

Board –CBSE

Class –9th

Topic – Tissues

1. What is tissue?

Ans. Tissue is a group of cells that are similar in structure and are organized together to perform a specific task.

2. What is the utility of tissues in multi-cellular organisms?

Ans. In unicellular organisms, a single cell performs all the basic functions such as respiration, movement, excretion, digestion, etc. But in multicellular organisms, cells are grouped to form tissues. These tissues are specialized to carry out a particular function at a definite place in the body. For example, the muscle cells form muscular tissues which help in movement, nerve cells form the nervous tissue which helps in the transmission of messages. This is known as the division of labour in multicellular organisms. It is because of this division of labour that multicellular organisms can perform all functions efficiently.

3. Name types of simple tissues.

Ans. Simple permanent tissues are of three types. Parenchyma, Collenchyma, and Sclerenchyma. Parenchyma tissue is of further two types – aerenchyma and chlorenchyma.

4. Where is apical meristem found?

Ans. Apical meristem is present at the growing tips of stems and roots. Their main function is to initiate growth in new cells of seedlings, at the tip of roots, and shoots.

5. Which tissue makes up the husk of coconut?

Ans. The husk of a coconut is made up of sclerenchyma tissue.

6. What are the constituents of phloem?

Ans. Phloem is the food conducting tissue in plants. It is made up of four components.

(i) Sieve tubes

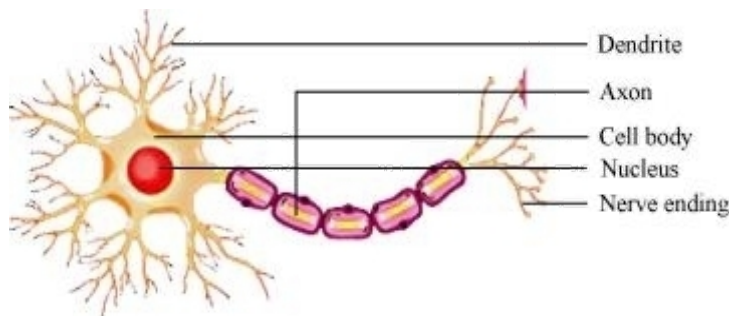
- (ii) Companion cells
- (iii) Phloem parenchyma
- (iv) Phloem fibres

7. Name the tissue responsible for movement in our body.

Ans. The muscular tissue is responsible for movement in our body.

8. What does a neuron look like?

Ans. A neuron consists of a cell body with a nucleus and cytoplasm. It has two important extensions known as the axon and dendrites. An axon is a long thread-like extension of nerve cells that transmits impulses away from the cell body. Dendrites, on the other hand, are thread-like extensions of the cell body that receive nerve impulses. Thus, the axon transmits impulses away from the cell body, whereas the dendrite receives nerve impulses. This coordinated function helps in transmitting impulses very quickly.



9. Give three features of cardiac muscles.

Ans. Three features of cardiac muscles are.

- (i) Cardiac muscles are involuntary muscles that contract rapidly but do not get fatigued.
- (ii) The cells of cardiac muscles are cylindrical, branched, and uninucleate.
- (iii) They control the contraction and relaxation of the heart.

10. What are the functions of areolar tissue?

Ans. Functions of areolar tissue.

- (i) It helps in supporting internal organs.

(ii) It helps in repairing the tissues of the skin and muscles.