

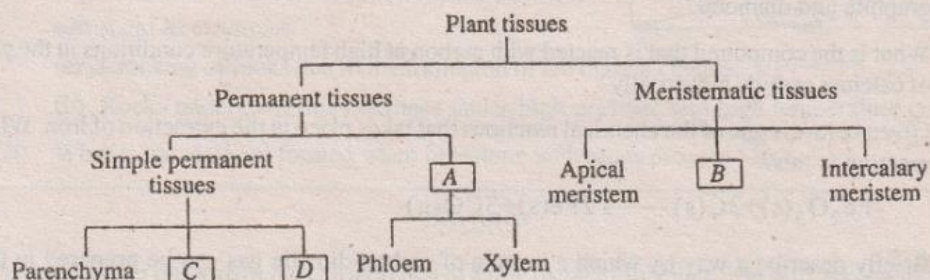


2014

3. In which of the following are sclerids mostly present?
- |                 |                                    |
|-----------------|------------------------------------|
| (1) Root tubers | (2) Cortex of dicotyledonous stems |
| (3) Dates seeds | (4) Papaw fruits                   |

2013 Part B

6. (A) The classification of plant tissues is shown in the following chart.



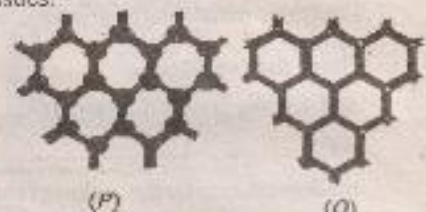
- (i) Name *A*, *B*, *C* and *D*.
- (ii) Mention a function each of the tissues *B*, *C* and *D*.
- (iii) State a structural feature that helps to differentiate the tissues *C* and *D*.
- (B) The units by which the nervous system is made of are nerve cells or neurones. There are three main kinds of neurones.
- (i) Name the **three** main kinds of neurones.
- (ii) When a thorn pricks a leg, the leg moves aside automatically and this is a reflex action. State the kind of neurones used in each step given below of the reflex action mentioned above.
- (a) Carrying the impulses from skin to the spinal cord.
- (b) Carrying the impulses from the spinal cord to the muscles of the leg.

2012 Part A

(D) (i) The diagrams illustrate collenchyma and sclerenchyma tissues.

(a) Which diagram shows the cross section of the sclerenchyma tissue? .....

(b) State a characteristic which you used to identify that tissue  
.....  
.....




(P) (Q)

(ii) The diagrams below illustrate the cells of the skeletal muscle tissue and the cardiac muscle tissue.

(a) Which diagram shows the cardiac muscle cells? .....

(b) State a characteristic which you used to identify that tissue.  
.....  
.....



(X) (Y)

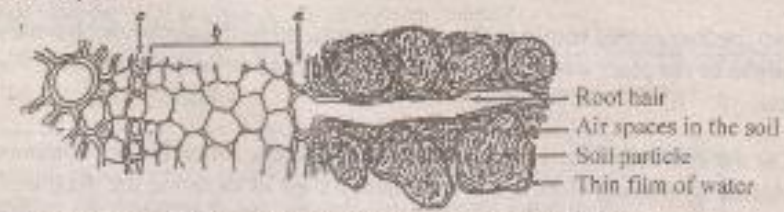
2011

4. Which of the following is the correct statement about the three main types of muscles in the human body, the skeletal muscles, smooth muscles and cardiac muscles?

(1) Cardiac muscles and skeletal muscles are striated.  
 (2) Cardiac muscles and smooth muscles are striated.  
 (3) Skeletal muscles and smooth muscles are striated.  
 (4) Only skeletal muscles are striated.

2010 Part A 2

(B) Given below is a diagram which illustrates how the water absorbed by the root of a plant is transported to the interior of the plant.



(i) Name the tissues depicted by the letters a, b and c in the diagram.  
 (a) ..... (b) ..... (c) .....

(ii) Through which tissue that you named in (i) above does selective absorption takes place?  
.....

(iii) The oxygen necessary for the respiration of plant roots is supplied by which constituent in the soil?  
.....

(iv) Plants tend to droop when the salinity of the wet soil in a cultivated plot is at a high value. What can be the reason for this?  
.....

(C) (i) There are special tissues to transport substances in a plant. Name the tissue that transports food in a plant.  
.....

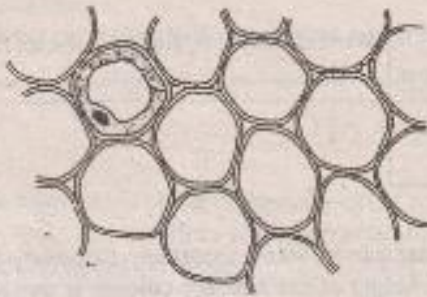
(ii) To transport starch in a plant it is converted into a simple substance. What is this simple substance?  
.....

(iii) Through which part is the soil solution carried to the interior of the plant by mass flow?  
.....

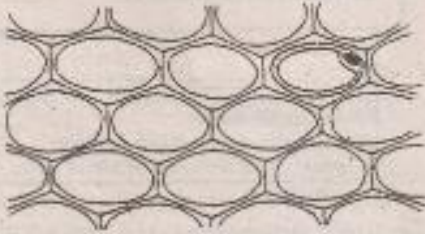
## 2019 Part A 2

(ii) (a) What is the organizational level of life, where the same type of cells are grouped together to perform definite body functions?  
.....

(b) Given below are diagrams of the microscopic views of two specimens taken from a plant, which illustrate the organization mentioned in (ii) (a) above. Name these two.



(A) .....



(B) .....

## 2008

6. Dendrons of the motor-neurons are present in the  
(1) effector organs.                      (2) central nervous system. (3) sensory organs.                      (4) spinal nerves.