

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

ANSWER KEY

Class: 6

1.

- **a) Solid¹¹. Characteristic:** Molecules are packed closely together, giving it a definite shape.
- **b)**
 - **Simple Fruit:** Mango
 - **Aggregate Fruit:** Custard Apple
 - **Multiple Fruit:** Jackfruit
 - **Pseudo Fruit:** Cashew Apple
- **c) C. Pedicel.**

2.

(A)

- **a) Method:** Filtration (or Straining)
Property: Difference in size of particles (Solid tea dust does not dissolve in liquid tea)
- **b) Experiment:** Pass a magnet through the mixture
Property: Magnetic property (Iron is attracted to magnets, sand is not).

OR

(B)

- **a)**
 - **Pumpkin: Unisexual**
Reason: It possesses either androecium or gynoecium only
 - **Shoe Flower: Bisexual**
Reason: It has both androecium and gynoecium in the same flower
- **b) Yes, I agree**
 - **Explanation:** Fruits are formed from the ovary. Male flowers have only the androecium and lack the gynoecium (ovary), so they cannot produce fruits.

3.

- **a) Cells → (1) Tissues → Organs → (2) Organ System → Organism.**
- **b) D. Cell membrane - Covers the cell.**

(Correction for others: Mitochondrion synthesises energy, Vacuole stores water/waste, Ribosome synthesises protein)

- **c) Robert Hooke** (in 1665)

4.

- a) B. Statement is correct. Reason is suitable for the statement

(Sugar solution is a homogeneous mixture because the sugar molecules spread throughout the water)

- b) Correct Order: 2 → 5 → 4 → 3.

(2. Take a thin layer... -->5. Put it in a watch glass containing stain... -->4. Place the stained piece in glycerine... -->3. Observe through the microscope)

5.

- a)
 - **Vanilla: Artificial Pollination.**
 - **Paddy: Wind**
 - **Black Pepper: Water**
- b) Honey bees are **pollinators**. They help in the transfer of pollen grains, which leads to **fertilisation** and the production of fruits and seeds, helping farmers get a better yield.
- c) C. Nutmeg

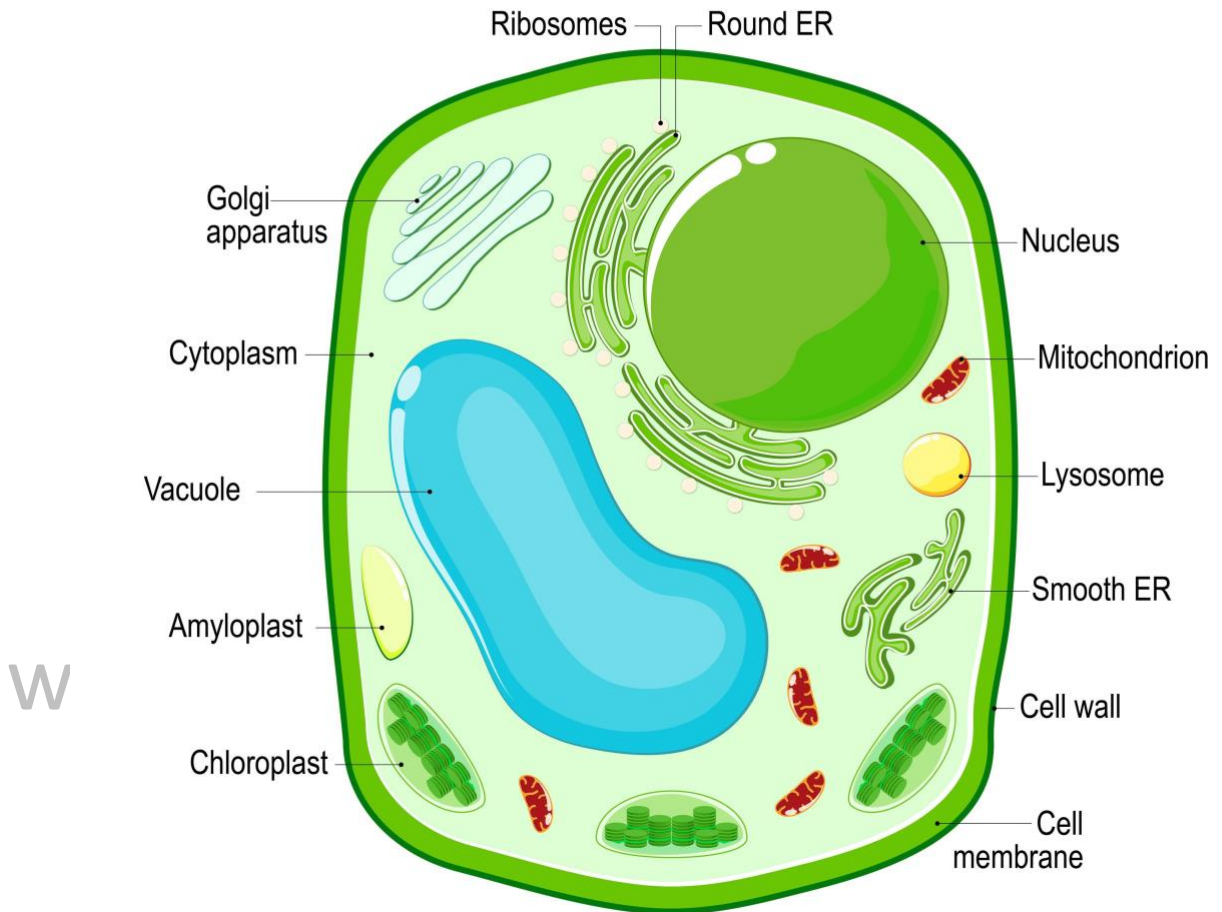
(Coconut, Cucumber, and Ash gourd are Monoecious)

6.

(A)

- a)
 - **Outermost covering: Cell wall**
 - **Green-colored organelle: Chloroplast**

Plant cell anatomy

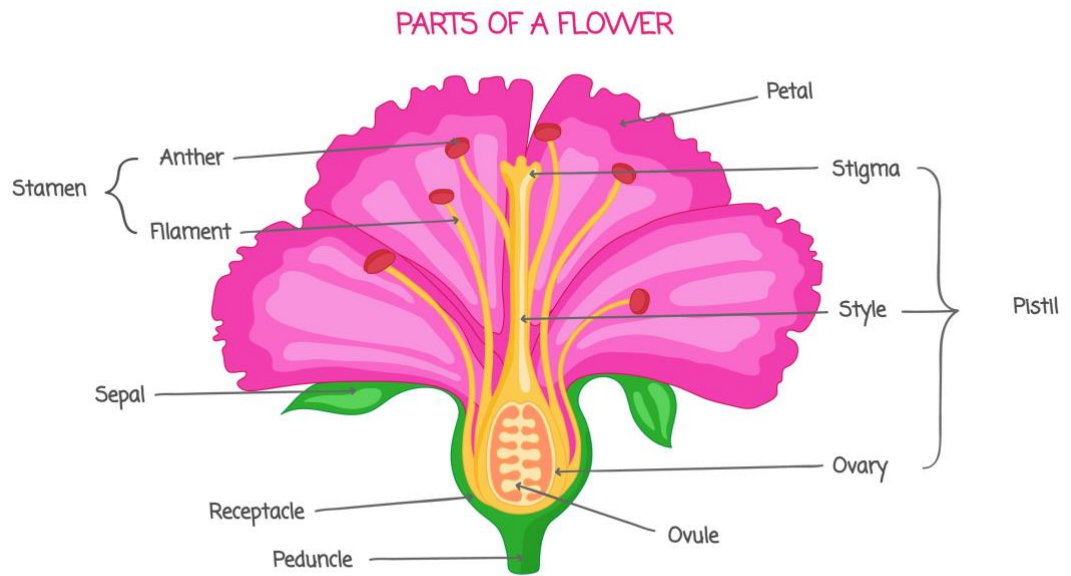


- **b)**
 1. Plant cells have a **Cell wall**, animal cells do not
 2. Plant cells have **Chloroplasts**, animal cells do not
- **c)** The body of all living organisms is built up of basic units called cells. Just like blocks are used to build a house, cells are arranged to form the body of an organism.

OR

(B)

- **a)**
 - **Male reproductive part: Androecium** (or Stamen)
 - **Female reproductive part: Gynoecium** (or Carpel).



- **b)** After pollination, the **pollen tube** grows down to the ovary. The **male gamete** reaches the ovary through this tube and fuses with the egg (in the ovule) to form a **zygote**. This process is called fertilisation.

- **c)**

- **Ovule becomes: Seed.**

- **Ovary becomes: Fruit.**

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