

Board - CBSE

Class - 7

Topic - Transportation In Animals And Plants

1. Why does the color of blood is red?

Sol. Blood has a Pigment known as hemoglobin that gives a red color to it.

2. What does blood consist of?

Sol. Blood consists of Red blood cells, white blood cells, platelets, and plasma.

3. What is removed along with water as sweat?

Sol. Extra salts are removed along with water as sweat.

4. What is a pulse?

Sol. The throbbing that occurs in arteries due to the flowing of blood is called a pulse.

5. Why is the transport of materials necessary in a plant or in an animal?

Sol. All organisms need food, water, and oxygen for survival. They need to transport all these to various parts of their body.

6. What are the functions of white blood cells?

Sol. White blood cells fight against the infection or germs in the body, thereby providing immunity.

7. How is a clot formed?

Sol. A clot is produced as an action of platelets during any external injury to prevent excessively loss of blood.

8. What is the main function of the heart?

Sol. The heart is the main pumping organ for blood to be circulated as blood is required to be sent to all the parts of the body so as to carry on all the important functions of the body.

9. What is transpiration? How is it useful to plants?

Sol. It is the process of removal of extra water in the form of water vapors through stomata in plants. This process helps in eliminating extra water and keeping the plant cooler.

10. Why is blood needed by all the parts of the body?

Sol. Blood transports the oxygen and digested food to all the sites of the body and takes the carbon dioxide to the lungs.

11. Why do plants absorb a large quantity of water from the soil?

Sol. Plants remove lots of water by the process of transpiration. This is why plants require absorbing a large quantity of water from the soil.

12. Why do sponges and hydra not have blood?

Sol. Animals such as sponges and hydra do not possess any circulatory system. The water in which they live brings food and oxygen as it enters their body the water carries away waste materials and carbon dioxide as it moves out.

13. Why are valves present in veins?

Sol. Valves are present in veins to prevent the backflow of blood in tissues.

14. Name the term for the transport of food from leaves to other parts of plants.

Sol. Translocation

15. Name the type of blood vessels which carry blood from organs to the heart.

Sol. Veins

16. Why do the arteries have thick elastic walls?

Sol. When the blood is pumped by the heart toward the cell, it comes at very high pressure and to withstand that high pressure the arteries have thick and elastic walls.

17. Write a short note on the heart.

Sol.

1. The heart is a triangular-shaped organ. It is made up of cardiac muscles and is located between the lungs inside the chest cavity.
2. It beats 60 to 80 times per minute throughout life. It pumps blood to all parts of the body.
3. The heart has four chambers. The top chambers are called auricles (or atria) and the lower two chambers are called ventricles.
4. The left chambers are completely separated from the right side by a partition called the septum. The chambers contain valves that allow the flow of blood in one direction only.

5. The right auricle receives carbon-dioxide rich blood from various parts of the body. The right ventricle pumps the blood to the lungs. Inside the lungs, carbon dioxide is exchanged with oxygen.
6. The left auricle receives oxygen-rich blood from the lungs. The left ventricle pumps this blood to the rest of the body.

18. Sometimes doctors inject medicines directly into our bloodstream. Where do they inject in artery or in vein?

Sol. In vein. Vein are superficial and are easily detectable. Second medicine needs to be transported to all parts of the body. Through veins, medicine reaches the heart and is then pumped to all over the body.

19. What is a heartbeat? Name the instrument used to provide information about heartbeats.

Sol. One complete contraction and relaxation of the heart makes one heartbeat.
Electrocardiogram
(ECG) is used to check the rhythm of heartbeats

20. What is plasma? What are its functions?

Sol. Plasma contains 90% of water and the rests are CO_2 , hormone protein, and glucose. It is yellow in color. It removes CO_2 from cells and transport to the lungs. It also carries urea from body cells to the kidney.