

Biology Exam: Answer Key

Instructions: This exam tests your knowledge of basic biology. You have 1 hour to complete this exam. Good Luck!

Question 1: What is the most basic structural unit of living things?

- A. Cells
- B. Organs
- C. Tissues
- D. Organisms

Correct Answer: Cells are the most basic structural unit of living things, where all life processes occur.

Question 2: A single fertilized cell is called what?

- A. Zygote
- B. Embryo
- C. Gamete
- D. Blastocyst

Correct Answer: A zygote is the term used to refer to a single fertilized cell, which is the beginning stage of development after fertilization.

Question 3: The adult human of average age and size has approximately how many quarts of blood? Is it:

- A. 5-10 quarts
- B. 10-15 quarts
- C. 15-20 quarts
- D. 20-25 quarts

Correct Answer. The adult human of average age and size has around 5-6 quarts of blood. It is important to understand the average amount of blood in the human body to maintain good health.

Question 4: This disease, caused by infection with the gram-negative *Yersinia pestis*, is transmitted by fleas from rats to humans. What is the more common name for this disease?

- A. Ebola
- B. Tuberculosis
- C. Cholera
- D. Bubonic Plague

Correct Answer. The disease caused by infection with the gram-negative *Yersinia pestis* is known as the Bubonic Plague, not Ebola, Tuberculosis, or Cholera.

Question 5: Which of the following represents the largest group of biological classification?

- A. Class
- B. Phylum
- C. Order
- D. Kingdom

Correct Answer: The largest group of biological classification is the Kingdom, which includes organisms with similar characteristics. This level of classification is broader than Phylum, Class, Order, and Family.

Question 6: The belief that living organisms arise from non-living matter is known as...

- A. Spontaneous generation
- B. Biogenesis
- C. Abiogenesis
- D. Panspermia

Correct Answer: Spontaneous generation is the belief that living organisms can arise from nonliving matter. This theory was widely accepted until Louis Pasteur's experiments disproved it in the mid-19th century.