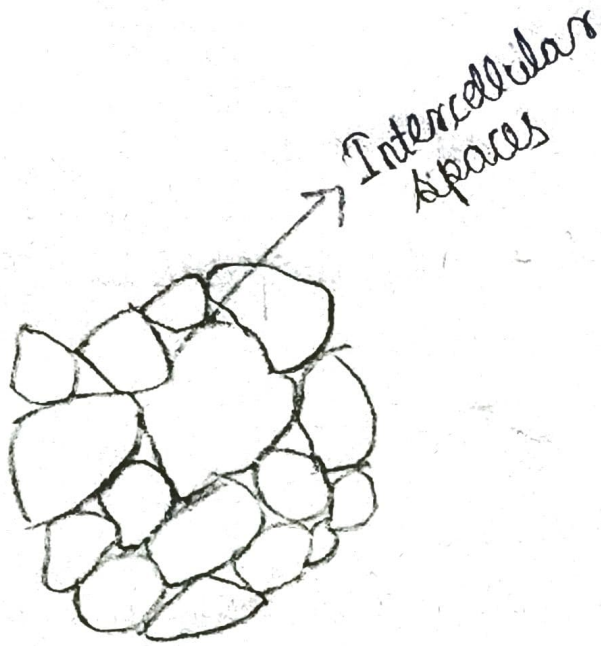


~~11/1/21~~  
4) Differentiate between sclerenchyma & parenchyma tissues.

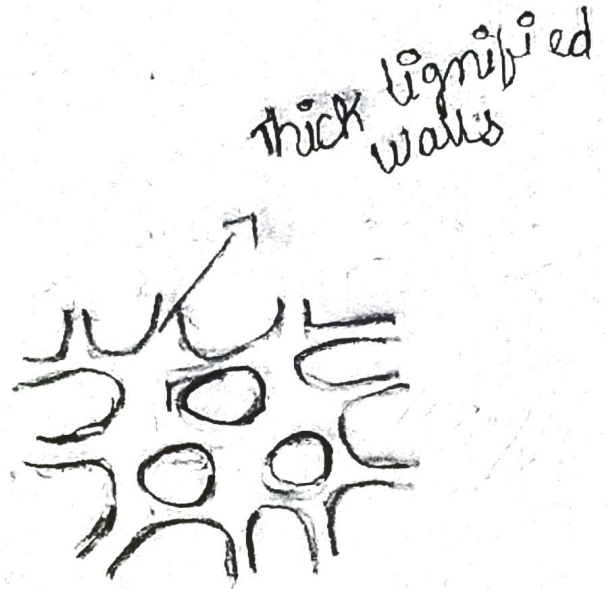
Sclerenchyma tissues

Parenchyma tissues.

- |  |   |
|--|---|
| > They are long dead cells with a deposit of lignin in their cell walls.   | > Plant cells with thin cell wall & living protoplasm.  |
| > They have no intercellular spaces.   | > Roughly isodiametric with intercellular spaces.   |
| > This tissue is present in stems, around vascular bundles, in the veins of leaves & in the hard covering of seeds & nuts. | > Found in cortex & pith of stems & roots, mesophyll of leaves & packing tissues on xylem & phloem. |



Parenchyma



Sclerenchyma

- 2) Water hyacinth floats on water surface. Explain. Water hyacinth have large air cavities in the parenchyma tissue. For this reason it floats in water. These specialized parenchyma tissue which is present in water hyacinth are called aerenchyma. The tissue has air-filled spaces inside & because the air gets trapped inside especially in the stem part.

- 3) Why epidermis is important for the plants?  
Epidermis is important for the plants because :-
- > It gives protection
  - > It helps in gaseous exchange
  - > It checks water loss.

4) We get a crunchy & granular feeling, when we chew pear fruit. Give reason.

Pear contains cells of sclerenchyma, which are small, rounded & called stone cells. They are hard with highly thickened cell wall. These cells give the crunchy & granular feeling when we chew pear fruit.

5) Why it is difficult to pull the husk of a coconut tree?

Walls of sclerenchyma are lignified, which make them thick. This tissue makes the plant hard & stiff. Coconut husk is made of sclerenchyma tissue, hence it is very hard as it is made of such thickened, lignified cells. Such cells make it very hard to pull out the coconut husk.