

Q. 1. Which permanent tissue :

(a) forms husk of coconut. (b) stores nutrients and water in stems and root. (c) is irregularly thickened at corners.

Ans: (a) Sclerenchyma (b) Parenchyma (c) Collenchyma

Q. 2. (a) Name the following structures of a neuron : Single long part which arises from cell body part of neuron which bears many short, branched parts.

(b) What is nerve? (c) Name two involuntary muscles.

Ans: (a) Neuron has a single long part, called the axon, and many short, branched parts called dendrites.

(b) Nerves are bundle of fibres in the body that transmits impulses between senses and the brain or spinal cord.

(c) smooth muscle and cardiac muscle are two involuntary muscles

Q.3. How is striated squamous epithelial tissue different from squamous epithelial tissue ?

Ans: A stratified squamous epithelium consists of squamous (flattened) epithelial cells arranged in layers upon a basal membrane. Only one layer is in contact with the basement membrane; the other layers adhere to one another to maintain structural integrity

Simple Squamous epithelial cells are extremely thin and flat and form a delicate lining.

Q.4. (a) Mention the location of parenchyma tissue? (b) How is it modified in aquatic plants ? (c) What are the other functions that it performs?

Ans: (a) parenchyma tissue found in root or stems (b) In aquatic plants, large air cavities are present in parenchyma to give buoyancy to the plants to help them float. (c) It provides support to plants and also photosynthesis.

Q.5. Identify the type of tissues in the following: (a) Vascular bundle (b) Inner lining of the Intestine (c) Lining of Kidney tubule (d) Iris of the eye (e) Muscle of the heart (e) Bronchi of lungs

Ans:

(a) Vascular bundle : complex tissues xylem and phloem

(b) Inner lining of the Intestine - columnar epithelium

(c) Lining of Kidney tubule : Cuboidal epithelium (d) Iris of the eye : Smooth muscles

(e) Muscle of the heart : cardiac muscles (e) Bronchi of lungs : Smooth muscles

Q.6. Are plant and animals made of same types of tissues ? If no, then. Write three points of difference.

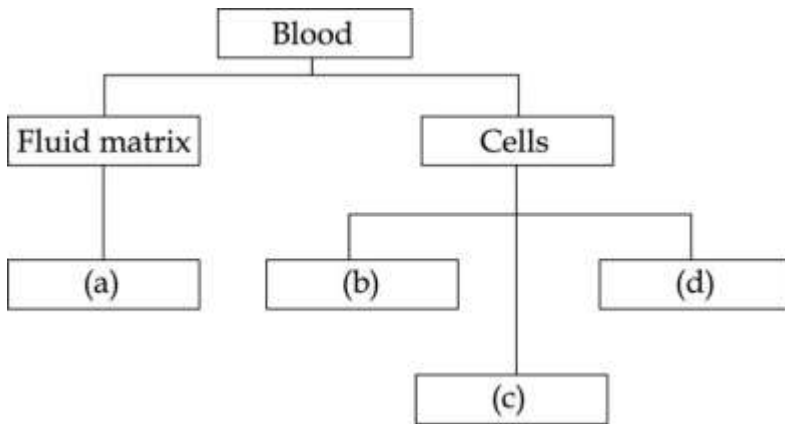
Ans: No, plant and animals are made of different types of tissues.

Plant tissues are generally made up of dead cells, but plant tissues are made up of live ones.

Plant tissues are have dividing tissue at certain region but animal tissues are non dividing.

Plant tissues provide mechanical support but animal tissues help in movement.

Q.7. Mention the different components of blood ?



Ans: a.plasma b.RBC c. WBC d. platelets

Q.8. (a) Differentiate between epidermal and cork cells. (b) Why are they called protective tissues ?

Ans: (a) Epidermis forms one cell thick outermost layer of the organs of plants, such as, leaves, flowers, stems and roots. This layer of cells is covered from the outside by the cuticle.

Cork is made up of dead cells with thick walls, with no intercellular spaces, found in older stems and roots of dicot plants. As the dicot plants get older, the single layer of epidermis is replaced by a multi-layer cork cells.

(b) epidermal and cork cells are epidermal and cork cells as they protect all the parts of the plant. Epidermal cells on the aerial parts of the plant often secrete a waxy, water-resistant layer on their outer surface. This aids in protection against loss of water, mechanical injury and invasion by parasitic fungi.

9. Name the following.

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| (a) Tissue that forms the inner lining of our mouth. | (b) Tissue that connects muscle to bone in humans. |
| (c) Tissue that transports food in plants. | (d) Tissue that stores fat in our body. |
| (e) Connective tissue with a fluid matrix. | (f) Tissue present in the brain. |

Answer :

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| (a) Tissue that forms the inner lining of our mouth --- Squamous epithelium |
| (b) Tissue that connects muscle to bone in humans - Tendon |
| (c) Tissue that transports food in plants – Phloem (d) Tissue that stores fat in our body - Adipose tissue |
| (e) Connective tissue with a fluid matrix – Blood (f) Tissue present in the brain - Nervous tissue |

10. Which plant tissue makes the plant hard and stiff and thickened due to lignin with no intercellular spaces

Ans: Sclerenchyma

Q. 11. By what process permanent tissues are formed?

Ans: Differentiation