

Advanced Human Anatomy Challenge

Anatomy · Answer Key · 18 Questions

1. Which specific structure prevents the aspiration of food into the trachea during the act of swallowing?

- A) Uvula
- B) Epiglottis**
- C) Glottis
- D) Thyroid cartilage

2. The 'Circle of Willis' is a circulatory anastomosis located in which part of the body?

- A) Heart
- B) Liver
- C) Brain**
- D) Kidneys

3. Which layer of the skin is responsible for the production of keratin and contains no blood vessels?

- A) Dermis
- B) Hypodermis
- C) Stratum corneum
- D) Stratum basale**

4. In the human skeletal system, what is the anatomical name for the bone commonly referred to as the 'kneecap'?

- A) Patella**
- B) Calcaneus
- C) Cuboid
- D) Talus

5. Which mineral is primarily stored in the skeletal system and is essential for muscle contraction and nerve signal transmission?

- A) Iron
- B) Calcium**
- C) Potassium
- D) Magnesium

6. The cranial nerve responsible for innervating the majority of the thoracic and abdominal viscera is the:

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

7. Which of the following blood vessels carries deoxygenated blood from the heart to the lungs?

- A) Pulmonary artery**
- B) Pulmonary vein
- C) Aorta
- D) Superior vena cava

8. What is the primary functional unit of the human kidney, responsible for filtering blood and forming urine?

- A) Ureter
- B) Nephron**
- C) Glomerulus
- D) Pelvis

9. Which hormone, secreted by the pancreas, is primarily responsible for lowering blood glucose levels?

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

10. The 'foramen magnum' is a large opening located in which bone of the skull?

- A) Frontal bone
- B) Temporal bone
- C) Sphenoid bone
- D) Occipital bone**

11. Which specific type of joint allows for rotation around a single axis, such as the joint between the atlas and axis vertebrae?

- A) Hinge joint
- B) Pivot joint**
- C) Saddle joint
- D) Ball and socket joint

12. Which organelle within human cells is frequently referred to as the 'powerhouse' due to its role in ATP production?

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

13. How many chambers are present in a fully developed human heart?

- A) Two
- B) Three
- C) Four**
- D) Five

14. Which major muscle is primarily responsible for the expansion of the thoracic cavity during inspiration?

- A) Intercostals
- B) Diaphragm**
- C) Pectoralis major
- D) Trapezius

15. The study of the structural changes in the body that occur due to disease is known as:

- A) Pathology**
- B) Histology
- C) Physiology
- D) Embryology

16. Which bone in the human body is considered the longest and strongest?

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

17. What is the name of the pigment that provides colour to the skin and helps protect against UV radiation?

- A) Hemoglobin
- B) Melanin**
- C) Carotene
- D) Bilirubin

18. Which part of the brain is primarily responsible for coordinating voluntary movements, posture, and balance?

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