

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 sheets 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 sheets, 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 most correct answer and write it down in the answer sheets provided by the school.*

1. The white skin inside the shell is called the
 - A yolk.
 - B egg white.
 - C membrane.
 - D twisted bundles.

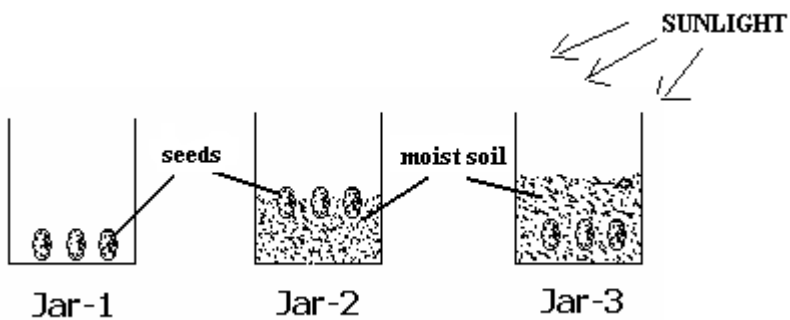
2. Which of the following electrical effects take place in a rod heater?
 - A colour and sound
 - B sound and light
 - C sound and heat
 - D heat and light

3. The raw material for making bricks is
 - A clay.
 - B sand.
 - C water.
 - D limestone.

4. Bamboo poles are used at construction sites because they are
 - A cheap.
 - B easy to use.
 - C tube shaped.
 - D easily available.

5. The bending of a structure shows
 - A shear force.
 - B tensile force.
 - C muscular force.
 - D compressive force.

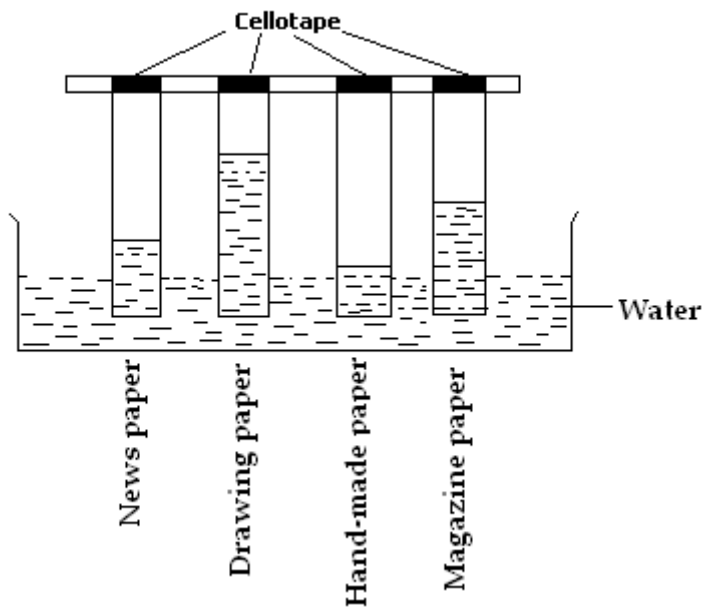
6. Which of the following is correct?
- A anther + ovary = carpel
 - B stigma + style = stamen
 - C filament + ovary = carpel
 - D anther + filament = stamen
7. The sour taste of lemon is because of
- A acid.
 - B base.
 - C alkali.
 - D mineral.
8. The total voltage of 3 batteries will be [The pushing power of a battery is 1.5 volts.]
- A 1.5 volts.
 - B 3.0 volts.
 - C 3.5 volts.
 - D 4.5 volts.
9. A cantilever bridge can be improved by
- A decreasing the amount of overlap.
 - B increasing the weight at the ends.
 - C increasing the weight on it.
 - D decreasing the span.
10. Study the diagram given below and answer the question that follows.



Seeds germinate best in jar/s

- A 1.
- B 2.
- C 3.
- D 2 and 3.

11. The following statements are true about a solute **EXCEPT**
- A a solute dissolves in water.
 - B salt is an example of a solute.
 - C a solute with solvent gives a solution.
 - D a solute can dissolve most of the substances.
12. Hydro power stations in our country generate electricity from
- A water.
 - B wind.
 - C coal.
 - D sun.
13. Study the experiment given below carefully and answer the question that follows.



The kind of paper which is most suitable to be used as a toilet paper is

- A newspaper.
 - B drawing paper.
 - C magazine paper.
 - D handmade paper.
14. To dry clothes quickly, we must
- A hang them loosely in a sunny and windy place.
 - B hang them in a sunny place with no wind.
 - C hang them in a windy place.
 - D lay them on the ground.

15. The ice on the mountains are formed by
- A melting of ice.
 - B freezing of water.
 - C evaporation of water.
 - D condensation of vapour.
16. When the span of a bridge is longer, the structure becomes
- A stronger.
 - B weaker.
 - C smaller.
 - D bigger.
17. A piece of wood will float in water because it is
- A light.
 - B less dense.
 - C more dense.
 - D lighter than other objects.
18. Which of the following statements is **NOT** true about yeast?
- A Yeast is a fungus.
 - B Yeast is used in making bread.
 - C Yeast is used in making alcohol.
 - D Yeast respire in the presence of oxygen.

19. Study the table given below.

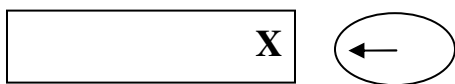
Number of turns of wire	Number of paper clips attracted by the magnet
5	2
10	5
15	7
20	12

The above table shows the

- A strength of the magnet.
- B number of paper clips attracted by the magnet.
- C magnet becomes stronger with increase in the number of turns.
- D number of turns depends on the number of paper clips attracted.

20. The length of a shadow is shortest at
- A 6 am.
 - B 10 am.
 - C 12 noon.
 - D 3.30 pm.
21. Forests are disappearing at a faster rate because
- A all are concerned about forest life.
 - B forests are used as a source of raw material.
 - C developmental activities are given importance.
 - D shifting cultivation is not commonly practised.
22. A torch battery changes
- A a weak current to a strong current.
 - B chemical energy to radiant energy.
 - C electrical energy to chemical energy.
 - D chemical energy to electrical energy.

23.



In the diagram of a magnet given above, X is the

- A East pole.
 - B West pole.
 - C North pole.
 - D South pole.
24. If the storm is 9 km away, the time between thunder and lightning will be (1km = 3 seconds)
- A 3 seconds.
 - B 27 seconds.
 - C 36 seconds.
 - D 60 seconds.

25. Read the following statements.
- I. Put hot water in a jar.
 - II. Keep adding more sugar till no more sugar dissolves.
 - III. Add sugar and stir.
 - IV. Leave the jar for a few days in a warm place.
 - V. Hang a thread and paper clip in the jar.

The correct steps to make a crystal is

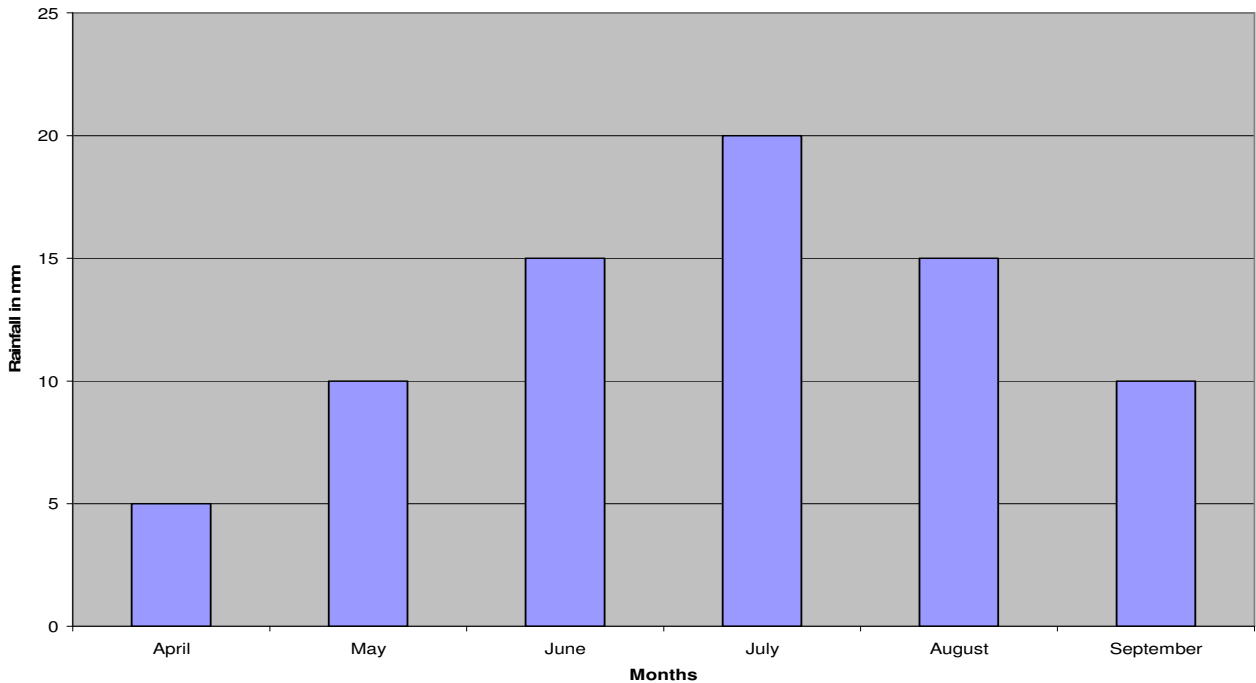
- A I, II, III, IV V.
- B I, III, II, V, IV.
- C I, IV, V, II, III.
- D I, V, II, III, IV.

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) Study the graph of rainfall given below carefully and answer the questions that follow.



- (i) Which month had the maximum rainfall?
- (ii) What is the average rainfall for six months?

- (b) State whether the following sentences are **TRUE** or **FALSE**. [4]
 - (i) Cutting of an apple is a chemical change.
 - (ii) A baby grows in the mother's stomach.
 - (iii) The canopy lies between the shrub layer and the forest floor.
 - (iv) An object floats or sinks in water depending on its shape.

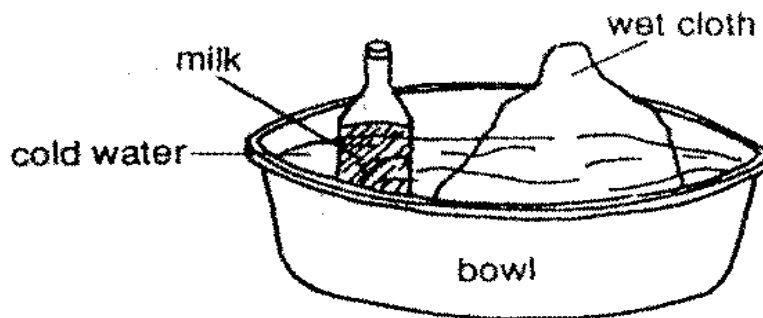
- (c) What is contraception? [1]

- (d) Give **TWO** characteristics of a seed that are scattered by the wind. [2]

Question 27

- (a) Fill in the blanks. [4]
 - (i) A rainbow is formed when _____ passes through droplets of water.
 - (ii) In a _____ joint, movement is only in one direction.
 - (iii) When a circuit is incomplete, _____ cannot flow.
 - (iv) A _____ is used to turn on and off a circuit.

- (b) The diagram given below shows two milk bottles kept in cold water. One of them has been kept under a wet cloth.



- (i) Which bottle of milk remains fresh and cool for a longer duration? [1]
- (ii) Why are the free ends of the cloth soaked in water? [1]

- (c) What is a fuel? Give **TWO** examples.
- (d) Why does a plate float in water but a stone sinks?

Question 28

- (a) Copy the table given below. By choosing the words from the boxes below, write them in Column B to match with the words in Column A. [3]

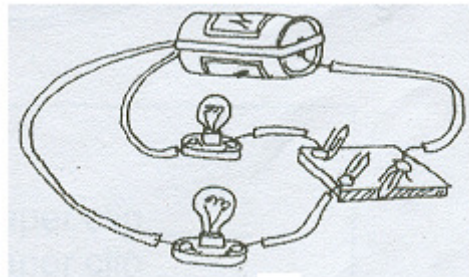
oxygen	plant	coin	pencil	carbon dioxide
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Column A	Column B
1. Conductor 2. Lime water 3. Living matter	

- (b) Answer the following questions.
 - (i) Write **ONE** difference between the life cycle of a frog and a butterfly. [2]
 - (ii) What types of plants lose more water? [1]
 - (iii) Give **ONE** reason why we should protect our forests. [1]
 - (iv) State the uses of the following. [2]
 - 1. Filament in the bulb
 - 2. Green house
 - (v) Why are maize and zow better snacks than sweets? Give **ONE** reason. [1]

Question 29

- (a) Study the circuit diagram carefully and answer the questions that follow.



- (i) Name the circuit shown in the diagram. [1]
- (ii) What is the advantage of this circuit? [1]

- (b) Give a reason for each of the following statements.
 - (i) Our earth is like a giant magnet.
 - (ii) You are advised not to eat too many sweets.
 - (iii) A football comes to a stop after sometime.
 - (iv) The ends of a magnet attract more paper pins.

(c) Write **TWO** advantages of using solar energy. [2]

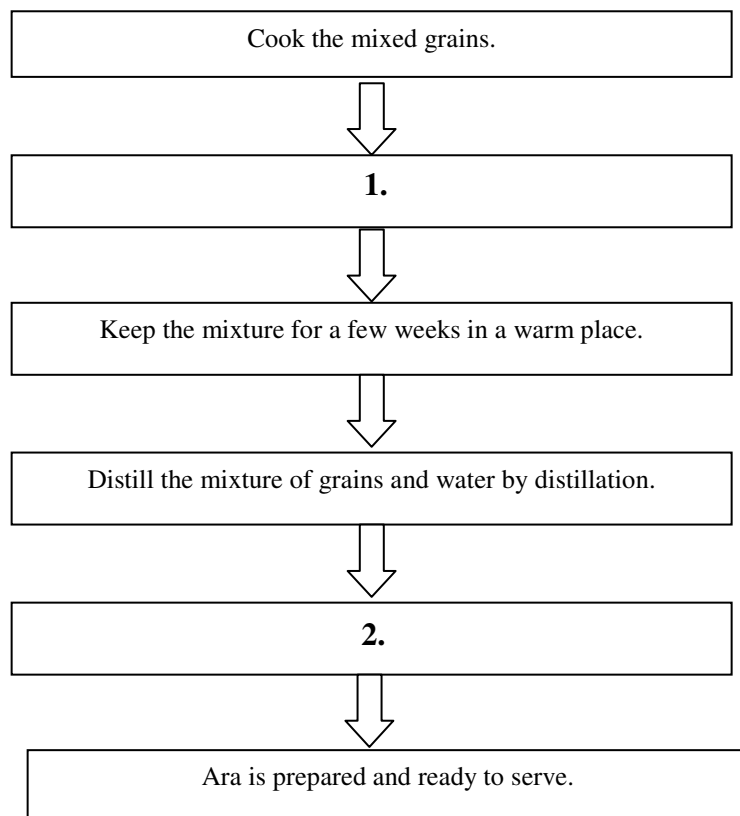
(d) What is the best way to dry meat? [2]

Question 30

(a) (i) What do you mean by process? [1]

(ii) The flow chart given below shows the process of making *ara* (local wine).

Copy the numbers 1. and 2. in your answer sheet and write the correct answer against each number. [2]



- (b) (i) Why do you think triangles are used in bridges? Give **ONE** reason.
- (ii) State **TWO** methods to make a suspension bridge stronger.
- (iii) Draw a diagram of a model cantilever bridge. [2]
- (c) Write **ONE** way to increase the stability of a tall building. [1]
- (d) Give **TWO** examples of rubbish that can be recycled. [1]

