

**Class: 7**  
**Subject: Biology**  
**Topic: Transport in Plants and animals**  
**No. of Questions: 20**

Q1. Why is color of blood red?

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

Q2. What does blood consist of?

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

Q3. What is removed along with water as sweat?

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

Q4. What is pulse?

Sol. Throbbing that occurs in arteries due to flowing of blood is called pulse.

Q5. Why is 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.

Q6. What are the functions of white blood cells?

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

Q7. How is clot formed?

Sol. Clot is produced as an action of platelets during any external injury to prevent excessive loss of blood.

Q8. What is the main function of heart?

Sol. 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 body.

Q9. 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 plant cooler.

Q10. 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.

Q11. 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 large quantity of water from the soil.

Q12. 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 enter their body the water carries away waste materials and carbon dioxide as it moves out.

Q13. Why valves present in veins?

Sol. Valves are present in veins to prevent back flow of blood in tissues.

Q14. Name the term for transport of food from leaves to other parts of plants.

Sol. Translocation

Q15. Name the type of blood vessels which carry blood from organs to the heart.

Sol. Veins

Q16. Why do the arteries have thick elastic walls?

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

Q17. Write short note on the heart.

- Sol.
1. Heart is triangular shaped organ. It is made up of cardiac muscles and is located between the lungs inside 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 right side by a partition called septum. The chambers contain valves which 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 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.

Q18. Sometime doctors inject medicines directly in 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 heart and then pumped to all over the body.

Q19. What is heart beat? Name the instrument used to provide information about heart beats.

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

Q20. What is plasma? What are its functions?

Sol. Plasma contains 90% of water and rests are  $\text{CO}_2$ , hormone protein and glucose. It is yellow in color. It removes  $\text{CO}_2$  from cells and transport to lungs. It also carries urea from body cells to kidney.