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Solution 1:
Importance of tissues-
(i) Formations of tissues have brought about a division of labour in multicellular organisms.
(ii) Tissues become organised to form organs and organs organise into organ system.
Solution 2:
Plants are autotrophic organisms, so prepare their own food by photosynthesis. Moreover plants are stationary or fixed organisms; they do not have to move from place to place in the search of their food. Since they do not consume or need much energy, so most of the plant tissues are supportive, which provide them with structural strength. Animals are heterotrophic organisms. They have to move in search of food, mate and find shelter, so they need more energy as compared to plants. Most of the tissues they contain are living.
Solution 3:
Plant Tissues:
1. They require less maintenance energy.
2. There is a differentiation of meristematic and permanent tissues.
Animal Tissues:
1. They require more maintenance energy.
2. Such a differentiation is absent in them.
Solution 4:
They are located at the base of leaves or internodes, e.g., stems of grasses and other monocots. Such tissues also occur below the nodes. It produces an increase in the length of an organ such as leaves and internodes.
Solution 5:
(i) Apical meristem - It brings about the elongation of the root and stem.
(ii) Lateral meristem - It causes the organ (stem or root) to increase in diameter and girth.
Solution 6:
Simple permanent tissues - These tissues are composed of cells which are structurally and functionally similar.
There are three types of simple permanent tissues:
(i) Parenchyma - Parenchyma cells are living and posses the power of division. The cell wall is thin and encloses a dense cytoplasm which contains a small nucleus and surrounds a large central vacuole.
(ii) Collenchyma - Its tissues consists of living cells. It is characterized by the deposition of extra cellulose at the corners of the cells. In collenchymas, intercellular spaces are generally absent. Collenchyma cells are elongated in shape. They often contain a few chloroplasts.
(iii) Sclerenchyma - Sclerenchyma cells are dead cells and they are devoid of protoplasm. The cells walls of Sclerenchyma are greatly thickened of lignin. The cells of Sclerenchyma are closely packed without intercellular spaces.

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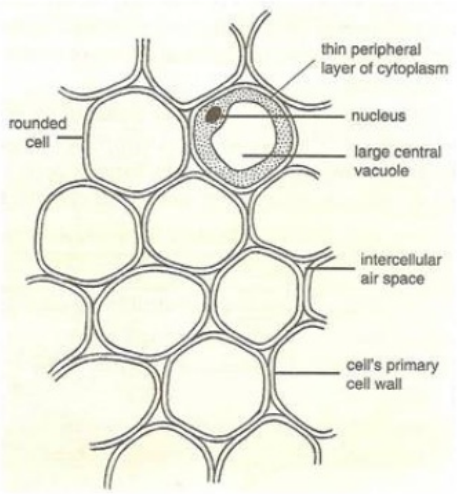
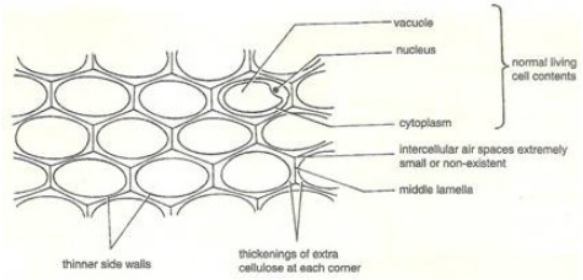
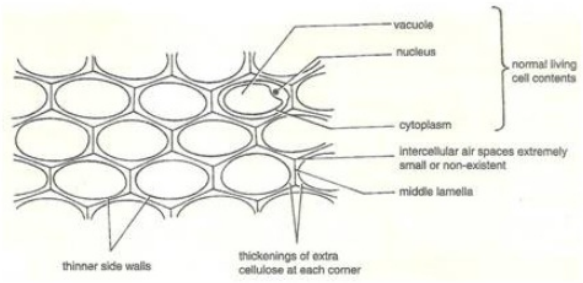
Solution 7:
(a) Parenchyma



(b) Collenchyma

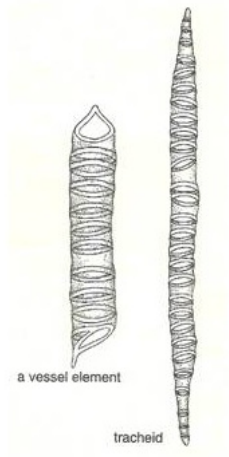


Solution 8:



Solution 9:
Xylem Tissue

Xylem Tissue



Solution 10:
Functions of Collenchyma:
(i) It provides mechanical support and elasticity.
(ii) It provides tensile strength to the plants.
Solution 11:
Sclerenchyma cells are dead cells and they are devoid of protoplasm. The cells walls of sclerenchyma are greatly thickened by lignin. The cells of sclerenchyma are closely packed without intercellular spaces.

Solution 12:
Xylem:
1. It conducts water and minerals.
2. Conducting channels or tracheary elements are tracheids and vessels.
Phloem:
1. It conducts organic solutes and food materials.
2. Conducting channels are sieve tubes.
Solution 13:
Tracheids:
1. Single celled.
2. The end walls remain intact.
Vessels:
1. Made up of a row of cells.
2. End walls get dissolved and become perforated.

********** END **********