

23/07/21 Home Assignment 4

1. Name the different components of xylem.
2. What is the function of phloem tissue?
3. Why xylem and phloem tissues are known as complex permanent tissues.

4. Write two differences b/w xylem and phloem tissue.

Answer

1. Components of xylem are:

- (i) tracheids (ii) vessels
- (iii) xylem parenchyma (iv) Xylem Sclerenchyma

2. Function of phloem tissue is to transport (conduct) photosynthetically prepared food materials from the leaves to the storage organs and later from storage organs to the growing regions of the plant body.

3. As we know that complex permanent tissues comprises of more than one type of cells; Xylem and Phloem tissues also consists of a group of distinct variety of cells. All these cells coordinate to perform a common function. Therefore, Xylem and Phloem tissues are known as complex permanent tissues.

4. Difference b/w xylem and phloem tissue is as follows:-

① Phloem tissue
 Phloem tissue transports food and other organic material from the part of the plant from leaves to all the parts of the plant. It provides mechanical strength to the part.

① Xylem tissue
 Xylem tissue transports water and minerals to the parts of plants from root.

② Provides mechanical strength to the plant