



REVIEW QUESTIONS



MULTIPLE CHOICE QUESTIONS

1. Put a tick (✓) against the most appropriate alternative in the following statements.

(i) A group of similar cells to perform a specific function forms a

(a) organ

(b) species

(c) organ system

(d) tissue

(ii) The small fine branches given out from the cell body of a nerve cell are

(a) dendrites

(b) cyton

(c) axon

(d) neurons

(iii) Fluid connective tissue of humans is

(a) blood and cartilage

(b) lymph and plasma

(c) blood and lymph

(d) stroma and matrix

SHORT ANSWER QUESTIONS

1. Define the following terms :

(i) Tissue : A group of cells which are similar in structure and perform a specific function, form a tissue.

(ii) Organ : Different tissues working together to perform a specific function is called an organ.

2. Answer the following :

(i) What is a meristematic tissue ? How is it different from permanent tissues ?

The plant tissue, which is made up of actively dividing cells which leads to the growth of the plant body is called meristematic tissue. Unlike meristematic tissue, permanent tissues do not divide further and forms the bulk of the plant body.

(ii) Which living material would you take to demonstrate meristematic tissue ?

Green sprouted mung seeds can be taken to

demonstrate meristematic tissue:

(iii) What is the function of meristematic tissue?

The meristematic tissues produce more cells leading to the growth of the plant body. They are found at all growing points in a plant, like the tip of roots, stems and branches.

3. State whether the following statements are True or False.

(i) A tissue is formed of only one type of cells.

True

(ii) Only one type of tissue forms an organ.

False

(iii) Permanent tissue is made up of undifferentiated and dividing cells.

False

(iv) Meristematic tissue is found at the growing tips of a plant.

True

(v) Phloem is formed of dead tubular cells.

False

4. Fill in the blanks by selecting suitable words from the list given below :

thin-walled, collenchyma, vascular, tissues, conducting

(i) A group of different tissues working together to perform a function is called an organ.

(ii) Xylem and phloem form the vascular tissue.

(iii) Conducting tissue is also called vascular tissue.

(iv) Cells are elongated and thick at the corners in collenchyma tissue.

(v) Parenchyma is composed of large thin-walled cells.

5. Match the items given in Column A with those given in Column B :

Column A

(i) Fibrous connective tissue (d)

(ii) Fluid connective tissue (a)

(iii) Supportive connective tissue (b)

(iv) Ligament (c)

(v) Tendon (e)

Column B

(a) blood

(b) cartilage

(c) connects a bone to another bone.

(d) areolar tissue

(e) connects a muscle with a bone.

How do you rank the following with respect to a cell, tissue, organ, or organism?

- (i) Amoeba : Organism
- (ii) Euglena : Organism
- (iii) Skin : Organ
- (iv) Lungs : Organ
- (v) Neuron : cell
- (vi) Cardiac muscles : Tissue

7. Each of the tissues listed in **Column A** is related to one of the functions given in **Column B**. Match the correct pairs by drawing lines.

Column A (Tissue)

- (i) Epithelial tissue — (b)
- (ii) Connective tissue — (d)
- (iii) Vascular tissue — (e)
- (iv) Nervous tissue — (c)
- (v) Muscular tissue — (a)

Column B (Function)

- (a) movement
- (b) protection
- (c) messages
- (d) support
- (e) transport

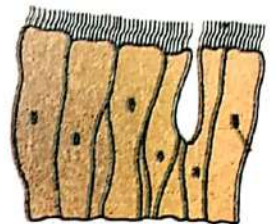
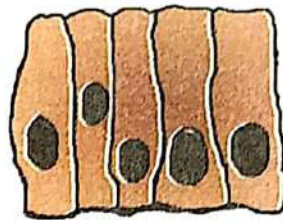
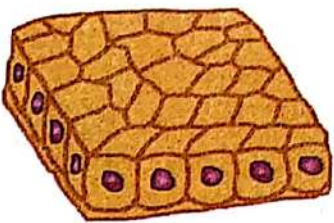
8. Name the kind of tissue that

- (i) Carries oxygen around your body Blood (fluid connective tissue)
- (ii) Brings about movement in animals Muscular tissue
- (iii) Transports food to different parts of a plant Phloem
- (iv) Transports water in plants Xylem
- (v) Supports an animal's body Supportive connective tissue
- (vi) Binds different tissues together Fibrous connective tissue
- (vii) Conducts messages from one part of the body to another Nervous tissue

9. Based on the following information, identify the three types of epithelial tissue in the figures given below :

- (i) **Cuboidal epithelium** : It consists of a single layer of cuboidal cells.
- (ii) **Columnar epithelium** : It is composed of tall, cylindrical cells with oval nuclei usually placed at the base of the cells.

(iii) **Ciliated epithelium** : It consists of cells bearing hair-like cilia on their free surface.



(a) Cuboidal epithelium (b) Columnar epithelium (c) Ciliated epithelium.

Q10. [Pg 15]. Write three differences between the two principal vascular tissues found in plants.

Ans:- Three differences are:-

XYLEM	PHLOEM.
1. Transports water and minerals absorbed by the roots to other plant parts.	1. Conducts food manufactured in the leaves to other plant parts.
2. Consists mainly of dead cells.	2. Consists mainly of living cells.
3. Conduction is unidirectional i.e. only upwards from the roots.	3. Bidirectional conduction i.e. both upwards and downwards from the leaves.

11. Mention the characteristic features of meristematic tissues and where do we find such tissues in plants. Give the function of meristematic tissue →

Ans:- (i) The cells are small

(ii) The cell walls are thin

(iii) The nuclei are large and conspicuous.

(iv) The cells are almost without vacuoles.

(v) The cells actively divide to add new cells.

Location :- These tissues are found at the growing points in a plant, like the tip of roots, stems and branches.

Function :- The function of these tissues is to produce more cells leading to the growth of the plant body.

Q12 Name the plant tissue which helps in the movement of water and minerals in the body. What are the various types of cells present in this tissue?

Ans. 'Xylem' is the plant tissue which helps in the movement of water and minerals in the plant body. The various types of cells present in this tissue are :

- (i) Tracheids.
- (ii) Vessels.
- (iii) Xylem parenchyma.
- (iv) Xylem fibres.

3. Which plant tissue is responsible for the distribution of food prepared in the leaves? Name the four component parts of this tissue.

Ans:- 'Phloem' is responsible for the distribution of food prepared in the leaves.

The four component parts of this tissue are:-

- (i) Sieve tubes
- (ii) Companion cells
- (iii) Phloem parenchyma
- (iv) Phloem fibres.

Q14. Name the various types of animal tissues and state their functions.

Ans:- The various types of animal tissues and their functions are:-

(1) Epithelial tissue.

Function :- It forms a thin protective layer of cells. It covers the surface of the body and forms the lining of various body cavities and internal organs.

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(2) Connective tissue

Function :- It connects various other tissues and organs as well as it provides support to different organs to keep them in proper position.

(3) Muscular tissue

Function :- It forms the muscles of the body which can contract and relax. Thus, they help the body in all its movement locomotion.

Q15. Give the structure and function of different types of epithelial tissues.

Ans. On the basis of shape of the cells, the epithelial tissues are of four types.

(1) Squamous epithelium:

Structure :- They are composed of thin, flattened and polygonal cells.

Function :- These cells are usually protective.

(ii) Cuboidal epithelium:

Structure :- They are composed of cube-like cells.

Function :- These cells are usually concerned with absorption.

iii) Columnar epithelium :

Structure : They are composed of vertically arranged, tall, cylindrical or column like cells.

Function :- These cells are usually secretory.

Ciliated epithelium :

Structure : They have cilia over the columnar epithelium.

Function : The cilia keeps lashing and move the substances in its contact.

16. Draw the diagram of a neuron and label the following parts in it.
Cyton, axon, node of Ranvier, internode.

— Home work.

(iii)
Q 17. Name the three main kinds of muscular tissues. Give the exact location of each kind in an animal body.

Ans: The three main kinds of muscular tissues are:-

- (i) striated muscles or voluntary muscles.
- (ii) unstriated muscles or involuntary muscles.
- (iii) cardiac or heart muscles.

Location of striated muscles - Found attached to bones. Common place to find such muscles are: arms and legs, face, neck etc.

Location of unstriated muscles - Found in the iris in the eye and in the urinary bladder.

Location of cardiac muscle - Found only in the walls of the heart.

— X —

homework:- Support each answer with diagram.

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