

Solved Question chapter-Tissue class 9

1. List two characteristics of cork cells which help them to function as protective tissue? Or, How does cork act as a protective tissue?

Ans: Cells of cork are dead and closely packed and having no intercellular spaces this help them to function as protective tissue

2. Why does the growth of a plant occur in specific regions? Where are the following found?

(a) Intercalary Meristem (b) Lateral Meristem

Ans: The growths of a plant occur in specific regions due to the presence of meristematic tissue at these points.

(a) Intercalary Meristem found at the internodes and at the base of leaves (b) Lateral Meristem found at the girth of root and stem

3. Name the connective tissue which helps in repair of tissues. State where this tissue is found.

Ans: Areolar connective tissue helps in repairing of tissues. It is present between the skin and muscles. It also fills the spaces between various organs and surrounds the blood vessels.

4. List any four salient features of meristematic tissue.

Ans: Meristematic tissues have dense cytoplasm, thin cellulose walls and prominent nuclei. They lack vacuoles.

5. Which elements of xylem :

(i) help in transport of water and minerals, (ii) store food and (iii) provide mechanical support?

Ans: Tracheids, Xylem parenchyma, Xylem fibre

6. In a temporary mount of a leaf epidermis we observe small pores. (a) What are the pores present in leaf epidermis called? (b) How are these pores beneficial to the plant?

Ans: a) these pores are called stomata. b) they help in the process of transpiration and in the exchange of gases.

7. Differentiate between aerenchyma and chlorenchyma.

Ans: Aerenchyma gives buoyancy to the plants to help them float where as chlorenchyma contains chlorophyll and performs photosynthesis.

8. Name the tissue that smoothens bone surfaces at joints. Describe its structure with the help of a diagram.

Ans: Cartilage smoothens bone surfaces at joints and is also present in the nose, ear, trachea. It has cells which secrete the synovial fluid for lubricating the joints

9. Give two differences between tendon and ligament.

Ans: Tendons are fibrous tissue with great strength but limited flexibility. Tendons connect muscles to bones. Ligament connects two bones to each other and has considerable strength.

10. (a) State two important functions of areolar tissue. (b) Why are skeletal muscles known as striated muscles?

Ans: (a) areolar tissue support internal organs and help in repair of tissues. (b) Skeletal muscles known as striated muscles as they have long cells having alternative black and white band and are multinucleated.

11. Write any two points of difference between structure and location of striated and unstriated muscles.

Ans:

Straited Muscles	Unstraited Muscles
Cells are long, cylindrical, non-tapering and multinucleate.	Cells are long, flattened, spindle shaped, tapering, uninucleate.
Occur in the limbs & help in body movements	Occur in alimentary canal, iris of eye, ureter and bronchi of lungs

12. Blood is considered to be a connective tissue. Give reason.

Ans: Blood flows and transports gases, digested food, hormones and waste materials to different parts of the body. This is why Blood is considered to be a connective tissue.

13. Name the simple permanent tissue which: (a) forms the basic packing tissue (b) provide flexibility in plants

Ans: permanent tissue which: (a) forms the basic packing tissue is Parenchyma (b) provide flexibility in plants is Collenchyma

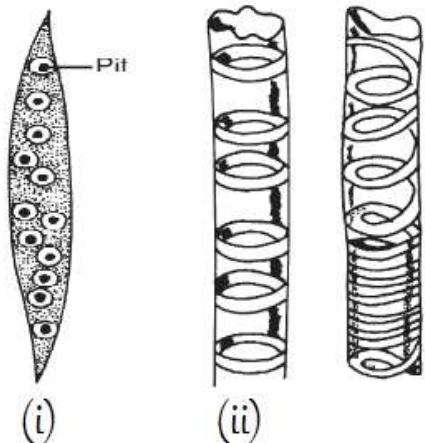
14. Name the tissue responsible for flexibility in plants? How would you differentiate it from other permanent tissues?

Ans: Collenchyma tissue present in leaves and stem is responsible for flexibility in plants. The cells of this tissue are living, elongated and irregularly thickened at the corners and having very little intercellular space.

15. What is a connective tissue? State its any two basic components.

Ans: Tissue that connect organs of body is called connective tissue. two basic components of connective tissue are cells and matrix. The matrix may be jelly like, fluid, dense or rigid substance in which the cells of connective tissue are loosely spaced and embedded .

16. (Aa) Identify the given figures. (b) State in brief their structure. (c) Describe the role performed by the two.



Ans: Figure (i) represent tracheids that have thick walled cells and have tubular structure and transport water and minerals

Figure (ii) represent xylem vessel that help tracheids of big trees in conduction. There is a spacious lumen that extends throughout the length of the trachea.