

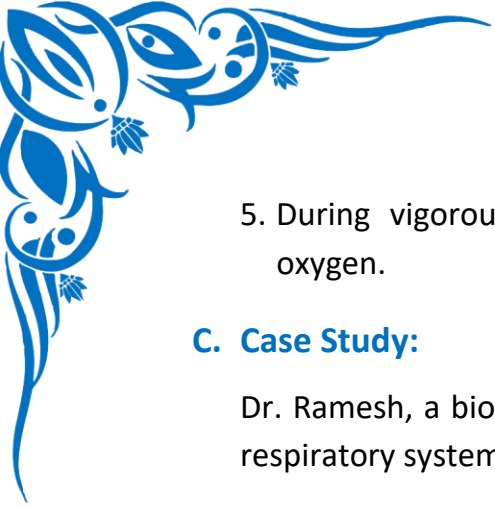
Respiration in Animals

A. Choose the Correct Answer

- 1. Which organ is primarily responsible for respiration in humans?**
 - A) Heart
 - B) Lungs
 - C) Stomach
 - D) Liver
- 2. What is the main gas taken in by animals during respiration?**
 - A) Carbon dioxide
 - B) Oxygen
 - C) Nitrogen
 - D) Hydrogen
- 3. In which of the following animals does respiration occur through the skin?**
 - A) Fish
 - B) Frog
 - C) Dog
 - D) Bird
- 4. Which structure in the lungs helps in the exchange of gases?**
 - A) Trachea
 - B) Bronchi
 - C) Alveoli
 - D) Esophagus
- 5. What is the role of hemoglobin in respiration?**
 - A) It digests food
 - B) It carries oxygen in the blood
 - C) It removes waste from the body
 - D) It produces energy directly

B. Fill in the Blanks

1. The process of breaking down glucose to release energy is called _____.
2. Insects breathe through small openings on their bodies called _____.
3. The main waste gas released during respiration is _____.
4. Fish obtain oxygen from water using their _____.



5. During vigorous exercise, muscles produce _____ due to a lack of oxygen.

C. Case Study:

Dr. Ramesh, a biologist, conducted a study on how different animals adapt their respiratory systems to their environments. He observed three animals:

- Animal A lived in water and used gills to extract oxygen.
- Animal B was an amphibian, breathing through both lungs and moist skin.
- Animal C lived in the desert and had special lungs adapted to conserve water.

After studying their respiration patterns, Dr. Ramesh concluded that different animals have evolved unique respiratory systems based on their habitats.

Case Study Questions:

1. What is the primary factor influencing how animals breathe?
2. How does Animal A obtain oxygen from its environment?
3. Why does Animal B use both lungs and skin for respiration?
4. What adaptations help Animal C survive in dry conditions?

D. Short Answer Questions

1. What is respiration, and why is it important for animals?
2. How does respiration differ in fish and mammals?
3. Why do animals breathe faster when they run or exercise?

E. Long Answer Questions

1. Explain the different types of respiration in animals with examples.
2. Describe the process of respiration in humans, including the role of the lungs and blood.
3. Discuss how respiratory systems are adapted to different environments in animals.