

Core Concepts in Human Biology

Human Biology · Answer Key · 8 Questions

1. What is the primary function of erythrocytes in the human body?

- A) Fighting infections
- B) Transporting oxygen**
- C) Clotting blood
- D) Producing antibodies

2. Which part of the brain is primarily responsible for coordinating voluntary movements and maintaining balance?

- A) Cerebrum
- B) Brainstem
- C) Cerebellum**
- D) Thalamus

3. Where does the majority of nutrient absorption occur in the human digestive system?

- A) Stomach
- B) Large intestine
- C) Small intestine**
- D) Esophagus

4. What is the main protein component of bone matrix, providing its flexibility and tensile strength?

- A) Keratin
- B) Elastin
- C) Collagen**
- D) Actin

5. Which hormone is primarily responsible for regulating blood glucose levels by promoting glucose uptake into cells?

- A) Glucagon
- B) Adrenaline
- C) Insulin**
- D) Thyroxine

6. Which cellular organelle is primarily responsible for synthesizing proteins based on mRNA templates?

- A) Mitochondrion
- B) Golgi apparatus
- C) Endoplasmic reticulum
- D) Ribosome**

7. Where does the primary exchange of oxygen and carbon dioxide occur in the human respiratory system?

- A) Trachea
- B) Bronchi
- C) Pharynx
- D) Alveoli**

8. What vitamin is synthesized in the skin upon exposure to ultraviolet (UV) radiation?

- A) Vitamin K
- B) Vitamin C
- C) Vitamin D**
- D) Vitamin B12