



Brain International School

Vikas Puri, New Delhi

ASSIGNMENT NO. 2

SUBJECT: BIOLOGY

CLASS-X

MAY, 2025

Chapter -5 life processes

MULTIPLE CHOICE QUESTIONS

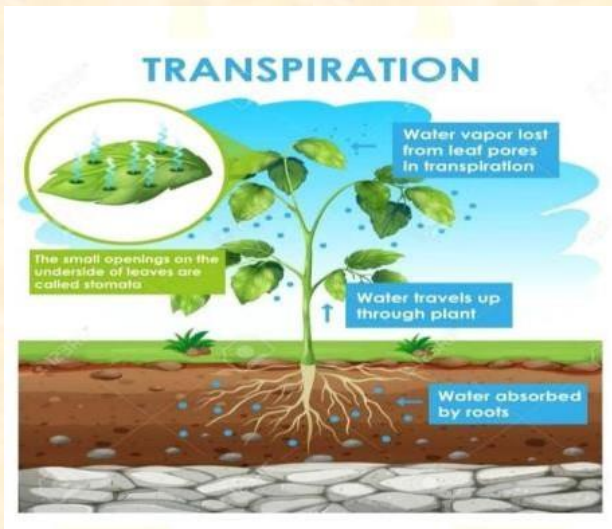
1. The contraction and expansion movement of the walls of the food pipe is called:
 - a) translocation
 - b) transpiration
 - c) peristaltic movement
 - d) digestion
2. Choose the correct path of urine in our body
 - a. kidney → ureter → urethra → urinary bladder
 - b. kidney → urinary bladder → urethra → ureter
 - c. kidney → ureters → urinary bladder → urethra
 - d. urinary bladder → kidney → ureter → urethra

ASSERTION AND REASON QUESTIONS

The following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
 - (b) Both A and R are true but R is not the correct explanation of A
 - (c) A is true but R is false.
 - (d) A is false but R is true.
3. Assertion (A): Diffusion does not meet high energy requirements of multi-cellular organisms
Reason (R) : Diffusion is a fast process but occurs at the surface of the body.

CASE STUDY QUESTION



4. Plants absorb water and minerals by the roots. The roots have root hair. The root hair increase the surface area of the root for the absorption of water and mineral nutrients dissolved in water. The root hair is in contact with the water present between the soil particles. Plants have pipe-like vessels to transport water and nutrients from the soil. The vessels are made of special cells, forming the vascular tissue. A tissue is a group of cells that perform specialized function in an organism. The vascular tissue for the transport of water and nutrients in the plant is called the xylem. The xylem forms a continuous network of channels that connects roots to the leaves through the stem and branches and thus transports water to the entire plant. One thing is very interesting here that when gravity pulls everything downwards, then how the water can rise up against gravity. There are only two possibilities, either the water is being pushed from below or the water is being pulled from the top of the plant. Now the question is which force is strong. It is very similar to the principle behind the sipping of softdrink from a bottle with a straw.

i) Name the force responsible for upward pulling of water.

- (a) Gravitational force
- (b) Magnetic force
- (c) Muscular force
- (d) Suction pull

ii) Group of cells that transport food in plants is called?

- (a) xylem
- (b) phloem
- (c) tissue
- (d) all of these

iii). The process in which water is lost as water vapour from the aerial parts of the plants through stomata is called

- (a) evaporation
- (b) transpiration
- (c) translation
- (d) sucking

- iv) Plants wither when
(a) xylem stops
(b) the epidermis is removed
(c) cortex is removed
(d) phloem stops

- iv) What type of water absorption takes place in plants by the process of more transpiration?
(a) Active absorption
(b) Passive absorption
(c) none of these
(d) both A And b

LONG ANSWER QUESTIONS

1. (a) Draw a schematic representation of transport and exchange of oxygen and carbon dioxide during transportation of blood in human beings and label on it: Lung capillaries, Pulmonary artery to lungs, Aorta to body, Pulmonary veins from lungs.

(b) What is the advantage of separate channels in mammals and birds for oxygenated and deoxygenated blood?
2. State the role of the following in human digestive system:
(I) Digestive enzymes (II) Hydrochloric acid (III) villi