

# TISSUES

1) Differentiate between parenchyma and sclerenchyma.

## Parenchyma

- Cell walls are relatively thin.
- Cells in parenchyma tissues are loosely packed.
- Cell wall is made up of cellulose.
- Present in stems, around vascular bundles and in hard covering of nuts.

## Sclerenchyma

- Cell walls are uniformly thickened.
- Cells in sclerenchyma tissues are closely packed.
- Cell wall is composed of lignin.
- Distributed in plant body such as stems, roots, leaves, flowers.

2) Water hyacinth floats on water surface. Explain.

Water hyacinth floats on water surface due to presence of a special type of parenchyma known as aerenchyma which provides buoyancy to aquatic plants due to presence of large air activities.

3) Why epidermis is important for plant?

Epidermis is important for plant because :-

- ⇒ It protects the plant from entry of pathogens.
- ⇒ The presence of cuticle in epidermis reduces the rate of transpiration and thus checks the water loss and prevents the plant from desiccation.

→ The presence of epidermis in roots helps in absorption of water and minerals.

⇒ The stomata present in epidermis helps in exchange of gases.

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

We get a crunchy and granular feeling when we chew pear fruit because of the presence of a special type of Sclerenchyma known as Sclerid, <sup>or stone cells</sup> which gives the firmness and crunchiness to pear fruit.

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

It is difficult to pull the husk of a coconut due to the presence of Sclerenchyma which strengthens the husk of a coconut.