

Blood

A. Choose the Correct Answer:

1. What is the main function of blood in the body?

- A) Provide oxygen and nutrients to the cells
- B) Help in digestion
- C) Produce energy
- D) Store food

2. What is the red-colored pigment in blood called?

- A) Plasma
- B) Hemoglobin
- C) Platelets
- D) Leukocytes

3. Which component of blood helps fight infections?

- A) Red blood cells
- B) White blood cells
- C) Platelets
- D) Plasma

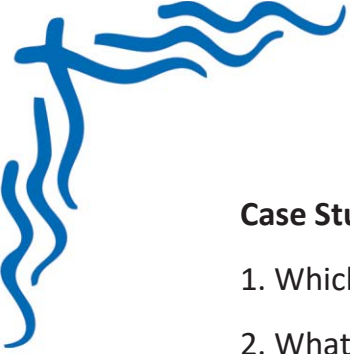
B. Fill in the Blanks:

1. Blood carries _____ from the lungs to the rest of the body.
2. _____ in blood helps in clotting to stop bleeding.
3. The liquid part of blood is called _____.

C. Case Study:

Meera was walking in the park when she accidentally scraped her knee. She noticed that blood started coming out of the wound.

- After a few minutes, the bleeding stopped as the blood formed a clot.
- Her science teacher had explained that blood contains red blood cells, white blood cells, platelets, and plasma.
- The teacher also mentioned that white blood cells protect the body from germs and infections.
- Meera remembered that the red color of blood is due to hemoglobin, which carries oxygen.

**Case Study Questions:**

1. Which component of blood helped stop Meera's bleeding?
2. What gives blood its red color?
3. How do white blood cells help the body?
4. What are the four main components of blood?

D. Short Answer Questions:

1. What is the function of red blood cells (RBCs)?
2. How do platelets help in healing wounds?
3. What role does plasma play in blood?

E. Long Answer Questions:

1. Explain the composition of blood and the function of each component.
2. How does blood transport oxygen and nutrients throughout the body?
3. Why is blood important for maintaining health?