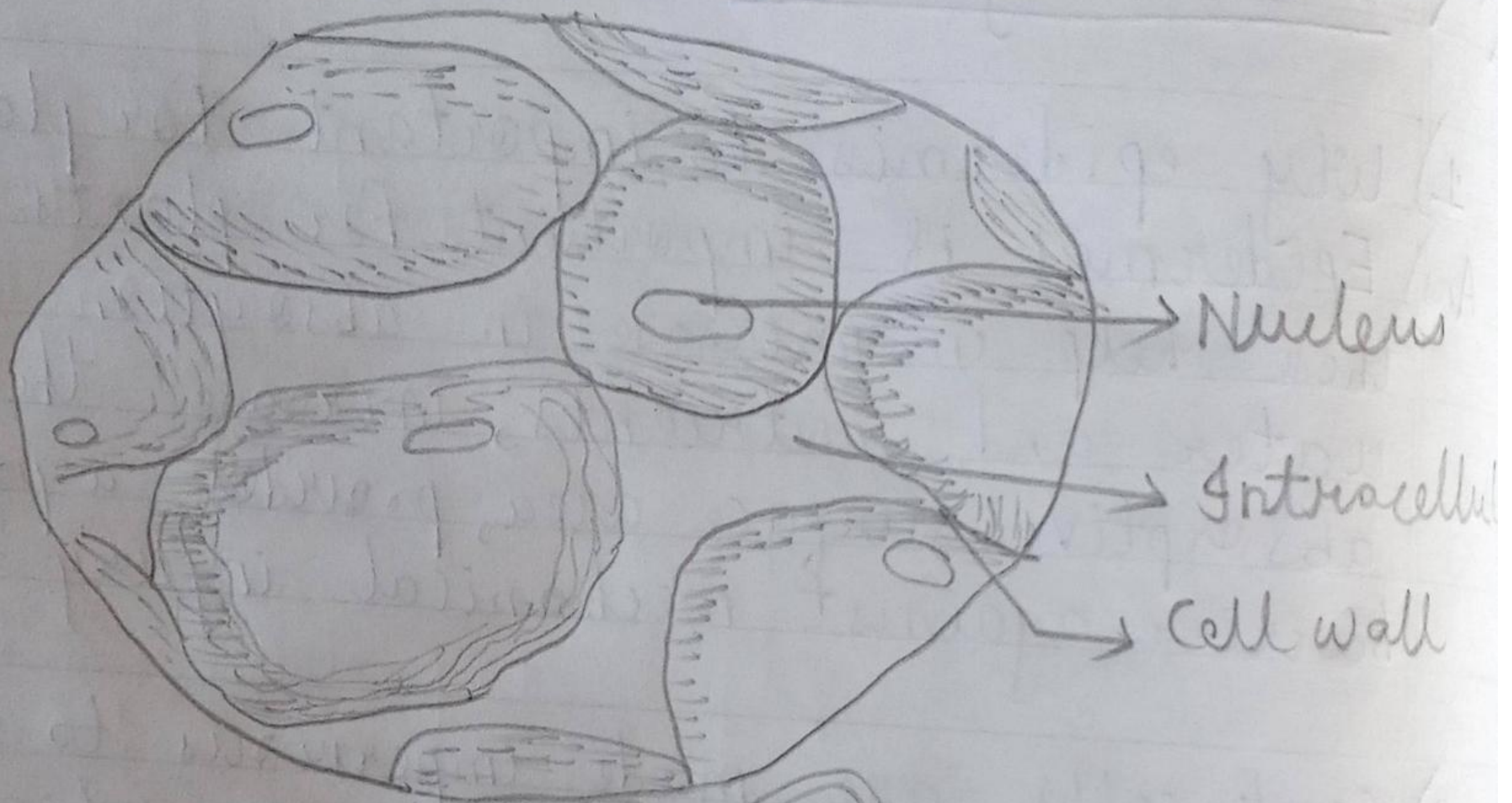


## Home Assignment

- 1) Differentiate between sclerenchyma and Parenchyma tissues. Draw well labelled diagram.

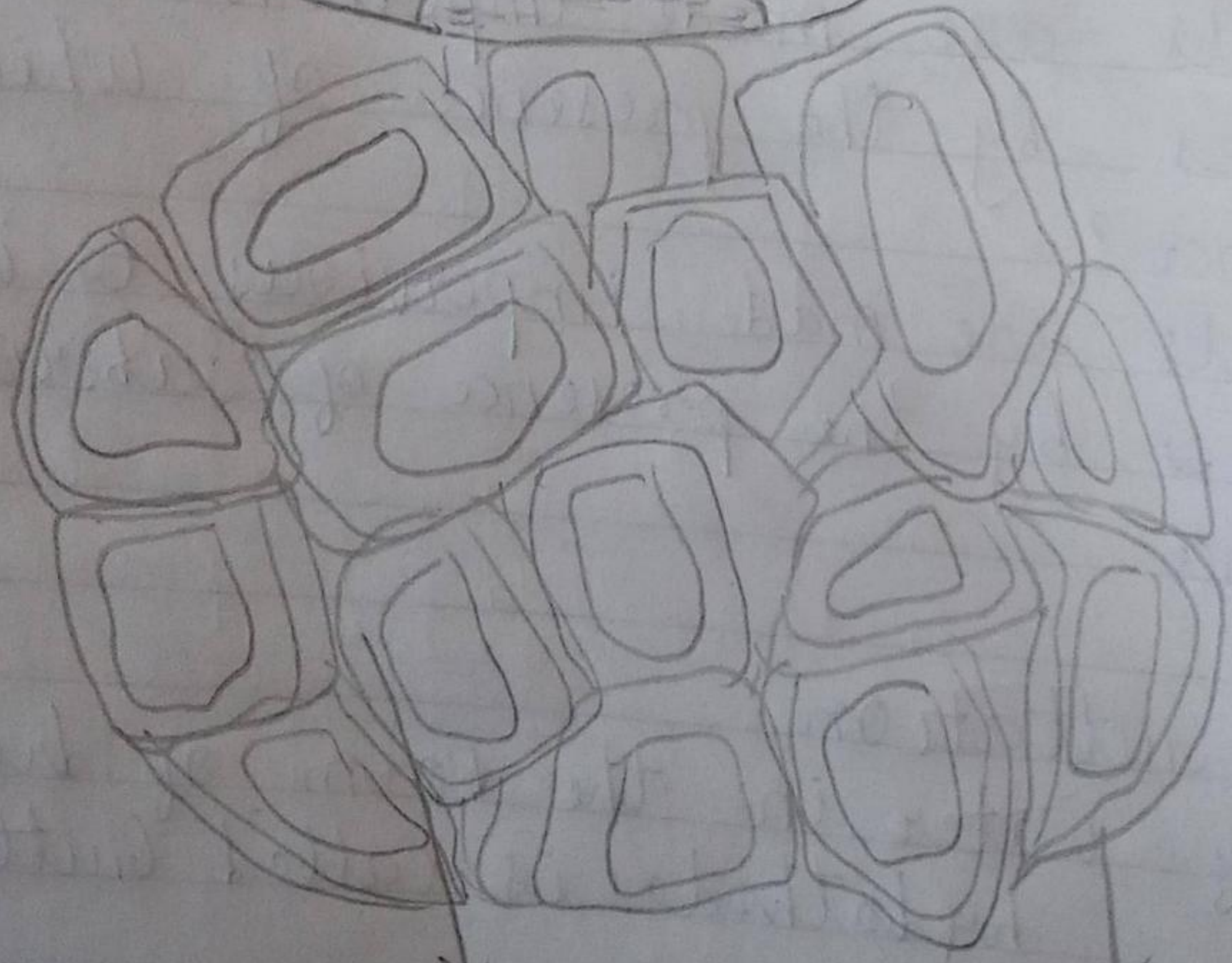
# Parenchyma Tissue



Nucleus

Intracellular

Cell wall



Thick  
Secondary  
cell wall

Primary  
cell wall

# Sclerenchyma Tissue

Ans) Sclerenchyma tissues

Parenchyma tissues

→ These cells are found in mature parts of the plant like herbaceous perennials and woody plants.

→ These cells are specialised.

→ The cell wall consists of a thick and rigid cell wall.

→ The cell wall is made up of waterproofing lignin.

→ These cells consist of dead cells at maturity.

→ These are the cells found in the soft part of plants, such as leaves, fruits.

→ These cells are not the specialised cells.

→ This cell consists of a thin cell wall.

→ The cell wall is made up of cellulose.

→ These consist of the living cell at maturity.

2) → Water hyacinth floats on water surface. Explain.

Ans) A special type of parenchyma called aerenchyma is present in water hyacinth. This tissue has air-filled spaces inside especially in the stem part so, it becomes buoyant. Due to this, water hyacinth floats on water surface.

3) Why epidermis is important for the plants?

Ans) Epidermis is important for the plants because these help in increase in absorption of water and nutrients, increase the total absorptive surface area, provides a protective barrier against mechanical injury.

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

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 when we chew pear fruit.

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

Ans) It is difficult to pull the husk of a coconut tree. This is due to the presence of Sclerenchyma tissue. The cells of this tissue are dead and there is no internal space inside the cell. <sup>Thus</sup> it provides strength to the plant cells/parts.