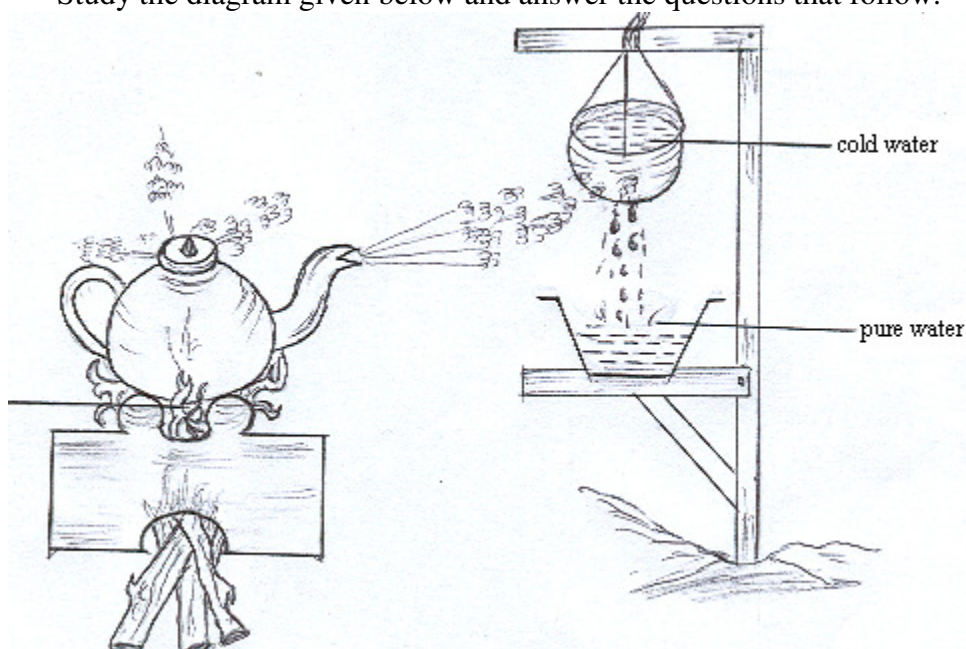
- (b) (i) The statements given below show the different ways of drying meat.

- I. Hanging meat outside a latrine.
- II. Drying meat on a wall.
- III. Drying meat covered with a thin cloth.

Which method of drying meat is the best? Why?

[2]

- (ii) Study the diagram given below and answer the questions that follow.



1. What is the process called?

[1]

2. What is the function of the cold water?

[1]