

ANATOMY 10 UPPER LIMB

Answering Instructions For This Section

Each of the questions that follows consists of an incomplete statement or question followed by 5 suggested completions or answers. For each question mark the ONE completion or answer which is most appropriate.

1. All of the following are correct except ONE about the humeroulnar joint:
 - A. Is a synovial joint
 - B. Resembles an interphalangeal joint in being a hinge joint
 - C. Shares the joint cavity with the superior radioulnar joint
 - D. Capsule is stronger anteriorly and posteriorly than at the sides
 - E. Triceps is attached to the capsule

2. The cubital fossa is bounded by :
 - A. Triceps
 - B. Biceps
 - C. Coracobrachialis
 - D. Brachioradialis
 - E. Pronator quadratus

3. Which of the following is NOT among the contents of the cubital fossa
 - A. Brachial artery
 - B. Radial nerve
 - C. Ulnar nerve
 - D. Median nerve
 - E. Radial artery

4. Muscles rotating the radius on the ulna
 - A. Pronator teres
 - B. Flexor carpi ulnaris
 - C. Flexor carpi radialis
 - D. Palmaris longus
 - E. Extensor digitorum

5. Concerning the basilic vein
 - A. Arises on the dorsum of the hand
 - B. Always superficial to the brachial fascia
 - C. Unites with the cephalic to form the axillary
 - D. All of the above
 - E. None of the above

6. Pronation
 - A. Depends upon an intact ulnar nerve
 - B. Is a stronger movement than supination
 - C. May be produced by the brachioradialis
 - D. Is dependent upon the integrity of C8
 - E. Is dependent upon an intact radial nerve

7. The wrist joint
 - A. Has strong radio-scaphoid ligaments
 - B. Is directly related to extensor pollicis longus
 - C. Has little or no rotation
 - D. Has a synovial cavity usually continuous with the mid-carpal joint
 - E. Has the flexor retinaculum attached to its distal joint margin

8. The wrist joint
 - A. Has a synovial cavity continuous with that of the inferior radio-ulnar joint
 - B. Has a synovial cavity which is usually continuous with that of the midcarpal joint
 - C. Permits a considerable amount of flexion, extension, abduction and adduction but little rotation
 - D. Has the distal (articular) surface of the radius facing distally, medially, and dorsally
 - E. Has the flexor retinaculum anterior to it

9. Which of the following is NOT in the proximal row of carpal bones
 - A. The scaphoid
 - B. The lunate
 - C. The triquetrum
 - D. The pisiform
 - E. The trapezium

10. The flexor retinaculum crosses the
 - A. Tendon of palmaris longus
 - B. Tendon of biceps brachii
 - C. Ulnar nerve
 - D. Radial nerve
 - E. Median nerve

11. The carpal tunnel contains
 - A. The flexor carpi ulnaris tendon
 - B. The ulnar artery
 - C. The radial artery
 - D. The deep branch of the ulnar nerve
 - E. None of the above

12. Which of the following is NOT true of the palmar aponeurosis
 - A. Is attached to skin of the palm by the fibrous septa
 - B. Is attached distally to the fibrous flexor sheaths
 - C. Protects the underlying tendons
 - D. Receives tendon of palmaris longus
 - E. Apex is attached to the flexor retinaculum

13. The margins of the middle phalanx of the index finger gives attachment to
 - A. The tendon of flexor digitorum profundus
 - B. The deep transverse metacarpal ligament
 - C. The fibrous flexor sheath
 - D. Vincula of the synovial sheath
 - E. None of the above

14. Palmar interossei
 - A. Abduct the index finger
 - B. Inserts into the extensor expansion of digits
 - C. Are supplied by the median nerve
 - D. Adducts the 3rd digit
 - E. Flexors the middle phalanges of digits

15. Palmar interossei
 - A. Are more powerful than the dorsal interossei
 - B. Inserted into the proximal phalanx of the respective finger
 - C. The 2nd palmar interossei is innervated by the median nerve
 - D. The main function is to adduct the fingers
 - E. Abducts the proximal interphalangeal joint thumb

16. The humerus ossifies in such a way that
 - A. Ossification commences in the shaft at the 6th intrauterine month
 - B. Ossification occurs in the lower and before the upper
 - C. Ossification appears in the medial condyle before the lateral
 - D. More growth occurs at the lower than the upper end
 - E. The upper epiphysis joins independently with the shaft

17. The ulna
 - A. Has a transverse ridge or groove in the trochlear notch resulting from fusion of the olecranon epiphysis with shaft
 - B. The inferior articular facet of the ulna articulates with the triquetrum
 - C. The ulnar collateral ligament of the elbow is attached to the tubercle of the ulna
 - D. The triceps tendon is attached to the whole of the superior surface of the olecranon
 - E. The lower epiphyseal line is within the capsular attachment

18. Features of ossification on the upper limb include
 - A. Enchondral ossification of the clavicle
 - B. Single secondary centre of ossification within the upper humeral epiphysis
 - C. Ossification of the root of the coracoid process form primary centre for the body of the scaphoid
 - D. Ossification of the proximal row of the carpus before birth
 - E. None of the above

19. The earliest bone to ossify is
 - A. The radius
 - B. The ulna
 - C. The clavicle
 - D. The humerus
 - E. The mandible

Answering Instructions For This Section

The questions that follow consist of an assertion or statement (S) and a reason (R). For each question select the appropriate response as follows:

- Mark (A) if S is correct, R is correct and is a valid explanation of S,
- Mark (B) if S is correct, R correct but is NOT a valid explanation of S,
- Mark (C) if S is correct but R is incorrect,
- Mark (D) if S is incorrect but R is correct,
- Mark (E) if S is incorrect and R is incorrect.

20.

The extensor digitorum is a comparatively weak extensor of the interphalangeal joints
BECAUSE
most of the pull of the extensor digitorum is extended on the metacarpophalangeal joints.

21.

Supination is usually a more powerful movement than pronation
BECAUSE
Supination is in part produced by contraction of the powerful biceps brachii muscle

22.

Grasping is stronger in the supinated forearm
BECAUSE
the flexor tendons are more stretched in this position

23.

Extension of the wrist is still possible after division of the posterior interosseous nerve at its origin
BECAUSE
the nerve supply to the extensor carpi radialis longus remains intact

24.

Precision grip depends partly on the integrity of the ulnar nerve
BECAUSE
the ulnar nerve innervates most of the small muscles of the hand

25.

Power grip depends upon the activity of the adductor pollicis
BECAUSE
the thumb is functionally the most important digit

Answering Instructions For This Section

Incomplete statements or questions are followed by 4 suggested answers or completions of which ONE or MORE THAN ONE is correct. Answer each true or false.

26. The nerve supply to the elbow joint is
1. Musculocutaneous
 2. Ulnar

3. Median
 4. Radial
27. The elbow joint:
1. Is lined by synovial membrane which is continuous with that of the superior radioulnar joint
 2. Is strengthened by radial and ulnar collateral ligaments
 3. Owes most of its stability to the close proximity of the brachialis and triceps
 4. Is supplied by the posterior interosseous nerve
28. Extensors of the elbow joint are;
1. Anconeus
 2. Brachioradialis
 3. Triceps
 4. Extensor carpi ulnaris
29. The cubital fossa
1. Is a quadrilateral space situated in front of the elbow
 2. Is floored by the bicipital aponeurosis
 3. Contains the median nerve
 4. Contains the radial nerve
30. The bicipital aponeurosis passes obliquely over the :
1. Brachial artery
 2. Radial nerve
 3. Long thoracic nerve
 4. Cephalic vein
31. The radial head of flexor digitorum superficialis:
1. Is supplied by the radial nerve
 2. Provides the tendon to the index finger
 3. Is superficial to the radial artery
 4. Arises from the upper part of the anterior border of the radius
32. The flexor digitorum sublimus arises from:
1. Anterior oblique line of radius between attachments of flexor pollicis longus and supinator
 2. Anterior fibrous cord of ulnar collateral ligament
 3. Intramuscular septa
 4. Antebrachial fascia of forearm
33. The flexor digitorum superficialis muscle
1. Arises from both radius and ulna
 2. Lies deep to the median nerve
 3. Has 4 tendons in the hand, which encircle the corresponding tendons of flexor digitorum profundus of the fingers
 4. Is attached distally to the base of the distal phalanx
34. The superficial group of forearm muscles
1. All arise from the anterior surface of the lateral epicondyle of the humerus

2. Includes pronator teres
 3. Are all supplied by branches of median nerve
 4. May effect flexion at the elbow
35. The flexor carpi radialis muscle
1. Is a flexor of the 2nd and 3rd metacarpo-pharyngeal joints
 2. Is an abductor of the wrist
 3. Is supplied by the median nerve
 4. Grooves the trapezoid bone
36. The brachioradialis muscle
1. Arises from the lower 1/2 of humerus
 2. Inserts in the distal end of radius
 3. Is a flexor of the elbow joint
 4. Is supplied by the median nerve
37. The extensor carpi ulnaris
1. Is supplied by the ulnar nerve
 2. Is inserted in the 5th metacarpal bone
 3. Produces wrist adduction principally at the midcarpal joint
 4. Takes partial origin from the oblique line of the ulna
38. Actions of the extensor carpi ulnaris
1. Abducts the hand ulnarwards
 2. Extends the 5th metacarpal
 3. Both
 4. Neither
39. The extensor carpi radialis longus
1. Is supplied by the deep branch of the radial nerve
 2. Is inserted into the base of the 3rd metacarpal bone
 3. Lies superficial to the tendon of abductor pollicis longus
 4. Arises from the lateral supracondylar ridge
40. The extensor digitorum muscle
1. Is attached proximally to the anterior aspect of the lateral condyle of the humerus
 2. Covers the proximal phalanges by dorsal expansions of its 4 tendons
 3. Is attached to the bases of the proximal phalanges of the 4 fingers
 4. Has small tendinous slips to the dorsal expansion from the lumbrical and interosseus muscles
41. Supinator muscle
1. Forms part of the floor of the cubital fossa
 2. Is attached to the medial condyle of the humerus
 3. Is attached to the upper end of the ulna
 4. Is supplied by the ulnar nerve
42. The abductor pollicis longus
1. Partly arises from the ulna below the attachment of anconeus
 2. Is usually inserted in the trapezium
 3. May become continuous with abductor pollicis brevis at its insertion

4. Is supplied in part by the posterior interosseus nerve
43. The extensor pollicis longus muscle;
 1. Is attached to the interosseous membrane
 2. Passes deep to the extensor retinaculum
 3. Has a synovial sheath common with that of the extensor indicis
 4. Is attached to the base of the distal phalanx of the thumb
 44. The abductor pollicis longus muscle
 1. Is attached to the interosseous membrane
 2. Is attached to the base of the proximal phalanx of the thumb
 3. Produces extension at the thumb's carpo-metacarpal joint
 4. Possesses a separate synovial sheath around its tendon
 45. Extension of the thumb is aided by:
 1. Abductor pollicis brevis
 2. First palmar interosseous
 3. Abductor pollicis longus
 4. 1st dorsal interosseous
 46. The ulnar artery
 1. Passes superficial to the flexor reticulum
 2. Lies on the flexor profundus
 3. Forms the superficial palmar arch
 4. Passes between the two heads of pronator teres
 47. Branches of the radial artery at the wrist are;
 1. 1st dorsal metacarpal
 2. 2nd dorsal metacarpal
 3. 3rd dorsal metacarpal
 4. All of the above
 48. The radial artery
 1. Passes superficial to brachioradialis
 2. Lies on the anterior surface of the lower end of the radius
 3. Passes between the two heads of the first interosseus muscle
 4. Terminates in the superficial palmar arch
 49. The ulnar artery
 1. Lies deep to the muscle attached to the common flexor origin
 2. Lies medial to the ulnar nerve
 3. Crosses superficial to the flexor reticulum
 4. Supplies the deep extensor muscles of the forearm
 50. Branches of the ulnar artery in the forearm
 1. Anterior ulnar recurrent
 2. Common interosseous
 3. Muscular
 4. Palmar carpal

51. Branches of the ulnar artery in the forearm
 1. Common interosseous
 2. Superficial volar
 3. Both
 4. Neither

52. Anastomoses of branches of the brachial artery:
 1. Volar ulnar recurrent and superior ulnar collateral
 2. Radial recurrent and radial collateral
 3. Both
 4. Neither

53. Relations of the ulnar artery at the wrist
 1. Lies on the flexor retinaculum
 2. Pisiform bone on its medial side
 3. Ulnar nerve dorsal to artery
 4. Covered by palmar carpal ligament

54. Arterial tributaries of the deep volar arch
 1. Princeps pollicis
 2. Volar indicis radialis
 3. Both
 4. Neither

55. The cephalic vein
 1. Crosses the anatomical “snuffbox”
 2. Ascends on the ulna border of the forearm
 3. Pierces the deltopectoral triangle
 4. Ends in the basilic vein

56. The basilic vein
 1. Arises on the dorsum of the hand
 2. Joins the internal jugular vein
 3. Accompanies the median antebrachial cutaneous nerve in the forearm
 4. Is a deep vein

57. Included amongst the deep veins of the upper extremity
 1. Cephalic
 2. Basilic
 3. Axillary
 4. Subclavian

58. Tributaries of the axillary vein
 1. Thoracic epigastric
 2. Costoaxillary
 3. Cephalic
 4. Right brachiocephalic

59. Superficial veins of the upper extremity
 1. Do not accompany arteries

2. Communicates with deep veins
 3. Are larger than the deep veins
 4. Do not have valves
60. The proximal radioulnar joint
1. Is of the condyloid variety
 2. Occurs between the head of the radius and the radial notch of the ulna
 3. Is stabilised mainly by the surrounding capsular ligament of the elbow joint
 4. Owes its stability mainly to the annular ligament
61. Muscles acting on the radioulnar joints
1. Pronator quadratus
 2. Pronator teres
 3. Flexor carpi radialis
 4. Biceps
62. The distal radio-ulnar joint
1. Is a synovial point of the pivot variety
 2. Owes its stability mainly to the capsular ligament
 3. With the superior joint, allows both supination and pronation to occur
 4. Pronation is a powerful movement because of the action of biceps
63. The wrist joint:
1. Comprises of the lower articular surfaces of the radius and ulna
 2. Usually communicates with the distal radiocarpal joint
 3. Owes its stability to the neighbouring tendons
 4. Is an elipsoid joint
64. Articulating surfaces of the wrist joint
1. Proximal surface of pisiform
 2. Head of ulna
 3. Distal surface of scaphoid
 4. Distal surface of radius
65. The nerve supply to the wrist articulation
1. Deep branch of the ulnar
 2. Anterior interosseous of the median
 3. Radial recurrent of the musculocutaneous
 4. Posterior interosseous of the median
66. The anatomical snuff box
1. Is bounded anteriorly by the tendons of extensor pollicis longus and brevis
 2. Is bounded posteriorly by the tendon of abductor pollicis longus
 3. Overlies the scaphoid and trapezium
 4. Contains the tendons of extensor carpi radialis longus and brevis on its floor
67. The carpal bones
1. Are arranged into the proximal, middle and distal rows
 2. Which form the distal articular surface of the wrist joint are the scaphoid, lunate and pisiform

3. Give attachment to the flexor retinaculum
 4. Give attachment to the extensor retinaculum
68. The trapezium articulates with the
1. Trapezoid
 2. Pisiform
 3. Radius
 4. Scaphoid
69. Carpal bones in the distal row
1. Scaphoid
 2. Lunate
 3. Capitate
 4. Pisiform
70. The pisiform articulates with
1. Triquetrum
 2. Lunate
 3. Scaphoid
 4. Capitate
71. The 2nd metacarpal articulates with
1. Trapezium
 2. Lunate
 3. Capitate
 4. Hamate
72. The metacarpal bone of
1. The thumb gives attachment to the interossei
 2. The thumb articulates with the trapezium
 3. The thumb gives attachment to flexor pollicis brevis
 4. The index finger articulates with those of the thumb and middle fingers
73. The metacarpophalangeal joints
1. Are synovial joints of the hinge variety
 2. Of the 4 medial digits are bound together
 3. May be abducted by the dorsal interossei
 4. May be adducted by the palmar interossei
74. The following structures cross superficial to the flexor retinaculum
1. The palmar branch of the median nerve
 2. The ulnar nerve
 3. The tendon of palmaris longus
 4. The ulnar artery
75. Which of the following structures pass deep to the flexor retinaculum
1. The radial artery
 2. The ulnar artery
 3. The ulnar nerve
 4. The median nerve

76. Which of the following structures pass deep to the flexor retinaculum
1. The ulnar artery
 2. The superficial palmar branch of the radial artery
 3. The dorsal branch of the ulnar nerve
 4. The medial nerve
77. The muscles of the thenar eminence
1. Are all attached to the radial side of the flexor retinaculum
 2. Are all supplied by the radial nerve
 3. Have abductor pollicis brevis lying most superficially
 4. Are all attached distally to the 1st metacarpal bone
78. The palmar aponeurosis
1. Is strengthened deep fascia
 2. Is firmly attached to palmar skin
 3. Is continuous proximally with the flexor retinaculum
 4. Distally is continuous with the long flexor tendons
79. Structures crossing superficial to the flexor retinaculum
1. Flexor pollicis longus muscle
 2. Ulnar nerve
 3. Median nerve
 4. Superficial palmar branch of the radial artery
80. The carpal tunnel
1. Is a fibrous tunnel formed by carpal bones and palmar aponeurosis
 2. Contains the tendons of the flexor digitorum superficialis
 3. Compression of the nerve in the tunnel causes sensory loss on the palmar surface of the index finger
 4. Contains portion of the ulna bursa
81. Extension of the thumb is aided by
1. Extensor pollicis brevis
 2. Abductor pollicis brevis
 3. Abductor pollicis brevis
 4. 1st dorsal interosseus
82. Extension of the thumb is aided by
1. 1st lumbrical
 2. 1st palmar interosseous
 3. 1st dorsal interosseous
 4. Abductor pollicis longus
83. Muscles situated superficial to the thenar fascia
1. Abductor pollicis brevis
 2. Opponens pollicis
 3. Both
 4. Neither

84. The abductor pollicis longus
1. Partly arises from the ulnar below the attachment of anconeus
 2. Is partly inserted into the trapezium
 3. May become continuous with abductor pollicis brevis
 4. Is supplied by the posterior interosseous nerve
85. The skin of the ring finger is supplied by
1. Ulnar and radial nerves
 2. Radial and median nerves
 3. Median and ulnar nerves
 4. Median nerve only
86. The palmar digital nerves are derived from
1. The median nerve
 2. The ulnar nerve
 3. The radial nerve
 4. Lateral cutaneous nerve
87. Nerve supply to the dorsum of the hand
1. Radial
 2. Ulnar
 3. Median
 4. Musculocutaneous
88. The innervation of the lumbricals parallels that of
1. Flexor digitorum superficialis
 2. Flexor digitorum profundus
 3. The interossei
 4. The two flexor carpi muscles
89. The lumbrical muscles
1. Are all attached to a tendon of flexor digitorum superficialis
 2. Have each a tendon winding round the ulnar side of the corresponding metacarpophalangeal joint
 3. Are all supplied by the median nerve
 4. Produce flexion at the metacarpophalangeal joints of the finger and extension at their interphalangeal joints
90. The interossei and lumbrical muscles
1. Flex the interphalangeal and extends the metacarpophalangeal joints
 2. Flexes both interphalangeal and metacarpophalangeal joints
 3. Flexes the distal interphalangeal and extends the proximal interphalangeal joints
 4. Extends the interphalangeal and flexes metacarpophalangeal joints
91. The actions of the palmar and dorsal interosseous muscles include
1. Abduction of the fingers
 2. Extension of the proximal phalanges
 3. Adduction of the fingers
 4. Flexion of the middle and distal phalanges

92. The interossei muscles
1. Are 8 in number
 2. All arise from 2 heads from adjacent metacarpal bones
 3. Are all attached distally to the base of the corresponding proximal phalanx and the dorsal extensor expansion
 4. May extend the middle and distal phalanges
93. The interossei inserted into the 2nd finger
1. Second palmar
 2. Second dorsal
 3. Third palmar
 4. Third dorsal
94. The palmar muscle spaces
1. Are 2 in number
 2. Are each deep to the palmar aponeurosis
 3. Contain thenar muscles
 4. Contain the lumbrical muscles
95. The ulnar bursa
1. Invests all but one of the tendons of the superficial and deep flexors in the forearm
 2. Begins deep to the flexor retinaculum
 3. Extends into the digital synovial sheaths around the tendons of all fingers
 4. Does not communicate with the radial bursa
96. Digital synovial sheaths generally continuous with the ulnar bursa
1. Index finger
 2. Middle finger
 3. Ring finger
 4. Little finger
97. The fibrous flexor digital sheaths
1. Are modifications of the deep fascia of the fingers
 2. Are attached to the phalanges
 3. Overlie the 1st phalanges only
 4. Enclose the tendons of flexor digitorum profundus only
98. The upper end of the humerus
1. Has the subscapular muscle attached to the greater tuberosity
 2. Has 3 epiphyses which fuse separately with the shaft
 3. Has the capsular ligament attached to the whole of the anatomical neck
 4. Is the growing end of the humerus
99. The shaft of the humerus
1. Has the lateral head of triceps attached to its upper posterior part
 2. Has the radial nerve posterior to it
 3. Has the capsular ligament attached to its anterior surface
 4. Has the diaphysis extending to the elbow joint
100. Muscles attached to the medial epicondyle of the humerus

1. Flexor carpi ulnaris
2. Pronator quadratus
3. Palmaris longus
4. Flexor pollicis longus

101. Muscles associated with the greater tubercle of the humerus include

1. Supraspinatus
2. Infraspinatus
3. Teres major
4. Teres minor

102. Which of the following structures is not attached to the coracoid process of the scapula

1. Short head of biceps
2. Subclavius muscle
3. Pectoralis minor
4. Conoid ligament

103. The scapula

1. Has its acromial process separated from the supraspinatus tendon by the subdeltoid bursa
2. Has its inferior angle at the level of the spine of the 9th thoracic vertebra
3. Has a glenoid cavity which is directed slightly forwards as well as laterally
4. Gives attachment to the long head of biceps from the tip of the coracoid process

104. The scapula has

1. A palpable inferior angle overlying the 7th rib
2. A costal surface divided by a projecting spine into supra and infra spinous fossa
3. A coracoid process giving attachment to biceps
4. A glenoid cavity with long head of biceps attached below

105. Muscles attached to the inferior angle of scapula

1. Serratus anterior
2. Teres major
3. Rhomboideus major
4. Deltoid

106. Attached to the styloid process of the ulna

1. Ulnar collateral ligament of wrist joint
2. Pronator teres
3. Both
4. Neither

107. The radius

1. Has the upper part of its neck partially surrounded by the annular ligament
2. Has its joint with the head of the ulna separated from the radiocarpal joint by an articular disc
3. Has carpal articular surfaces for the lunate and the scaphoid bones
4. Makes contact with the deep branch of the radial nerve (posterior interosseous nerve)

108. Muscles originating from the radius

1. Biceps

2. Supinator
3. Pronator quadratus
4. Flexor pollicis longus

109. The radius

1. Possesses a head which articulates with the scaphoid and lunate
2. Gives attachment to the triceps tendon
3. Possesses a palpable styloid process
4. Is attached to the ulna throughout the length of its interosseous border

110. Joints containing intra-articular fibrocartilage

1. Sternoclavicular
2. Acromioclavicular
3. Wrist
4. First carpo-metacarpal joint

111. The characteristic “roundness” of the shoulder is due to

1. The acromion process of the scapula
2. The coracoid process of the scapula
3. Both
4. Neither

112. In relation to the carpus

1. Ossification begins in the capitate and hamate and ends in the pisiform
2. The flexor retinaculum is attached medially to the triquetrum and hamate
3. The range of extension at the radiocarpal joint is greater than the range of flexion
4. The tubercle of the scaphoid lies medial to the tendon of the flexor carpi radialis

Answers: Anatomy 10, Upper Limb

1	D	41	TFTF	81	TFTF
2	D	42	TTTT	82	FFFT
3	D	43	TTFT	83	FFFT
4	A	44	TFTT	84	TTTT
5	A	45	FFTF	85	FTTF
6	C	46	TTTF	86	TTFE
7	C	47	TFFF	87	TTTF
8	C	48	FTTF	88	FTFF
9	E	49	TFTT	89	FFFT
10	C	50	TTTT	90	FFFT
11	E	51	TFFF	91	TFTF
12	E	52	FTFF	92	TFTT
13	C	53	TTTT	93	FTFT
14	B	54	FFTF	94	FFTT
15	B	55	TFTF	95	TFFT
16	C	56	TFTF	96	FFFT
17	C	57	FFTT	97	TTFE
18	E	58	TTTF	98	FFFT
19	C	59	TTTF	99	TTTF
20	A	60	FTFT	100	TFTF
21	A	61	TTTT	101	TFTT
22	A	62	TFTF	102	FTFF
23	A	63	FFTT	103	TFTF
24	D	64	FFFT	104	TFTT
25	D	65	FTFF	105	TTTF
26	TTTT	66	FFTT	106	TFFF
27	TTFT	67	FFTT	107	TTTT
28	TFTF	68	TFFT	108	FFFT
29	FFTT	69	FFTF	109	FFTT
30	TFFF	70	TFFF	110	TTTF
31	FTFT	71	TFTF	111	FFFT
32	TTTF	72	TTFE	112	TFTF
33	TFTF	73	FTTT		
34	FTFT	74	TTTT		
35	FTTF	75	FFFT		
36	TTTF	76	FFFT		
37	FTFT	77	TFTF		
38	TTFE	78	TTTF		
39	FFFT	79	FTFT		
40	TTFT	80	FTTT		

ANATOMY 5

UPPER LIMB

Each of the questions that follows consists of an incomplete statement or question followed by 5 suggested completions or answers. For each question mark the ONE completion or answer which is most appropriate.

1. The earliest bone to ossify is:
 - A) Radius
 - B) Ulna
 - C) Clavicle
 - D) Humerus
 - D) Mandible

2. Muscles associated with the greater tuberosity of the humerus include:
 - A) Deltoid
 - B) Latissimus Dorsi
 - C) Teres Major
 - D) Teres Minor
 - E) Subscapularis

3. The humerus ossifies from centres:
 - A) 4
 - B) 5
 - C) 6
 - D) 7
 - E) 8

4. The muscle pair most important in elevating the arm is:
 - A) Trapezius and pectoralis minor
 - B) Scapulae and serratus anterior
 - C) Rhomboid major and serratus anterior
 - D) Rhomboid major and levator scapulae
 - E) Trapezius and serratus anterior

5. The nutrient artery to the shaft of the humerus arises from:
 - A) Ulna collateral a.
 - B) Profunda a.
 - C) Brachial a.
 - D) Posterior circumflex a.
 - E) None of the above

6. The radial artery in the forearm crosses all of the following muscles except:
 - A) Flexor profundus digitorum
 - B) Flexor pollicis longus
 - C) Supinator
 - D) Pronator Teres
 - E) Flexor sublimis digitorum (superficialis)

7. Which of the following do not lie beneath the extensor retinaculum at the wrist:
- A) Brachioradialis
 - B) Abductor pollicis longus
 - C) Posterior interosseous nerve
 - D) Extensor indicis
 - E) Extensor carpi ulnaris
8. Flexor carpi radialis:
- A) Lies lateral to pronator teres
 - B) Has a separate synovial sheath beneath the flexor reticulum
 - C) Supplied by radial nerve
 - D) Grooves scaphoid
 - E) None of the above
9. Which of the following pass through the quadrilateral space?
- A) Circumflex scapular artery
 - B) Nerve to lateral head of triceps
 - C) Radial nerve
 - D) Profunda artery
 - E) Posterior humeral circumflex vessels
10. The suprascapular nerve arises from which portion of the brachial plexus?
- A) Upper trunk
 - B) Ventral roots C5 and C6
 - C) Ventral division of upper trunk
 - D) Dorsal division of upper trunk
 - E) In common with lateral cord
11. The lymphatic drainage of the breast:
- A) Is entirely to the axillary nodes
 - B) Follows the arterial supply
 - C) Follows the superior epigastric vessels
 - D) Is mainly through the internal mammary nodes
 - E) Has a significant drainage through the opposite breast
12. The groove on the superior surface of the first rib has most intimate relation with:
- A) Subclavian vein
 - B) Scalenus pleuralis
 - C) Subclavian artery
 - D) Lower trunk of the brachial plexus
 - E) Dorsal chord of brachial plexus
13. Disruption of the brachial plexus at Erb's point typically produces a complete paralysis of:
- A) Pectoralis major
 - B) Pectoralis minor
 - C) Brachioradialis
 - D) Supinator
 - E) Pronator Teres

14. Which structure does not pierce the costo-coracoid membrane:
- A) Acromio-thoracic artery
 - B) Cephalic vein
 - C) Medial pectoral nerve
 - D) Lymphatics
 - E) Lateral pectoral nerve
15. The brachial artery :
- A) Commences at the upper border of teres major
 - B) Is in direct contact with humerus
 - C) Lies lateral to biceps tendon
 - D) Is readily compressible
 - E) Is accompanied throughout by basilie vein
16. The radial nerve:
- A) Gives a branch to extensor carpi radius brevis and brachialis above the elbow
 - B) Has a posterior cutaneous branch to the forearm which is given off in the axilla
 - C) Passes deep to brachioradialis and superficial to the snuff box tendons
 - D) Has a posterior interosseous branch which only supplies muscle
 - E) Supplies flexor carpi radialis
17. Movement possible at the finger inter-phalangeal joints:
- A) Abduction
 - B) Adduction
 - C) Flexion
 - D) Circumduction
 - E) Rotation
18. Simple pronation:
- A) Requires an intact radial nerve
 - B) Requires an intact C8 nerve root
 - C) Occurs without movement of the ulna
 - D) Occurs about an axis which runs along the shaft of the radius
 - E) Requires the action of anconeus
19. Actions of Latissimus Dorsi:
- A) Flexes humerus
 - B) Laterally rotates humerus
 - C) Abducts humerus
 - D) All of above
 - E) None of above
20. Flexor carpi radialis:
- A) Supplied by radial nerve
 - B) Pierces flexor retinaculum
 - C) Can act as a pronator
 - D) Synergist with finger flexors
 - E) Insertion extends to thumb

21. Usual number of branches of the Median nerve in the upper arm:
- A) 0
 - B) 1
 - C) 3
 - D) 4
 - E) 6
22. Muscle supinating the forearm :
- A) Anconeus
 - B) Biceps
 - C) Brachialis
 - D) Extensor carpi ulnaris
 - E) All of the above
23. Basilic vein:
- A) Arises on dorsum of hand
 - B) Always superficial to deep fascia
 - C) Unites with cephalic to form axillary vein
 - D) All of above
 - E) None of above
24. The “roundness” of the normal shoulder is due to :
- A) Acromion process
 - B) Coracoid process
 - C) Outer end of clavicle
 - D) None of the above
 - E) All of the above
25. The fifth cervical nerve root is concerned mainly with:
- A) Pronation
 - B) Wrist extension
 - C) Elbow extension
 - D) Medial rotation of shoulder
 - E) None of the above
26. Pronator teres:
- A) Gains attachment to ulna
 - B) Superficial to radial artery
 - C) Deep to median nerve
 - D) Sometimes supplied by ulna nerve
 - E) Can flex wrist
27. Branches of the radial artery in the forearm:
- A) Comes nervi mediani
 - B) Anterior interosseous
 - C) Posterior interosseous
 - D) All of above
 - E) None of above

28. Humerus:
- A) Nowhere has radial nerve indirect contact
 - B) Gives origin to Abductor pollicis longus
 - C) Proximal epiphysis unites later than distal
 - D) Is normally shorter than radius
 - E) Has only transversally directed trabeculae in head
29. After division of the ulna nerve at the wrist sensory loss will be noted over the:
- A) Thumb
 - B) Index and middle fingers
 - C) Ring and little finger
 - D) All of above
 - E) None of above
30. If the Brachial artery is ligated:
- A) No collateral circulation can be established
 - B) Collateral circulation is possible only if ligation is below the level of the superior ulnar collateral artery
 - C) Collateral circulation is possible if ligation is above the level of the superior ulnar collateral artery
 - D) Immediate amputation is necessary
 - E) Amputation of the fingers only is necessary
31. The radial nerve:
- A) Contains no fibres from C5 and C6
 - B) Passes through the Quadrilateral space
 - C) Does not supply extensor carpi ulnaris
 - D) Supplies Supinator muscle
 - E) Has no sudomotor fibres within it
32. The musculo-cutaneous nerve:
- A) Supplies Brachioradialis
 - B) Terminates as posterior interosseous nerve
 - C) Arises from the lateral cord of the brachial plexus
 - D) Always supplies all of Brachialis muscle
 - E) Contains fibres from C5, 6, 7 and 8
33. The nerve in closest relation to the shoulder joint is the
- A) Radial
 - B) Median
 - C) Axillary
 - D) Musculocutaneous
 - E) Lateral pectoral

34. Which of the following lies immediately medial to the tubercle of the radius (Lister's tubercle):
- Extensor carpi ulnaris
 - Extensor carpi radius
 - Extensor pollicis longus
 - Extensor pollicis brevis
 - Extensor communis digitorum
35. Nerve supply to the palmaris brevis muscle:
- Palmar branch of median
 - Recurrent branch of median
 - Deep branch of ulna
 - Superficial branch of ulna
 - None of the above
36. Interossei muscles in the hand:
- Flex the interphalangeal joints
 - Assist in extension of metacarpo-phalangeal joints
 - Usually supplied by the ulna nerve
 - Cannot laterally deviate the middle finger
 - The palmar interossei have two heads of origin
37. Almost exclusively supplied by the median nerve:
- Adductor pollicis
 - Abductor pollicis brevis
 - Opponeus pollicis
 - Flexor pollicis brevis
 - None of the above
38. In abduction of the arm:
- The clavicle remains fixed
 - The scapula retracts (adducts)
 - Scapular movement is at first more rapid than movement of the humerus
 - The scapula rotates medially (downwards)
 - The medial end of the clavicle moves downwards on the articular disc
39. In abduction of the arm :
- The clavicle remains fixed
 - The scapula moves dorsally on the chest wall
 - Scapular movement is at first more rapid than movement of the humerus
 - The medial end of the clavicle moves downwards on the intra-articular disc
 - Medial rotation of the humerus occurs
40. The brachial artery:
- Commences at the upper border of Teres Major
 - Is in direct contact with the humerus
 - Has biceps tendon medial to it
 - Is readily compressible
 - Is accompanied throughout by Basilic vein

41. The wrist (radio-carpal) joint:
- A) Has a synovial cavity continuous with the inferior radio-ulna joint
 - B) Has a synovial cavity continuous with the mid-carpal joint
 - C) Permits a considerable amount of flexion, extension, abduction and adduction but little or no rotation
 - D) Has the articular surface of the radius facing distally, medially, and dorsally
 - E) Has a flexor retinaculum anterior to it
42. The median nerve:
- A) Lies medial to palmaris longus
 - B) Does not supply the first dorsal interosseous
 - C) Passes deep to both heads of pronator teres
 - D) Has constant and important interchange of nerve fibres with the musculo-cutaneous nerve
 - E) Supplies that portion of flexor profundus digitorum which will move the index and middle fingers
43. First dorsal interosseous muscle:
- A) Adducts index finger
 - B) Adducts the thumb
 - C) Sometimes supplied by median nerve
 - D) All of above
 - E) None of above
44. The radial nerve;
- A) Contains fibres derived from only the sixth, seventh and eighth cervical root nerves
 - B) Passes in front of the humerus from the medial to the lateral side
 - C) Supplies the skin on the dorsum of the little finger
 - D) Supplies sensory branches to the nail beds of index and middle fingers
 - E) Is the only nerve supplying triceps muscle
45. The female breast:
- A) Does not extend over serratus anterior
 - B) Has a separate duct for each lobe opening on to the nipple
 - C) Receives the great part of its blood supply from the mammary artery
 - D) Drains lymph mainly directly to the infra-clavicular lymph nodes
 - E) Is developmentally a collection of modified sebaceous glands
46. The flexor sublimis digitorum:
- A) Is essential for full finger flexion
 - B) Has tendons in one plane at the wrist
 - C) Is supplied by both median and ulna nerves
 - D) Has communication with the extensor apparatus by way of the lumbricals
 - E) Has the median nerve attached to its dorsal sheath

47. If the ulna is cut at the elbow:
- A) Part of the flexor digitorum sublimis is paralysed
 - B) There is a loss of sensation on the back of the index finger
 - C) Flexion at the metacarpophalangeal joints of the ring and little finger is lost if their interphalangeal joints are kept extended
 - D) The distal phalanges of all the fingers are extended
 - E) Opposition of the limb is usually lost
48. The cephalic vein:
- A) Arises in the region of the anatomical snuff box
 - B) At the elbow is deep to the lateral cutaneous nerve at the forearm
 - C) Terminates by joining the brachial vein
 - D) Is medial to biceps in the arm
 - E) Has no valves
49. The upper end of the humerus:
- A) Has the subscapularis muscle attached to the greater tuberosity
 - B) Has teres major muscle attached to the floor of the bicep groove
 - C) Has three epiphyses which fuse separately with the shaft
 - D) Has the capsular ligament of the shoulder joint attached to the whole of the anatomical neck
 - E) Is the growing end of the humerus
50. In the antecubital fossa:
- A) The ulna nerve is on the medial side
 - B) The radial nerve is on the lateral side
 - C) The median nerve is lateral to the brachial artery
 - D) All the superficial veins are deep to the cutaneous nerves
 - E) The brachial artery is lateral to the tendon on biceps

Answering Instructions For This Section

The questions that follow consist of an assertion or statement (S) in the left-hand column and a reason (R) in the right-hand column. For each question select the most appropriate response as follows:

Mark (A) if S is correct, R is correct and is a valid explanation of S,
 Mark (B) if S is correct, R correct but is NOT a valid explanation of S,
 Mark (C) if S is correct but R is incorrect,
 Mark (D) if S is incorrect but R is correct,
 Mark (E) if S is incorrect and R is incorrect.

51.

The distal end of the ulna articulate with the carpal bones

BECAUSE

the inferior radioulnar joint communicates with the radiocarpal joint

52.

The carpal scaphoid is likely to become ischaemic following a fracture of its waist
BECAUSE
the blood vessels entering its dorsal surface are unevenly distributed from proximal to distal

53.

The biceps brachii is most powerful supinator of the forearm
BECAUSE
Its tendon rotates through ninety as it approaches its insertion

54.

The lateral pectoral nerve does not supply pectoralis minor
BECAUSE
the nerve pierces the costo-coracoid membrane

55.

In the carpal tunnel syndrome the sensation over the thenar eminence is not altered
BECAUSE
the thenar eminence is mostly supplied by the radial nerve

56.

In performing a phrenic crush operation in the neck, the long thoracic nerve is easily mistaken for the phrenic
BECAUSE
both nerves lie anterior to the brachial plexus in close relation to scalenus anterior

57.

The dorsal division of the lower trunk of the brachial plexus is the smallest of the dorsal divisions
BECAUSE
virtually all the orthosympathetic fibres to the upper limb run with the ventral division

58.

The midpalmar space is found between the palmar aponeurosis and the flexor tendon sheaths
BECAUSE
the midpalmar space forms a bursa between the tendon sheaths and the more superficial tissues

59.

A cervical rib may produce thoracic outlet compression
BECAUSE
when a cervical rib is present the brachial plexus receives a larger contribution from T2 (ie the plexus is post-fixed)

60.

In a buttonhole deformity of the proximal interphalangeal joint of a finger, hyperextension at the terminal joint occurs
BECAUSE
the triangular ligament between the lateral slips has been divided allowing these slips to slide laterally forwards over the head of the middle phalanx

61.

Power grip is weakened in radial nerve palsy

BECAUSE

the dorsiflexors of the wrist are weak

62.

In ulnar damage at the elbow, power grip is weakened

BECAUSE

the interossei are the prime flexors of the metacarpophalangeal joints of the fingers

63.

In radical dissection of the submandibular lymph nodes, the submandibular gland must be resected

BECAUSE

there is no plane of cleavage between the inverting layer of deep cervical fascia and the submandibular gland

64.

Geniohyoid, genioglossus and hyoglossus are supplied by the hypoglossal nerve

BECAUSE

they all arise from the sub-occipital myotomes

65.

The parotid gland is subdivided into clearly separable superficial and deep lobes by the facial nerve

BECAUSE

the parotid gland develops from an ingrowth from the skin as well as an outgrowth from the first pharyngeal pouch

66.

Portion of the thyroid gland may occupy the superior mediastinum

BECAUSE

the gland and the thymus develop from the third pharyngeal pouch

67.

The ultimobranchial body is incorporated into the thyroid gland

BECAUSE

they both develop from the same pharyngeal pouch

68.

A thyroglossal cyst may have a fistulous communication with the skin at the anterior border of sternomastoid

BECAUSE

of persistence of the second pharyngeal cleft

69.

Return of the voice after complete section of both recurrent laryngeal nerves is possible

BECAUSE

crico-thyroid acts as an adductor of the true vocal cord

70.

Palpable submandibular nodes suggest a carcinoma of the posterior third of the tongue
BECAUSE
lymph from this region passes through these nodes on route to the upper deep cervical nodes

71.

Division of the cervical sympathetic chain above the middle cervical ganglion does not result in Horner's syndrome
BECAUSE
the sympathetic fibres of the eyeball pass through the ansa subclavia to the internal carotid plexus

72.

Section of the sensory root of the fifth cranial nerve result in the corneal ulceration
BECAUSE
antidromic secretomotor fibres to the lacrimal gland are also sectioned

73.

Intra and extracranial lesions of the facial nerve can be distinguished
BECAUSE
paralysis of stapedius causes hyperacusis

Incomplete statements or questions are followed by 4 suggested answers or completions of which ONE or MORE THAN ONE is correct. Answer each true or false.

74. Medial cutaneous nerve of the arm:

- 1) Fibres from C8 and T1
- 2) From dorsal cord of brachial plexus
- 3) Pierces deep fascia at mid-arm
- 4) Has communications with the circumflex nerve

75. The superficial cubital nodes receive lymph from:

- 1) Thumb
- 2) Ulnar digits
- 3) Palm of hand
- 4) Index finger

76. Flexor carpi radialis

- 1) Is supplied by the median nerve
- 2) Flexes the wrist joint
- 3) Abducts the wrist joint
- 4) Grooves the trapezoid

77. The ulna nerve:

- 1) Lies medial to the ulnar artery
- 2) Passes between the heads of extensor carpi ulnaris
- 3) Receives C7 fibres from the lateral cord
- 4) Has a superficial branch which is cutaneous only

78. **Abductor Pollicis Longus:**
- 1) Can act as an extensor of the wrist joint
 - 2) Occupies alone a separate synovial compartment beneath the extensor retinaculum
 - 3) Has origin from both radius and ulna
 - 4) May have connections to abductor pollicis brevis
79. **Median nerve:**
- 1) Enters forearm by passing deep to ulnar head of pronator teres
 - 2) Supplies all of the flexor sublimis digitorum
 - 3) Lies directly on the interosseous membrane
 - 4) May supply first dorsal interosseous muscle
80. **Ulnar nerve:**
- 1) its most proximal branch is to the elbow joint
 - 2) Dorsal cutaneous branch passes deep to flexor carpi ulnaris
 - 3) Lies superficial to flexor retinaculum
 - 4) Has a superficial branch which supplies only skin
81. **Median nerve:**
- 1) Receives its blood supply from a branch of the radial artery
 - 2) Receives a few fibres from C8 and T1
 - 3) Supplies pronator quadratus
 - 4) Emerges from under flexor digitorum superficial on the lateral side
82. **Radial nerve :**
- 1) Lies between medial and lateral heads of the triceps branchii
 - 2) Passes between the long and medial heads of the triceps branchii
 - 3) Passes dorsal to the medial head of the triceps branchii
 - 4) Has no branches before entering the quadrilateral space
83. **Humerus:**
- 1) Medial epicondyle is more prominent than the lateral
 - 2) Is rarely fractured through the anatomical neck
 - 3) Proximal metaphysis is intracapsular
 - 4) Seldom has a separate epiphysis for the medial epicondyle
84. **Piercing the clavipectoral fascia is/are:**
- 1) The medial pectoral nerve
 - 2) The lymphatics from the infraclavicular nodes
 - 3) The cephalic vein
 - 4) The acromiothoracic axis which usually has 3 main branches
85. **The interosseous membrane between the radius and ulna:**
- 1) Is pierced by posterior interosseous vessels
 - 2) Forms the axis of rotation in movements of pronation and supination
 - 3) Is pierced by anterior interosseous vessels
 - 4) Is most stretched in full supination

86. Muscles attaching to the scapula:
- 1) Serratus anterior
 - 2) Pectoralis minor
 - 3) Deltoid
 - 4) Teres major
87. Concerning the humerus:
- 1) Greater tuberosity lateral to the head
 - 2) Capsule attached to anatomical neck
 - 3) Proximal epiphysis closes later than distal
 - 4) Ossifies from eight centres
88. Muscles originating from radius:
- 1) Biceps
 - 2) Supinator
 - 3) Brachioradialis
 - 4) Flexor sublimis digitorum
89. Nerves to elbow joints include:
- 1) Ulnar
 - 2) Musculo-cutaneous
 - 3) Median
 - 4) Circumflex
90. Features of trapezius:
- 1) Medially rotates the scapula
 - 2) Originates in part from the occipital bone
 - 3) In part inserts into the clavicle
 - 4) Upper part acting alone draws scapula upwards
91. Pectoralis major:
- 1) Is synergetic to serratus anterior
 - 2) Innervated by median nerve
 - 3) Can abduct arm
 - 4) Can act as an accessory muscle of respiration
92. Muscles assisting abduction of the arm:
- 1) Deltoid
 - 2) Serratus anterior
 - 3) Supraspinatus
 - 4) Infraspiratus
93. Abductor pollicis longus:
- 1) Arises from the ulna
 - 2) Inserts into the base of first metacarpal
 - 3) Innervated by radial nerve
 - 4) Can act as flexor of the wrist

94. Features of tendon sheaths at wrist :
- 1) Ulnar bursa encloses tendons of flexor sublimis digitorum
 - 2) Ulnar bursa encloses tendons of flexor profundus digitorum
 - 3) Radial bursa encloses tendon of flexor longus pollicis
 - 4) Ulna bursa best drained from radial side
95. The dorsal interossei are :
- 1) Seven in number
 - 2) Inserted into the metacarpals
 - 3) Bipenniform
 - 4) Abductors of fingers
96. Among the boundaries and contents of the antecubital fossa:
- 1) Median nerve just outside the fossa
 - 2) Sides by biceps and coracobrachialis
 - 3) Posterior interosseous nerve laterally
 - 4) Radial nerve adjacent to brachial artery
97. Musculo-cutaneous nerve:
- 1) Found only in upper two-thirds of arm
 - 2) Has communications with ulna nerve
 - 3) Supplies branchialis
 - 4) Has no branches
98. Concerning the Brachial plexus:
- 1) From C5 to T1
 - 2) Lies in anterior triangle of neck
 - 3) Contains sympathetic components
 - 4) Supplies all the skin of the upper limb
99. The lumbricals are:
- 1) Four small fleshy fasciculi
 - 2) Associated with tendons of flexor sublimis digitorum
 - 3) Innervated by median and ulnar nerves
 - 4) Extensors of M.C.P. joints
100. Supinator muscle is:
- 1) Deep to extensor carpi radiatis brevis
 - 2) Supplied in part by musculo-cutaneous nerve
 - 3) Lies posterior (superficial) to origin of abductor pollicis longus
 - 4) Is most powerful supinator of forearm
101. The superficial palmar arch:
- 1) Lies level with the distal border of the outstretched thumb
 - 2) Is supplied mainly from the ulnar artery
 - 3) Is completed by the radial artery
 - 4) Supplies the thumb

102. Movements possible at the carpo-metacarpal joint of the thumb:
- 1) Flexion
 - 2) Extension
 - 3) Circumduction
 - 4) Abduction
103. Pronation:
- 1) Depends on intact ulnar nerve
 - 2) Largely produced by pronator teres
 - 3) Depends on intact C8 nerve root
 - 4) Depends on intact radial nerve
104. Muscles contributing to the dorsal wall of the axilla:
- 1) Subscapularis
 - 2) Teres Major
 - 3) Latissimus Dorsi
 - 4) Infraspinatus
105. Nerves supplying the skin of the dorsum of the hand or fingers:
- 1) Radial
 - 2) Ulna
 - 3) Median
 - 4) Musculo-cutaneous
106. Abduction of arm:
- 1) Depends on intact C7 nerve root
 - 2) Humerus moves initially, scapular rotation follows
 - 3) Gleno-humeral to scapular movement is in the ratio of 2:1
 - 4) Associated with medial rotation of humerus
107. The first dorsal interosseous :
- 1) Has one head of origin
 - 2) Abducts the index finger
 - 3) Lies dorsal to the adductor pollicis muscle
 - 4) Is invariably supplied by the ulnar nerve
108. Radial artery lies on:
- 1) Supinator
 - 2) Pronator teres
 - 3) Flexor pollicis longus
 - 4) Flexor digitorum sublimis (superficialis)
109. Superficial to flexor retinaculum at wrist;
- 1) Ulnar nerve
 - 2) Palmar cutaneous branch of median nerve
 - 3) Palmaris longus tendon
 - 4) Origin of Abductor brevis pollicis

110. Nerves directly related to the humerus:
- 1) Radial (musculo-spiral)
 - 2) Ulnar
 - 3) Musculocutaneous
 - 4) Axillary (circumflex)
111. Humerus:
- 1) Growth mainly from upper epiphysis
 - 2) The centre of the shaft appears before birth
 - 3) Ossification centre for medial epicondyle is extracapsular
 - 4) There is a separate ossification centre for each epicondyle
112. The deep branch of the ulna nerve in the hand:
- 1) Supplies no skin on the little finger
 - 2) Supplies adductor pollicis
 - 3) Supplies all the lumbricals
 - 4) Supplies skin on the ring finger
113. Division of ulnar nerve at level of proximal wrist crease will cause:
- 1) Anaesthesia on dorsum of hand
 - 2) Anaesthesia on ulna side of the palm
 - 3) Paralysis of first palmar interosseous muscle
 - 4) Hypertension deformity at any M.C.P. joints
114. Extensor pollicis brevis:
- 1) Is an accessory extensor of proximal phalanx
 - 2) Extends first metacarpal
 - 3) Does not lie beneath extensor retinaculum
 - 4) Does not gain attachment to ulna
115. Coracobrachialis :
- 1) Adducts arm
 - 2) Can extend to medial humeral condyle
 - 3) Supplied from lateral cord of brachial plexus
 - 4) Is derived from first brachial arch
116. Posterior interosseous nerve:
- 1) Communicates with ulnar nerve
 - 2) Supplies skin on back of hand
 - 3) Supplies wrist joint
 - 4) Supplies extensor indicis
117. Anterior interosseous nerve supply includes:
- 1) Flexor profundus to ring finger
 - 2) Flexor sublimis to index finger
 - 3) Skin on the front of wrist
 - 4) Flexor pollicis longus

118. Deep palmar arch:

- 1) Formed mainly from radial artery
- 2) Passes between the two heads of the first dorsal interosseous muscle
- 3) Main arterial supply to thumb
- 4) Has branches to dorsum of hand

119. The palmar aponeurosis ;

- 1) Has the ulnar artery superficial to it
- 2) Has slips to four fingers
- 3) Is continuous with palmaris longus
- 4) Covers abductor pollicis brevis

120. Ulnar artery:

- 1) Passes between the two heads of pronator teres
- 2) Lies on pronator quadratus
- 3) Main contribution to deep palmar arch
- 4) Lies lateral to ulnar nerve

Answers: Anatomy 5, Upper Limb

1	C	41	C	81	FFTT
2	D	42	E	82	TTTF
3	E	43	C	83	TTTF
4	E	44	E	84	FTTF
5	C	45	B	85	FFTT
6	A	46	E	86	TTFT
7	A	47	C	87	TTTT
8	B	48	A	88	FFFT
9	E	49	E	89	TFTF
10	A	50	B	90	FTTT
11	B	51	E	91	FFFT
12	D	52	A	92	TTTT
13	D	53	B	93	TTTT
14	C	54	B	94	TTTF
15	D	55	C	95	FFTT
16	C	56	E	96	FFTF
17	C	57	C	97	FFTF
18	C	58	E	98	TFTF
19	E	59	C	99	TFTF
20	B	60	A	100	TTTF
21	A	61	A	101	TTTF
22	B	62	B	102	TTTT
23	E	63	A	103	TFTT
24	D	64	A	104	TTTF
25	E	65	E	105	TTTT
26	A	66	C	106	FFTF
27	E	67	C	107	FTTF
28	C	68	E	108	TTTT
29	C	69	A	109	TTTT
30	C	70	E	110	TTFT
31	D	71	E	111	TTTT
32	C	72	C	112	TTFE
33	C	73	A	113	FTFT
34	C	74	TFTF	114	FFFT
35	D	75	FTTF	115	TTTF
36	C	76	TTTT	116	FFTT
37	B	77	TFTF	117	FFFT
38	E	78	FTTT	118	TTTT
39	D	79	FTFT	119	FTTF
40	D	80	TTTF	120	FFFT