



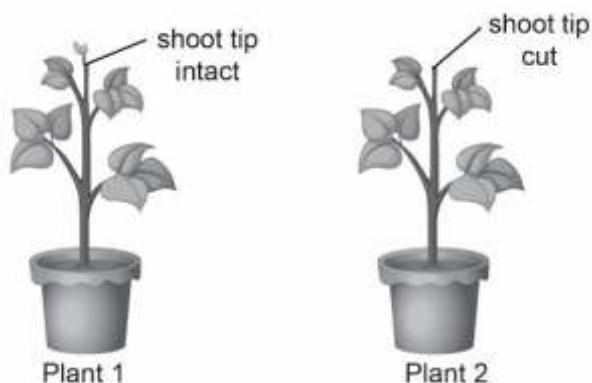
Curriculum Aligned Competency Based Test Items

Science

Class 9 – Chapter 6

Tissues

Apical meristem is a type of tissue that helps plants grow in length. Tina took two identical potted plants and cut the shoot tip of one of them. She observed if the two plants grew in height after a week.



SAS21S090601

- 1 What was Tina trying to find out about shoot tips through her experiment?

SAS21S090602

- 2 Which of these conditions would have made Tina's experiment invalid? Circle 'Yes' or 'No' to mark your responses.

| Would this have made the experiment invalid? | Yes or No |
|--|-----------|
| Keeping one plant in sunlight and the other in a dark room | Yes/No |
| Watering both the plants equally | Yes/No |
| Adding manure to the soil of plant 1 only | Yes/No |

3 Why do cells of apical meristem lack vacuoles?

- A. They store food materials.
- B. They have thin cell walls.
- C. They contain dense cytoplasm.
- D. They are actively dividing cells.

Stomata are minute openings found in the epidermis of plant leaves.

Each stoma allows carbon dioxide, oxygen and water vapour to diffuse in and out of a plant's internal tissues.

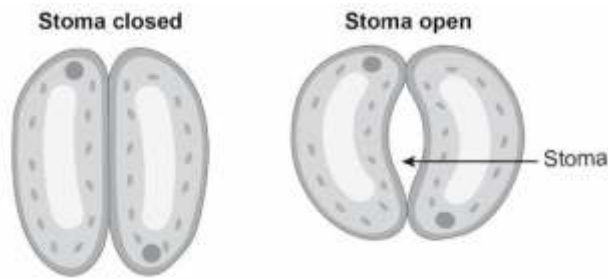


Figure 1

Figure 2

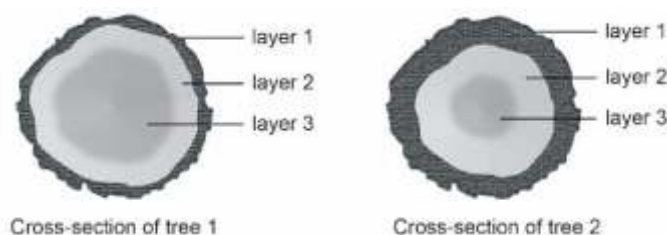
SAS21S090604

4 Each stoma is surrounded by a pair of elongated cells. What is this pair of cells known as?

SAS21S090605

5 Why do desert plants have smaller and fewer stomata as compared to rainforest plants? Explain your answer.

The pictures show the cross-sections of two chopped tree trunks.



SAS21S090606

6 Which layer in the cross-sections of both the trees is made of dead cells?

SAS21S090607

7 Which question can be answered from the picture?

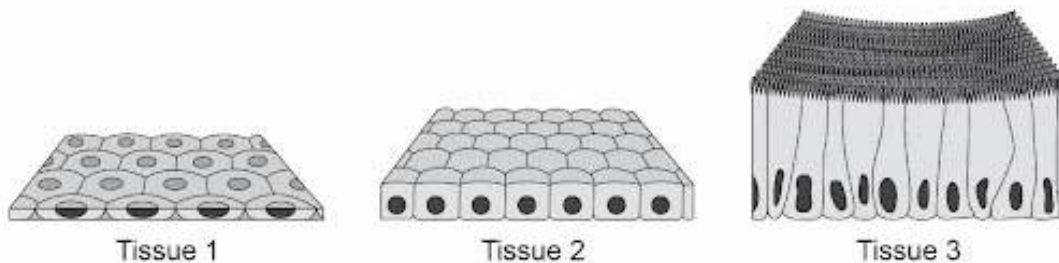
- A. Was tree 1 taller than tree 2?
- B. Was tree 1 younger than tree 2?
- C. Did tree 1 bear more fruits than tree 2?
- D. Did tree 1 have more branches than tree 2?

SAS21S090608

8 Which of these is correct about connective tissues?
Circle 'Yes' or 'No' to mark your responses.

| Is the statement correct? | Yes/No |
|--|--------|
| All connective tissues are highly flexible. | Yes/No |
| All connective tissues contain cells that are either placed in a fluid or in a solid matrix. | Yes/No |
| All connective tissues form frameworks that provide support to organs. | Yes/No |

The picture shows three types of tissues found in the human body.



SAS21S090609

9 The inner lining of alveoli (air sacs in lungs) is very thin and delicate.
Which type of tissue forms the inner lining of alveoli?

10 Which of these cells is the longest?

- A. Bone cell
- B. Nerve cell
- C. Stomach cell
- D. Heart muscle cell