

Human Biology and Health Mastery

Human Biology · Practice Test · 15 Questions

1. Which specific bone in the human body is the only one that does not articulate with any other bone, being held in place only by muscles and ligaments?

- A) Hyoid bone
- B) Sesamoid bone
- C) Patella
- D) Sphenoid bone

2. What is the medical term for the functional unit of the kidney, of which there are approximately one million per organ?

- A) Glomerulus
- B) Nephron
- C) Tubule
- D) Calyx

3. In the human eye, which layer is responsible for the highest concentration of cone cells, enabling sharp, central vision?

- A) Choroid
- B) Sclera
- C) Fovea centralis
- D) Tapetum lucidum

4. Which hormone, secreted by the alpha cells of the pancreas, is primarily responsible for increasing blood glucose levels by triggering glycogenolysis in the liver?

- A) Insulin
- B) Somatostatin
- C) Ghrelin
- D) Glucagon

5. What is the name of the fibrous structure that connects the gastrocnemius and soleus muscles to the calcaneus bone?

- A) Achilles tendon
- B) Patellar ligament
- C) Plantaris tendon
- D) Tibialis posterior

6. Which cranial nerve, also known as the tenth cranial nerve, is the longest and longest-reaching nerve of the autonomic nervous system?

- A) Trigeminal nerve
- B) Facial nerve
- C) Vagus nerve
- D) Glossopharyngeal nerve

7. Within the hierarchy of human muscle fiber types, which classification is characterized by high mitochondrial density and high resistance to fatigue?

- A) Type IIx
- B) Type I
- C) Type IIa
- D) Type IIb

8. What is the anatomical name for the tiny air sacs in the lungs where gas exchange occurs?

- A) Bronchioles
- B) Alveoli
- C) Pleura
- D) Trachea

9. Which immunoglobulin is the most abundant in the human circulatory system, accounting for approximately 75% to 80% of all serum antibodies?

- A) IgG
- B) IgM
- C) IgA
- D) IgE

10. The Circle of Willis is an anatomical configuration of arteries located in which part of the human body?

- A) The heart
- B) The lungs
- C) The brain
- D) The liver

11. Which specific region of the brain is the primary integration center for autonomic functions, including heart rate, blood pressure, and respiratory rate?

- A) Cerebellum
- B) Thalamus
- C) Medulla oblongata
- D) Hypothalamus

12. What is the primary protein component found in the human epidermis that provides structural integrity and water resistance?

- A) Collagen
- B) Keratin
- C) Elastin
- D) Fibrin

13. In the small intestine, what are the finger-like projections that significantly increase the surface area for nutrient absorption called?

- A) Microvilli
- B) Peyer's patches
- C) Rugae
- D) Lacteals

14. Which bone is the smallest in the human body, measuring approximately 2.8 millimeters in length?

- A) Incus
- B) Stapes
- C) Malleus
- D) Pisiform

15. What is the term for the process by which white blood cells move through the capillary walls into the tissues to combat infection?

- A) Phagocytosis
- B) Diapedesis
- C) Chemotaxis
- D) Opsonization