

Foundations of Human Biology

Human Biology · Practice Test · 25 Questions

1. Which organelle is known as the 'powerhouse' of the cell because it generates most of the cell's supply of adenosine triphosphate (ATP), used as a source of chemical energy?

- A) Nucleus
- B) Ribosome
- C) Mitochondrion
- D) Golgi apparatus

2. What is the primary function of red blood cells?

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

3. The skeletal system provides support, protection, and allows for movement. Which bone is commonly known as the kneecap?

- A) Humerus
- B) Femur
- C) Tibia
- D) Patella

4. Which part of the brain is primarily responsible for coordination, balance, and posture?

- A) Cerebrum
- B) Cerebellum
- C) Brainstem
- D) Hypothalamus

5. Digestion begins in the mouth. What is the main role of saliva in this process?

- A) Breaking down proteins
- B) Killing bacteria
- C) Lubricating food and starting carbohydrate digestion
- D) Absorbing nutrients

6. The respiratory system is responsible for gas exchange. What gas do humans primarily exhale?

- A) Oxygen
- B) Nitrogen
- C) Carbon dioxide
- D) Hydrogen

7. Which type of muscle tissue is found in the walls of internal organs like the stomach and intestines, and is responsible for involuntary movements?

- A) Skeletal muscle
- B) Cardiac muscle
- C) Smooth muscle
- D) Nervous tissue

8. The circulatory system transports nutrients, oxygen, and waste products throughout the body. What is the main function of the heart?

- A) Filtering waste
- B) Pumping blood
- C) Producing red blood cells
- D) Storing oxygen

9. The nervous system allows for communication and control within the body. What is the basic structural and functional unit of the nervous system?

- A) Neuron
- B) Glial cell
- C) Axon
- D) Dendrite

10. The endocrine system uses hormones to regulate bodily functions. Which gland produces insulin, a hormone that regulates blood sugar levels?

- A) Thyroid gland
- B) Adrenal gland
- C) Pituitary gland
- D) Pancreas

11. What is the largest organ of the human body?

- A) Liver
- B) Brain
- C) Skin
- D) Lungs

12. The immune system protects the body from disease. Which type of white blood cell is primarily responsible for producing antibodies?

- A) Neutrophil
- B) Lymphocyte
- C) Macrophage
- D) Eosinophil

13. The process by which plants and some bacteria use sunlight, water, and carbon dioxide to create their own food is called:

- A) Respiration
- B) Fermentation
- C) Photosynthesis
- D) Transpiration

14. Which of the following is a type of connective tissue found in joints that connects bone to bone?

- A) Tendon
- B) Ligament
- C) Cartilage
- D) Muscle

15. The small intestine is the primary site for nutrient absorption. What are the finger-like projections that increase the surface area of the small intestine called?

- A) Villi
- B) Cilia
- C) Flagella
- D) Alveoli

16. What is the primary function of the kidneys?

- A) Producing bile
- B) Filtering blood and producing urine
- C) Storing glycogen
- D) Regulating body temperature

17. The reproductive system produces gametes. In males, what are the primary reproductive organs called?

- A) Ovaries
- B) Uterus
- C) Testes
- D) Prostate gland

18. What is the scientific name for the thigh bone?

- A) Tibia
- B) Fibula
- C) Humerus
- D) Femur

19. Which gas is essential for cellular respiration, the process by which cells generate energy?

- A) Carbon dioxide
- B) Nitrogen
- C) Oxygen
- D) Methane

20. The sense of sight is processed in which part of the brain?

- A) Temporal lobe
- B) Parietal lobe
- C) Frontal lobe
- D) Occipital lobe

21. What is the fluid portion of blood called, which carries blood cells, nutrients, and waste products?

- A) Plasma
- B) Serum
- C) Lymph
- D) Cytoplasm

22. Which hormone is primarily responsible for the 'fight or flight' response?

- A) Insulin
- B) Thyroxine
- C) Adrenaline (Epinephrine)
- D) Estrogen

23. What is the process of breaking down food into smaller molecules that can be absorbed by the body called?

- A) Assimilation
- B) Metabolism
- C) Digestion
- D) Excretion

24. The human eye focuses light onto which light-sensitive layer at the back of the eye?

- A) Cornea
- B) Iris
- C) Retina
- D) Pupil

25. Which chamber of the heart receives deoxygenated blood from the body?

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