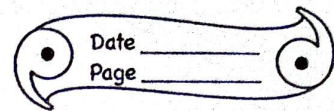


3.7.2021



HOMWORK

Q1. Define secondary growth.

Ans:- Secondary growth is an increase in girth (width) of a plant initiated by cell divisions in lateral meristems.

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

Ans:- Lateral meristematic tissue.

Q3. What are the two types of cambium? Write one difference ^{between them.}

Ans:- There are 2 types of cambium.

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

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

Cork cambium

1. Cork cambium originates from cortex or pericycle.

Vascular cambium

1. Vascular cambium exists in the vascular bundles between the xylem and phloem.

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

Ans:- 1. The bark of a tree is formed due to the growth of cork cambium.

2. The growth of cork cambium occurs due to the presence of

lateral ~~meristematic~~ meristematic tissues.

3. Lateral meristems increase the girth (width) of a plant / tree. Therefore, it leads to the formation of bark of a tree.

X The ~~bark~~ ^{cork cambium} of a tree acts as a protective tissue because a strip of secondary meristem ~~located~~ called cork cambium forms layers

Cork cambium ~~it~~ acts as a protective tissue ^{because} as it forms layers of cells which constitute the cork. Cork cells prevent desiccation, infection and mechanical injury. Thus, it provides protection to the plant / tree.