

SUMMATIVE ASSESSMENT II | 2025-2026
BASIC SCIENCE MODEL QUESTION PAPER

Class: 6

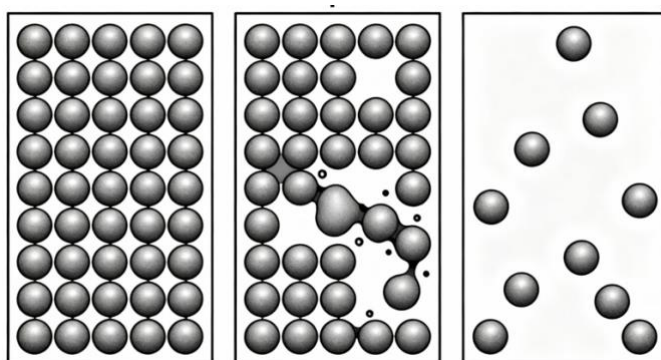
Time: 2 Hrs 15 minutes

Instructions

1. 15 minutes cool-off time is allotted for reading and understanding the activities.
2. Answer **any six** questions.

1.

a) Observe the figures given below regarding the arrangement of molecules in different states of matter.



Identify the state of matter where molecules are packed the closest. Write one characteristic of this state regarding its shape.

b) Classify the fruits given below into the table based on their formation method:

Jackfruit, Mango, Custard Apple, Cashew Apple

Simple Fruit	Aggregate Fruit	Multiple Fruit	Pseudo Fruit
.....

c) Which part of the Cashew Apple develops into the "fruit" structure we eat?

- A. Ovary
- B. Thalamus
- C. Pedicel

D. Seed

2. Question 2 has two parts 2(A) and 2(B). Write any one 2(A) or 2(B) completely.

2. (A)

a) While preparing tea, we separate tea dust from tea.

Which method of separation is used here?

What property of the components is utilized in this method?

b) You are given a mixture of iron powder and sand.

Plan an experiment to separate the iron powder. Name the property used for this separation.

OR

2. (B)

a) Observe the table regarding flowers and fill in the missing data.

Flower	Type (Unisexual/Bisexual)	Reason
Pumpkin	Has only Androecium or Gynoecium
Shoe Flower	Bisexual

b) "All flowers do not produce fruits."

Do you agree with this statement? Explain your answer using the concept of male and female flowers.

3.

a) Observe the flow chart showing the organization of life in multicellular organisms. Complete the missing stages.

Cells → (1) → Organs → (2) → Organism

b) Identify the correct pair from the following cell organelles and their functions:

A. Mitochondrion - Controls cellular activities

B. Vacuole - Synthesises protein

C. Ribosome - Synthesises energy

D. Cell membrane - Covers the cell

c) Which scientist discovered the cell in 1665 using a microscope?

4.

a) Examine the given statement and reason and write down the correct one.

- **Statement:** Water with sugar dissolved in it is a homogeneous mixture.
- **Reason:** The sugar molecules spread throughout the water and show the same properties throughout.

A. Statement is correct. Reason is not suitable for the statement.

B. Statement is correct. Reason is suitable for the statement.

C. Statement is wrong. Reason is not suitable for the statement.

D. Statement and the reason are wrong.

b) The stages of preparing a slide of onion peel are given below in a jumbled order. Arrange them correctly.

1. Place a cover glass over it.
2. Take a thin layer from a cleaned onion.
3. Observe through the microscope.
4. Place the stained piece in glycerine on a slide.
5. Put it in a watch glass containing stain.

5. a) Analyse the table given below regarding pollinators and rewrite the mistakes if any.

Plant	Pollinator
Vanilla	Wind
Paddy	Artificial Pollination
Black Pepper	Water

(Hint: Correct the pollinators for Vanilla, Paddy, and Black Pepper)

b) "Honey bees are called the friends of farmers."

What is the scientific reason behind this saying related to the process of reproduction in plants?

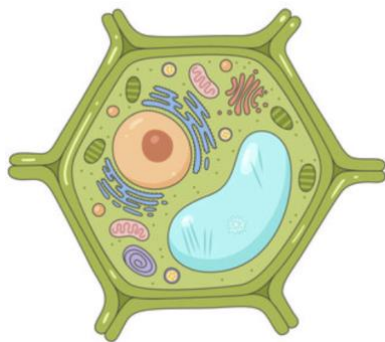
c) Which among the following is a dioecious plant (male and female flowers on different plants)?

- A. Coconut
 - B. Cucumber
 - C. Nutmeg
 - D. Ash gourd
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6. Question 6 has two parts 6(A) and 6(B). Write any one 6(A) or 6(B) completely.

6. (A)

a) Observe the diagram of the Plant Cell given below.



- Name the outermost covering seen only in plant cells.
- Name the green-colored organelle that helps in photosynthesis.

b) Write two major differences between a Plant Cell and an Animal Cell.

c) Why are cells called the "building blocks of life"?

OR

6. (B)

a) Observe the figure showing the longitudinal section of a flower.



[Identify the parts labelled Male reproductive part and Female reproductive part

b) Explain the process of Fertilisation in plants.

(Include the terms: Pollen tube, Male gamete, Ovary, Zygote).

c) What happens to the **Ovule** and **Ovary** after fertilisation?

- Ovule becomes:
- Ovary becomes: