

TRANSPORTATION IN ANIMALS AND PLANTS
WORKSHEET

1. Assertion (A): Xylem helps in the upward movement of water in plants.
Reason (R): Phloem transports water and minerals from roots to leaves.
2. Assertion (A): Arteries have thick and elastic walls.
Reason (R): Blood in arteries flows under high pressure.
3. Which of the following animals does NOT have blood vessels?
A. Earthworm B. Hydra. C. Frog. D. Human
4. Assertion (A): White blood cells protect the body against infections.
Reason (R): WBCs produce antibodies and fight germs.
5. A child gets a cut on his hand. Which blood component helps stop the bleeding?
A. Plasma. B. RBC C. Platelets D. Hemoglobin
6. What is the function of stomata in leaves?
A. Water absorption
B. Food transport
C. Transpiration and gas exchange
D. Supporting the plant

Case Study:

Mr. Sharma, a 55-year-old man, complained of tiredness, breathlessness during mild activities, and frequent dizziness. After a check-up, the doctor found that one of the valves in his heart was not functioning properly. The doctor explained that this valve was allowing blood to flow backward, which was making the heart work harder to push blood forward. He also had high blood pressure, which put extra strain on the walls of his arteries.

Questions:

1. Name the four chambers of the human heart and mention their function.
2. What is the role of valves in the heart? What happens if a valve does not work properly?
3. How does high blood pressure affect the blood vessels?
4. Why did Mr. Sharma feel tired even with mild activity?
5. Explain how oxygenated and deoxygenated blood are kept separate in the human heart. Why is this separation important?