

First Written Examination in Human Anatomy
Duration: 1 hour 15 (Upper Limb)

Select ONE correct answer only

1. Which of the following statement concerning medial (internal) rotation are correct?

- A. It occurs in the transverse plane around the longitudinal axis.
- B. It occurs in the frontal plane around the sagittal axis.
- C. The rotational movement occurs from medial to lateral.
- D. The movement occurs in the sagittal plane, about the frontal axis.
- E. The movement results in separation of the bony segments.

2. Which of the following statements concerning the structural organisation of the human body are correct?

- 1. An organ is a group of different tissues organised to perform several functions.
- 2. A tissue is a group of cells performing a similar function.
- 3. A system is a group of comparable organs.
- 4. The endocrine system is part of the system of voluntary life.
- 5. The nervous system constitutes a system of voluntary life.

A. 1,3,4. B. 2,3,4. C. 2,3,5 D. 3,4,5 E. 1,2,3

3. Which of the following statements concerning hyaline articular cartilage are correct?

- 1. It is innervated.
- 2. It is avascular.
- 3. It is nourished by diffusion (imbibition).
- 4. Its thickness is identical in all joints.
- 5. Its thickness depends on the mechanical stresses of each joint.

A. 1,2 B. 3,4,5 C. 2,3,4 D. 2,3,5 E. 4,5

4. Which of the following statements concerning synovial fluid are correct?

- 1. It is produced by the fibrous capsule.
- 2. It allows nutrition of the articular cartilage.
- 3. It increases friction.
- 4. It plays a shock-absorbing role.
- 5. It contains air.

A. 1,2,3 B. 2,3 C. 1,4,5 D. 1,2 E. 2,4

5. Synarthroses are characterised by:

- 1. The presence of a joint cavity.
- 2. High mobility.
- 3. Absence of a synovial membrane.
- 4. Absence of movement.
- 5. Gliding movements.

A. 1,2 B. 2,3 C. 3,4 D. 2,5 E. 1,5

6. Amphiarthroses present the following features:

- 1. Absence of a synovial membrane.
- 2. High mobility.
- 3. Union by fibrocartilaginous tissue.
- 4. Include cranial sutures.
- 5. Include the pubic symphysis.

A. 1,3,5 B. 1,4,5 C. 1,3,4 D. 2,3 E. 3,4

7. Which of the following statements concerning circumduction are correct?

1. It is a simple movement.
2. It involves several axes.
3. It exists in ball-and-socket joints.
4. It is impossible at the elbow.
5. It involves a single axis.

A. 1,2 B. 2,3,4 C. 3,4,5 D. 4,5 E. 1,3,5

8. Which of the following statements concerning muscle tissue in humans are correct?

- 1-There are two types of muscle tissue.
- 2-Skeletal muscle is voluntary.
- 3-White muscle is striated.
- 4-Cardiac muscle is involuntary.
- 5-Cardiac muscle is smooth.

A. 1,2,3 B. 1,5 C. 2,3 D. 2,4 E. 4,5

9. Muscle mass represents:

- A. 10% of body weight
- B. 20% of body weight
- C. 30% of body weight
- D. Approximately 40% of body weight
- E. More than 60% of body weight

10. The fixed part of the vertebral column is formed by:

- A. Cervical vertebrae
- B. Lumbar vertebrae
- C. The sacrum and coccyx
- D. Lumbar vertebrae and sacrum
- E. Thoracic vertebrae

11. Which of the following statement concerning the humerus are correct?

- A. The greater tubercle gives attachment to the supraspinatus and teres major muscles.
- B. The greater tubercle gives attachment to the subscapularis muscle.
- C. The humeral head is directed upwards, backwards and medially.
- D. The humeral head is directed upwards, forwards and medially.
- E. The anterior border gives attachment to the coracobrachialis muscle.

12. To correctly orient the ulna:

1. The larger extremity is inferior.
2. The greater articular notch faces anteriorly.
3. The small lateral articular surface faces medially.
4. The small lateral articular surface faces laterally.
5. The larger extremity is superior.

A. 1,2,3 B. 2,4,5 C. 2,3,5 D. 1,3 E. 1,2,4

13. Which statement concerning the ulnar styloid process is correct?

- A. It is located medially and anteriorly to the ulnar head.
- B. It is positioned lower than the radial styloid.
- C. It is subcutaneous.
- D. It does not give attachment to the ulnar collateral ligament of the wrist.
- E. It is located laterally and anteriorly to the ulnar head.

14. The insertion of the anterior ligament of the elbow joint is correct :

- A. On the lateral border of the coronoid process.
- B. On the medial border of the coronoid process.
- C. Below the radial notch of the ulna.
- D. On the lateral part of the capsule.
- E. On the inferior part of the capsule.

15. In the radiocarpal joint, the dorsal radiocarpal ligament inserts on:

1. Triquetrum
 - 2-Capitate
 - 3-Hamate
 - 4-Lunate
 - 5-Pisiform
- A. 1,4,5 B. 1,2,3 C. 3,4,5 D. 1,3,4 E. 1,2,4

16. The palmar radiocarpal ligament inserts on:

- 1-Triquetrum 2-Capitate 3-Hamate 4-Lunate 5-Pisiform
A. 1,4,5 B. 2,3 C. 3,4 D. 1,4 E. 2,4

17. The carpometacarpal joint of the thumb is:

- A. A plane joint B. A ball-and-socket joint C. A hinge joint
D. A condyloid joint E. A saddle joint

18. What are the actions of the teres major muscle?

- A. Adduction and medial rotation of the arm
B. Adduction and lateral rotation of the arm
C. Abduction and medial rotation of the arm
D. Abduction and lateral rotation of the arm
E. Flexion and medial rotation of the arm

19. Which muscle belongs to the superficial layer of the posterior compartment of the forearm?

- A. Abductor pollicis longus B. Extensor carpi ulnaris C. Extensor pollicis longus
D. Extensor pollicis brevis E. Extensor indicis

20. The extensor carpi radialis longus inserts on:

- A. The styloid process of the radius
B. The base of the third metacarpal
C. The base of the second metacarpal
D. The lateral surface of the radius
E. The base of the distal phalanx of the thumb

21. The origin of the deep head of flexor pollicis brevis is:

- A. Tubercle of the trapezium
B. Second and third metacarpals
C. Trapezoid and capitate
D. Trapezoid and hamate
E. Hook of the hamate

22. The action of the pectoralis major muscle is:

- A. Flexion and adduction of the arm
B. Adduction and medial rotation of the arm
C. Abduction and lateral rotation of the arm
D. Flexion and abduction of the arm
E. Pronation and flexion of the forearm

23. Which are collateral branches of the brachial artery?

1. Superior ulnar collateral artery
2. Deep brachial artery
3. Anterior circumflex humeral artery
4. Posterior circumflex humeral artery
5. Tricipital branch
A. 1,2 B. 2,4 C. 3,5 D. 1,3 E. 3,4

24. The deep palmar arterial arch of the hand is formed by the anastomosis between:

- A. The radial artery and the superficial palmar branch of the ulnar artery
B. The ulnar artery and the deep palmar branch of the radial artery
C. The radial artery and the deep palmar branch of the ulnar artery
D. The ulnar artery and the superficial dorsal branch of the ulnar artery
E. The ulnar artery and its superficial palmar branch

25. Which statements concerning the venous system of the upper limb are correct?

1. Superficial veins are subaponeurotic.
2. Superficial veins drain into deep veins.
3. Superficial veins drain directly into the heart.
4. Veins of the limbs lack valves.
5. Nine-tenths of the blood volume flows in deep veins.

A. 1,2 B. 2,5 C. 3,5 D. 1,3 E. 3,4

26. Which statements concerning the brachial cephalic vein are correct?

1. Formed by the union of the median basilic vein and the antebrachial cephalic vein
2. Formed by the union of the median cephalic vein and the antebrachial cephalic vein
3. Runs along the lateral border in the deltopectoral groove
4. Runs along the medial border in the deltopectoral groove
5. Terminates in the brachial vein

A. 1,4 B. 2,4 C. 3,5 D. 1,3 E. 2,3

27. The brachial plexus is formed as follows:

- A. From the last six cervical nerves and the first thoracic nerve
- B. Each primary trunk divides into medial and lateral branches
- C. The posterior cord is formed by all three primary trunks
- D. The medial cord is formed by the superior and middle trunks
- E. The superior trunk arises from C6 and C7

28. Which statement concerning the ulnar nerve is correct?

- A. Its fibres arise from C8 and T1.
- B. Its fibres arise from C7 to T1.
- C. It produces extension of the fingers.
- D. It descends obliquely downward and anteriorly in the arm.
- E. It passes through the carpal tunnel.

29. The medial cutaneous nerve of the arm arises from which root?

- A. C5
- B. C6
- C. C7
- D. C8
- E. T1

30. The sensory territory of the radial nerve includes:

- A. The anterior surface of the arm and lateral forearm
- B. The middle segment of the anterior forearm
- C. The base of the hypothenar eminence
- D. The dorsal surface of the hand lateral to the axis of the third finger, excluding the distal two phalanges of the second and third fingers
- E. The palmar surface of the distal two phalanges of the second and third fingers