

- as those in the wall of the stomach and blood vessels, cannot contract. Muscles are present in the heart and are also involuntary in nature.
- Nervous tissue is made of cells called neurons, which together form nerves. A neuron consists of a cyton, an axon, and many dendrites. Nerves carry messages from all parts of the body to the brain and the spinal cord, and vice versa.

Exercises

A. Fill in the blanks.

1. Cells that are similar in structure and carry out the same functions together form a tissue.
2. Plant cells that divide to give rise to new cells form meristematic tissue.
3. Lateral meristem is also known as cambium.
4. Water and minerals are carried from roots to leaves by xylem.
5. epithelial tissue forms a thin covering layer on the outer surface of the animal body.
6. Adipocytes store fats within their vacuoles.
7. Tendons connect muscles with bones.
8. Blood is a kind of fluid connective tissue.
9. Heart muscles are called cardiac muscles.
10. The cell body of a neuron is also known as cyton.

B. Write 'true' or 'false'. If false, write the correct statement.

1. Meristematic tissue arises from permanent tissue. *Permanence* *Meristematic* ☐
2. Parenchyma is a complex permanent tissue. ☐
3. There are no intercellular spaces between the cells of sclerenchyma. ☐
4. Phloem is a dead tissue. ☐
5. Areolar tissue is a type of connective tissue. ☐
6. Ligaments are more flexible than tendons. ☐
7. Cartilage is a kind of muscular tissue. *Connective* ☐
8. Osteoblasts produce a protein mixture that forms the matrix of the bone. ☐
9. Blood cells are suspended in the plasma. ☐
10. Skeletal muscles are involuntary muscles. *Voluntary* ☐

C. Choose the correct option.

1. The cells of meristematic tissue

(a) cannot divide

(b) divide throughout

7. Cartilage is a kind of muscular tissue. ☐
8. Osteoblasts produce a protein mixture that forms the matrix of the bone. ☐
9. Blood cells are suspended in the plasma. ☐
10. Skeletal muscles are involuntary muscles. ☒ Voluntary

C. Choose the correct option.

1. The cells of meristematic tissue
 - (a) cannot divide
 - (b) divide throughout a plant's life
 - (c) are mostly dead
 - (d) divide just once
2. Which of the following is not a simple permanent tissue?
 - (a) Parenchyma
 - (b) Collenchyma
 - (c) Sclerenchyma
 - (d) Cambium
3. In plants, food and water are stored in the
 - (a) collenchyma
 - (b) parenchyma
 - (c) sclerenchyma
 - (d) phloem
4. Xylem and phloem are responsible for
 - (a) storing food
 - (b) growth
 - (c) transporting materials
 - (d) manufacturing food
5. Connective tissue includes
 - (a) vascular tissue
 - (b) epithelial tissue
 - (c) nervous tissue
 - (d) muscular tissue
6. Ligaments contain
 - (a) only collagen
 - (b) more collagen than tendons do
 - (c) only elastin
 - (d) more elastin than tendons do
7. Cartilage is made up of
 - (a) adipocytes
 - (b) osteocytes
 - (c) chondrocytes
 - (d) osteoclasts
8. Involuntary muscles
 - (a) cannot move
 - (b) move by conscious effort
 - (c) do not obey our will
 - (d) are attached to the skeleton
9. Neurons contain short fibre-like structures called
 - (a) dendrites
 - (b) axon
 - (c) cyton
 - (d) nerves

D. Answer the following.

Su	31	3	10	17	24
Mo		4	11	18	25
Tu		5	12	19	26
We		6	13	20	27
Th		7	14	21	28
Fr	1	8	15	22	29
Sa	2	9	16	23	30

Answer the following

1) What is epithelial tissue? What are its functions?

Ans: Epithelial tissue are thin tissues that covers all the exposed surfaces of the body. It also lined the outer and inner surfaces of organs such as the heart, stomach, lungs, blood vessels etc.

Epithelial tissue provide protection from injury and germs. It also helps in absorption and secretion.

2) Describe the functions of the areolar tissue and the adipose tissue.

Ans: Function of areolar tissue

Areolar tissue forms a continuous layer under the skin and packs the spaces between various organs to keep them in space.

Function of Adipose tissue

Adipose tissue cushions various parts of the body to protect them from injury and insulates the body against the cold. It also stores fats.

3) Differentiate between voluntary and involuntary muscle.

Voluntary muscle	Involuntary muscles
1) Voluntary muscles are under the control of an individual's will.	1) Involuntary muscles are not under the control of an individual's will.
2) It is also known as skeletal muscles.	2) It is also known as smooth muscles.
3) It consists of long, cylindrical multinucleated cells.	3) It consists of small spindle shaped uninucleated cells.
4) Contains series of bands and hence called striated muscles.	4) These are unstriated muscles.

Good health and good sense are two of life's greatest blessings.

JUNE 2020				
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31				

MAY

2020

2020

20

WEDNESDAY

Q: Name the components of the blood. What are the functions of blood?

Ans: Blood consists of liquid matrix plasma in which blood cells remain suspended. Blood has three types of cells—Red Blood corpuscles (RBCs), White Blood cells (WBCs), and platelets.

Functions of Blood

- 1) Transport: Oxygen, carbon dioxide, digested food substances and waste products from one part of the body to another.
- 2) It helps to fight infections and also regulates our body temperature.

Q: How is lymph formed?

Ans: Blood without RBCs and few other components when leaves the blood capillaries and passes into the spaces between tissues formed lymph.

Q: Differentiate between tendon and ligament.

Tendon	Ligament
1) Tendons attach muscles to the bone.	1) Ligaments attach one bone to another.
2) It's white fibrous connective tissue.	2) It's yellow fibrous connective tissue.
3) Tendons are mainly made up of collagen fibres and tendon.	3) Ligaments contain more elastin than tendons.

Q: What are chondrocytes?

Ans: Cartilage is made of cells called chondrocytes. These cells have wide spaces between them and are embedded in a jelly like matrix.

Miracles do occur, but one has to work hard for them to happen.

21

MAY

THURSDAY

2020

MAY 2020

Su	31	1	2	3	4
Mo		4	5	6	7
Tu		5	6	7	8
We		6	7	8	9
Th		7	8	9	10
Fr	1	8	9	10	11
Sa	2	9	10	11	12

Q: Name the types of cells that make up the bones.
Write down its function.

Ans: Bone is made up of three types of cells —
Osteoblasts, Osteocytes and Osteoclasts.

Function of bones —

- 1) Provide support and forms the framework of the body.
- 2) Enables the movement of different parts of the body.
- 3) Bone marrow present inside the bones is responsible for the formation of blood cells.

Q: Write down the function of lymph.

Ans: Supply nutrients and oxygen to those parts of the body where blood cannot reach.
Lymph also protect us from various diseases by killing germs.

He who is afraid to ask, is ashamed of learning.