

**GIRLS' HIGH SCHOOL & COLLEGE, PRAYAGRAJ**

**WORKSHEET NO # 2**

**SESSION 2020-21**

**CLASS 7 (A,B,C,D,E,F)**

**SUBJECT: BIOLOGY**

*Note: Parents are expected to ensure that the child takes reference from the book or the internet and then answer the given questions.*

Website: <https://youtu.be/OaHKQCPdPmU>

**CHAPTER: TISSUES**

**TOPIC: PLANT TISSUES**

Plant tissues are of two types:

1. Meristematic tissues
2. Permanent tissues

**MERISTEMATIC TISSUES:**

These are formed of actively dividing cells. They are found at growing points in plants, in apical parts of root, stem and branches. They help the plants to grow in length and thickness.

**PERMANENT TISSUES:**

These tissues are formed of matured differentiated cells. These cells are specialized to carry out specific functions. Permanent tissues are of two types:

- (i) Simple permanent tissues
- (ii) Complex permanent tissues

**SIMPLE PERMANENT TISSUES:**

These are formed of only one type of cells. They are **protective** and **supporting** tissues.

- **PROTECTIVE TISSUES:** These are the cells of Epidermis and cork.
- **SUPPORTING TISSUES:** These are of three types Parenchyma, Collenchyma and Sclerenchyma.
  - ✚ **Parenchyma:** These cells store food material. Some parenchymatous cells contain chlorophyll they are called chlorenchyma and help in Photosynthesis.
  - ✚ **Collenchyma:** These cells provide mechanical support to leaves and stem.
  - ✚ **Sclerenchyma:** These cells provide mechanical strength and rigidity to the plant body.

**COMPLEX PERMANENT TISSUES:**

These are formed of more than one type of cells which perform different functions. These are vascular or conducting tissues comprising of **Xylem** and **Phloem**.

**XYLEM:**

These are long tubular cells and help in transport of water and minerals from roots upto the leaves. Xylem is formed of four different types of cells – xylem tracheids, xylem vessels, xylem fibres and xylem parenchyma.

**PHLOEM:**

These are formed of long tubular cells and help in transport of food from leaves to various parts of the plant. Phloem is made up of four types of cells – sieve tubes, companion cells, phloem fibres and phloem parenchyma.

**Q1.** Name the following.

- (i) Tissues found in tip of stems and branches.
- (ii) Tissues which help in photosynthesis.
- (iii) Tissues which provide mechanical strength to the plant body.

**Q2.** Give one function of

- (i) Parenchyma
- (ii) Xylem
- (iii) Phloem

**Q3.** Give one difference between Simple and Complex Permanent tissues.

**Q4.** What is Xylem made of?

**Q5.** Name the different type of cells of Phloem.

**END**