WORKSHEET 1

CHAPTER 2 – TISSUES

A. Tick (✓) the correct option.

1. The plant tissue which provides tensile strength and consists of living cells, is
   a. parenchyma. b. aerenchyma. c. collenchyma. d. sclerenchyma.
2. Bones are connected to muscles at the joints by
   a. tendons. b. adipose tissue. c. areolar tissue. d. ligament.
3. Which tissues store fat in our body?
   a. Cuboidal epithelium b. Cartilage c. Bone d. Adipose tissue
4. Cork cells are made impervious to water and gases due to the presence of
   a. suberin. b. lipids. c. lignin. d. cutin.
5. Which one of the following is dead and yet provided mechanical strength?
   a. Sieve tube b. Companion cells c. Phloem fibres d. Phloem parenchyma

B. Fill in the blanks.

1. Blood is a _____ tissue.
2. Bone cells are called as _____.
3. Cartilage are made up of cells called as _____.
4. _____ epithelium occurs in the lining of renal tubules and ducts of salivary glands.
5. The girth of the stem or root increases due to _____ .

C. State whether the given statements are true or false.

1. Ligaments connect muscle to muscle.
2. Vacuoles are absent in cells of meristematic tissue.
3. Voluntary muscles control the movement of iris of eye.
4. Areolar connective tissue is found between the skin and muscles.
5. Smooth muscles are called voluntary muscles.

D. Name the following.

1. Meristem at the base of leaves or internodes.
2. Chlorophyll containing parenchyma.
3. Tissue lining the alveoli of lungs.
4. Muscular tissue found in the heart.
5. Type of muscle found in intestine.

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Class: IX Date: .....

E. Answer the following questions.

1. What is sclerenchyma? What are its types?
2. Draw a neat and labelled diagram of a nerve cell.
3. What is the role of epidermis in plants?
4. Do the roots of a plant continue growing after their tips are removed? Explain giving reason.
5. Differentiate between striated and non-striated muscle.

ANSWERS

WORKSHEET 1

A. Tick (✓) the correct option.

1. c
2. a
3. d
4. a
5. c

B. Fill in the blanks.

1. Fluid connective
2. Osteocytes
3. Chondrocytes
4. Cuboidal
5. Cambium

C. State whether the given statements are true or false.

1. F
2. T
3. F
4. T
5. T

D. Name the following.

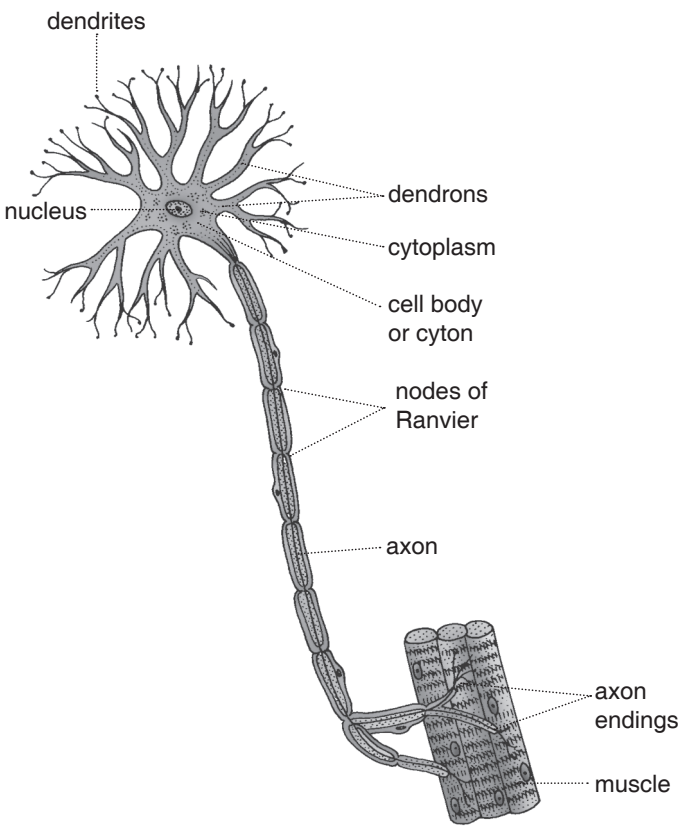
1. Intercalary
2. Chlorenchyma
3. Squamous epithelium
4. Cardiac muscle
5. Smooth muscle

E. Answer the following questions.

1. Sclerenchyma in a simple permanent tissue of plant. The cells of this tissue are dead and their cell walls are thickened due to lignin deposition.

   Sclerenchyma tissues are of two types: fibres and sclereids.

2. Nerve cell



3. Functions of epidermis:
   (i) It protects internal tissues against mechanical injury, parasitic fungi, bacteria and cold or heat.
   (ii) Thick cuticle, wax, epidermal hair and multiple epidermis reduce loss of water from internal tissues.
   (iii) Epidermal cells of roots have hair that greatly increase the surface area for the absorption of water and nutrients.
4. No because apical meristem are present at the tips of the root which are responsible for increase in length of root. If tips are removed, apical meristem are lost, hence, roots of the plant cannot grow.
5.

Striated muscle	Non-striated muscle
(i) Cells are cylindrical, unbranched, having many nuclei.	(i) Cells are spindle-shaped, having single nucleus.
(ii) Alternate dark and light bands are present.	(ii) Dark and light bands are absent.
(iii) Movement is controlled by our will.	(iii) Movement cannot be controlled by our will.