

H. 22
12/07/21

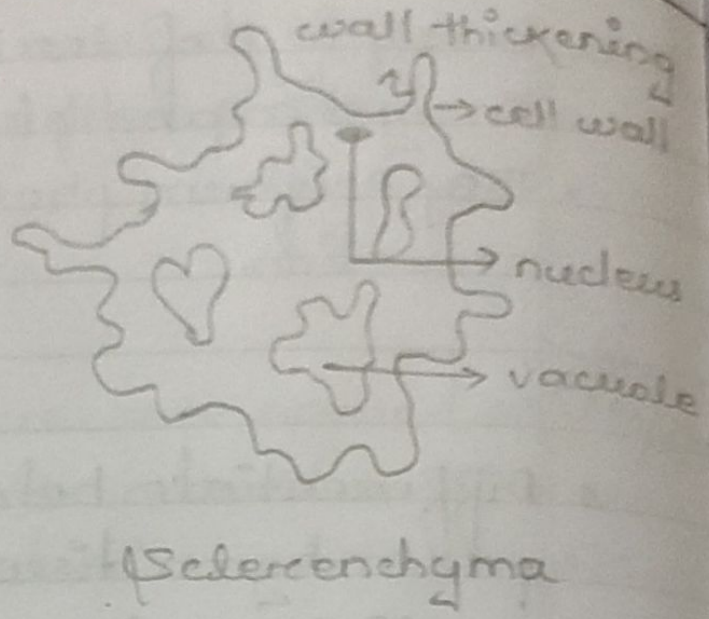
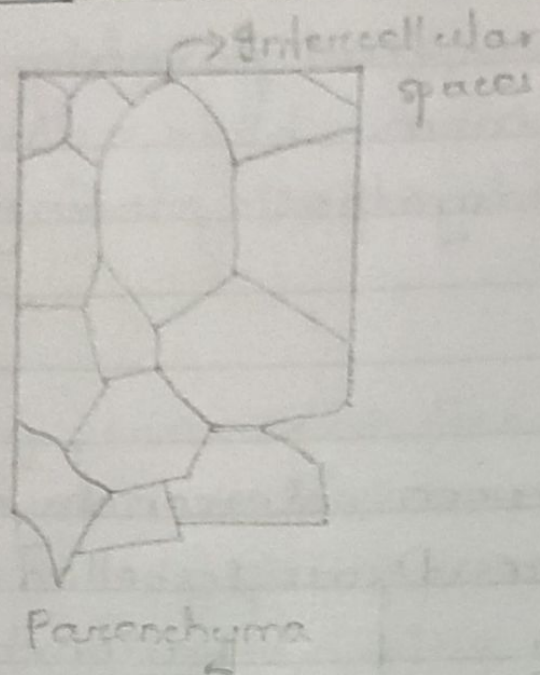
1. Differentiate between sclerenchyma and parenchyma tissues. Draw labelled diagram.

Ans →

Sclerenchyma

Parenchyma

- | | |
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| <ul style="list-style-type: none">• These cells are found in mature parts of the plant like herbaceous perennials and woody plants.• These cells are specialised.• The cell wall is thick and rigid.• They consist of dead cells at maturity. | <ul style="list-style-type: none">• These cells are found in the soft part of plants, such as leaves, fruits.• These cells are not specialised.• The cell wall is thin.• They consist of living cell at maturity. |
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2. Water hyacinth floats on water surface.
 Explain.

Ans → Water hyacinth have large air cavities in the parenchyma tissue. That's why it floats.

3. Why epidermis is important for the plants?

Ans → It forms a boundary between the plant and the external environment.

- It protects against water loss, regulate gas exchange, secretes metabolic compounds and absorbs water and mineral nutrients.

4. We get a crunchy and granular feeling, when we chew pear fruit. Why?

Ans → Pear contains cells of sclerenchyma which are small, rounded and called stone cells. They are hard with highly thickened cell wall. These cells give the crunchy and granular feeling.

5. Why it is difficult to pull the bark of a coconut tree?

Ans → Coconut bark is made of walls of sclerenchyma which make them thick. So it is difficult to peel it.