

Human Biology Fundamentals

Human Biology · Answer Key · 12 Questions

1. Which hormone is primarily responsible for regulating blood glucose levels by promoting the uptake of glucose from the bloodstream into cells?

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

2. The process by which cells convert glucose into pyruvate in the absence of oxygen is known as:

- A) Oxidative phosphorylation
- B) Krebs cycle
- C) Glycolysis**
- D) Fermentation

3. What is the primary function of red blood cells in the human body?

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

4. Which part of the neuron is responsible for transmitting electrical signals away from the cell body?

- A) Dendrite
- B) Axon**
- C) Synapse
- D) Cell body (soma)

5. The small, specialized structures within cells that perform specific functions are called:

- A) Organelles**
- B) Chromosomes
- C) Genes
- D) Proteins

6. What is the main structural component of the cell membrane?

- A) Polysaccharides
- B) Phospholipids**
- C) Nucleic acids
- D) Proteins

7. Which chamber of the heart pumps oxygenated blood to the rest of the body?

- A) Right atrium
- B) Right ventricle
- C) Left atrium

D) Left ventricle

8. The process of DNA replication results in the production of:

- A) Four new DNA molecules

B) Two identical DNA molecules

- C) One new DNA molecule
- D) Two different DNA molecules

9. Which of the following is a primary function of the kidneys?

- A) Producing bile

B) Filtering waste products from the blood

- C) Storing bile
- D) Digesting carbohydrates

10. The genetic material of an organism is stored in:

- A) Ribosomes
- B) Mitochondria

C) DNA

- D) Golgi apparatus

11. What is the role of villi in the small intestine?

- A) Secreting digestive enzymes

B) Absorbing nutrients

- C) Storing bile
- D) Neutralizing stomach acid

12. The process by which genetic information is transferred from DNA to messenger RNA (mRNA) is called:

- A) Translation
- B) Replication

C) Transcription

- D) Mutation