

Q1. Define secondary growth.

Ans) Secondary growth is an increase in girth (width) of a plant initiated by cell divisions in lateral meristems. It adds width to older areas of the stems and roots that are no longer growing in length. Typically, stems have much more secondary growth than roots.

Q2. Name the meristematic tissue responsible for secondary growth in stems.

Ans) Lateral meristems is responsible for secondary growth in stems.

Q3. What are the two types of cambium? write one difference between them.

Ans) Cork cambium and Vascular cambium are the two types of cambium.

Cork cambium originates from cortex or pericycle. It gives cork to the outside and secondary cortex (phelloderm) to the inside.

Vascular (Fascicular) cambium exists in the vascular bundles between the xylem and phloem. It gives secondary phloem to the outside and secondary xylem to the inside.

Q4. Explain how bark of a tree is formed. How does it act as a protective tissue?

Ans) Bark is formed as a result of the secondary growth in the plants. Phellogen cut the cell inside as phelloderm or secondary cortex and outside side as phellem of cork.

The bark of the tree consists of dead cell, it forms a rigid covering that protects the interior of the plant.