

113. Which of the following structures are not found in the adductor (subsartorial) canal
- A. Femoral artery
 - B. Femoral vein
 - C. Femoral nerve
 - D. Saphenous nerve
 - E. Nerve to vastus medialis
114. Which is not true of the Achilles tendon
- A. It inserts into the medial third of the posterior surface of the calcaneus
 - B. It is invested in a synovial sheath
 - C. It is formed from the soleus and gastrocnemius muscles
 - D. A bursa lies between the tendon and the upper third of the calcaneus
 - E. A bursa lies between it and the deep fascia near its insertion
115. Following an injury to the leg, a patient is unable to dorsiflex their foot. Which nerve is most likely to be damaged
- A. The deep branch of the common peroneal nerve
 - B. The sural nerve
 - C. The superficial branch of the common peroneal nerve
 - D. The saphenous nerve
 - E. None of the above
116. The anterior tibial artery
- A. Pierces the interosseous membrane
 - B. Supplies the lateral compartment of the leg
 - C. Lies lateral to the deep peroneal nerve
 - D. Lies lateral to tibialis anterior
 - E. Gives the nutrient artery to the tibia
117. A 30 year old man presents with adenopathy of the medial group of superficial inguinal lymph nodes on the right side. Which of the following is the primary site resulting in this finding
- A. Right testis
 - B. Right buttock
 - C. The skin of the right lower limb
 - D. The anal canal
 - E. None of the above
118. The suprapatellar bursa
- A. Does not communicate with the knee joint
 - B. Lies in front of the vastus intermedius muscle
 - C. Extends 5 cm or more above the patella
 - D. Lies deep to the patellar retinacula
 - E. None of the above

119. Following a subcapital fracture of the neck of femur, an 80 year old man sustains avascular necrosis of the femoral head. This is most likely to be the consequence of interruption to the blood supply to the head from which of the following sources
- A. Arteries from the trochanteric anastomosis in the retinacula
 - B. Artery of the ligament of the head from the obturator artery
 - C. Branches from the profunda femoris artery
 - D. Branches from the pudendal artery
 - E. Branches from the inferior gluteal artery
120. Which of the following is not a component of the second layer of the sole of the foot
- A. Tendon of flexor hallucis longus
 - B. Abductor hallucis
 - C. Flexor accessorius
 - D. The lumbrical muscles
 - E. Tendon of flexor digitorum longus
121. The blood supply of the spinal cord
- A. Is from a single anterior and posterior artery
 - B. Anteriorly is from the anterior spinal artery derived from the right brachiocephalic trunk
 - C. Lies in the subdural space
 - D. Receives important contributions from radicular arteries
 - E. None of the above is true
122. The spleen
- A. Has a lower pole which normally projects forward to the anterior axillary line
 - B. Lies between the eighth and tenth ribs
 - C. Has a long axis lying in the line of the ninth rib
 - D. As it enlarges, glides in contact with the anterior abdominal wall in front of the splenic flexure
 - E. When palpable on abdominal examination is identified by being resonant to percussion
123. With regard to the duodenum, which is not true
- A. The duodenal cap has plicae circulares which are often evident on Xray
 - B. The 3rd part may be compressed by the superior mesenteric artery
 - C. The 2nd part lies at level of L2 vertebra in cadavers
 - D. The duodenal cap lies upon bile duct, hepatic artery and portal vein
 - E. The accessory pancreatic duct opens into it proximal to the ampulla of Vater
124. Land marks of the trachea are
- A. Thyroid cartilage to sternal notch
 - B. Hyoid bone to sternal angle
 - C. Cricoid cartilage to sternal angle
 - D. Thyroid cartilage to sternal angle
 - E. Cricoid cartilage to sternal notch

125. With regard to the cutaneous innervation of the thorax and abdomen
- A. Above the 2nd rib, the skin is supplied by the cervical plexus (C4)
 - b. Loss of a single spinal segment will produce a sensory deficit
 - C. It is supplied segmentally by the anterior primary rami of T1 to L1
 - D. T8 supplies skin at the level of the umbilicus
 - E. The lower 8 thoracic nerves pass beyond the costal margin to supply the skin of the abdominal wall
126. In the anatomical position, the heart
- A. Has a right border comprised of right atrium and right ventricle
 - B. Has an anterior (sternocostal) surface comprised of right atrium, right ventricle and a strip of left ventricle
 - C. Has a posterior surface comprised of left atrium, 4 pulmonary veins and left ventricle
 - D. Has an inferior (diaphragmatic) surface comprised of left atrium, inferior vena cava and right ventricle
 - E. All of the above are true
127. Venous drainage of the face
- A. Is both deep and superficial
 - B. Empties ultimately into the internal jugular vein alone
 - C. Communicates indirectly with the cavernous sinus via the deep facial vein
 - D. Communicates directly with the cavernous sinus via the supraorbital veins
 - E. All of the above
128. The larynx
- A. Is a respiratory organ whose essential function is phonation
 - B. Extends from the anterior upper border of the epiglottis to the level of C6
 - C. Consists of two single cartilages, the thyroid and cricoid
 - D. Is hauled up beneath the tongue with the epiglottis tilted anterior and upwards during swallowing
 - E. Is supplied by the external laryngeal nerve except for the cricothyroid muscle which is supplied by the recurrent laryngeal nerve
129. Contents of the posterior triangle of the neck include all the following except
- A. Occipital lymph nodes
 - B. Accessory nerve
 - C. Cervical plexus
 - D. Inferior belly of omohyoid
 - E. Transverse cervical vessels
130. A 40 year old man suffered a whiplash injury to his neck and now complains of pain along the lateral aspect of his left forearm, and there is weakness of his left biceps. What is the most likely cause of his symptoms
- A. Prolapsed 4th cervical disc impinging on C4 root
 - B. Prolapsed 4th cervical disc impinging on C5 root
 - C. Prolapsed 5th cervical disc impinging on C6 root
 - D. Prolapsed 6th cervical disc impinging on C6 root
 - E. Prolapsed 6th cervical disc impinging on C7 root
131. With respect to the facial nerve, all of these are correct except

- A. It carries taste fibres from the anterior two thirds of the tongue
- B. It has 5 branches exiting the parotid gland
- C. It carries sensation from the skin of the external acoustic meatus
- D. It exits the base of the skull via the foramen spinosum
- E. Its efferent fibres have cell bodies in the geniculate ganglion

132. Anterior relations of the abdominal aorta include

- A. The lateral arcuate ligament
- B. The splenic vein inferior to the superior mesenteric artery
- C. The left renal vein inferior to the inferior mesenteric artery
- D. The parietal peritoneum inferior to the duodenum
- E. The sympathetic trunk

133. With respect to the diaphragm

- A. The oesophageal opening is opposite T8 vertebra behind the 7th costal cartilage
- B. It is supplied by the 5th, 6th and 7th cervical roots
- C. Its major function is forced expiration
- D. Its blood supply is only from abdominal aorta
- E. The aortic opening is opposite T12 vertebra between the overlapping right and left crural fibres

134. The arch of the aorta

- A. Contains baroreceptors within its intima
- B. Extends from the manubriosternal joint to the body of T4
- C. Gives rise to four major arteries
- D. Is crossed on its right side by the vagus and phrenic nerves
- E. Lies anterior to the oesophagus and trachea

135. The posterior triangle of the neck

- A. Contains the anterior rami of the upper four cervical nerves
- B. Contains the third part of the subclavian artery through its centre
- C. Has deep cervical fascia lining its floor
- D. Lies between the posterior border of sternocleidomastoid and the posterior border of trapezius and the clavicle
- E. Contains the subclavian vein

136. With regard to the thyroid gland

- A. Its isthmus lies in front of the 1st and 2nd tracheal rings
- B. The superior thyroid artery is a branch of the internal carotid artery
- C. It has the parathyroid glands lying behind its medial lobe
- D. Parafollicular cells are more abundant than follicular cells
- E. The recurrent laryngeal nerve is always behind the pretracheal fascia

137. With respect to the contents of the posterior mediastinum, all are true except
- A. The oesophagus extends from level of cricoid cartilage to traverse the diaphragm at T10
 - B. The descending thoracic aorta gives off the posterior intercostal arteries
 - C. It contains the perihilar lymph nodes
 - D. The oesophagus is 25 cm in length
 - E. The descending aorta commences at the lower level of T4 vertebra
138. Regarding the larynx
- A. The external laryngeal nerve supplies the posterior cricoarytenoid muscle
 - B. The internal laryngeal nerve supplies cricothyroid
 - C. The blood supply above the vocal cords is by a branch of the internal carotid
 - D. Normal vocal cords are always covered by stratified squamous epithelium
 - E. The recurrent laryngeal nerve lies immediately behind the cricoarytenoid joint
139. The ureter
- A. Passes anterior to genitofemoral nerve
 - B. Develops from the metanephric cap
 - C. Is represented by dermatome L2
 - D. In the male, is crossed anteriorly by the ductus deferens
 - E. Passes anterior to the uterine artery in the female
140. In the skull
- A. The anterior fontanelle usually closes by 2 months
 - B. The pterion overlies the middle meningeal artery
 - C. The round foramen transmits the mandibular branch of fifth cranial nerve
 - D. The cribriform plate is part of the sphenoid bone
 - E. All of the above are correct
141. The abdominal aorta is crossed anteriorly by
- A. Left renal artery
 - B. Inferior mesenteric artery
 - C. Left renal vein
 - D. Right gonadal artery
 - E. Right renal vein
142. The orbit contains all of the following except
- A. Branches of the facial nerve
 - B. The optic nerve
 - C. The third cranial nerve
 - D. A subarachnoid space
 - E. The inferior rectus muscle
143. The clavicle
- A. Is convex anteriorly throughout its entire length
 - B. Articulates laterally with the coracoid via the coracoclavicular ligament
 - C. Is crossed in its middle third by the subclavian vein
 - D. Forms part of the apex of the axilla
 - E. Has as its only inferior musculature attachment the muscle pectoralis major
144. In relation to the medial malleolus

- A. Peroneus brevis grooves its posterior aspect
- B. The greater saphenous vein passes behind it
- C. Flexor hallucis longus passes medial to flexor digitorum longus
- D. The strongest part of the deltoid ligament is its tibiocalcaneal part
- E. The tibial nerve passes lateral to the posterior tibial artery

145. On the palmar aspect of the wrist

- A. The median nerve lies between flexor carpi radialis and palmaris longus
- B. The ulnar nerve passes deep to the medial aspect of the flexor retinaculum
- C. The flexor tendons lie together in a complete synovial sheath
- D. The radial artery may be palpated over the flexor retinaculum
- E. Flexor carpi radialis may be distinguished by the presence of musculature fibres

146. The deltoid ligament of the ankle

- A. Has three parts
- B. Is continuous with the spring ligament
- C. Has a deep part which is triangular in shape
- D. Has a posterior talofibular ligament which runs horizontally
- E. Strengthens the lateral aspect of the capsule of the ankle joint

147. The femoral nerve

- A. Is formed by the anterior divisions of the anterior rami of lumbar nerves 2, 3, and 4
- B. Lies within the femoral sheath
- C. Divides into superficial and deep divisions
- D. Lies medial to the femoral vein
- E. Passes superficial to the inguinal ligament

148. In carpal tunnel syndrome which of the following structures is not affected by compression of the median nerve

- A. The medial branch of the median nerve
- B. Opponens pollicis
- C. The lateral branch of the median nerve
- D. Palmar branch of median nerve
- E. Abductor pollicis brevis

149. Regarding the median nerve, all of the following are true except

- A. It is formed by the union of 2 roots from the medial and lateral cords
- B. In the arm, it passes anterior to the brachial artery
- C. It passes deep to the flexor retinaculum
- D. It does not supply the part of flexor digitorum profundus to the middle finger
- E. Typically, chronic compression of the nerve in carpal tunnel syndrome would result in wasting of the thenar eminence

150. Regarding the ankle

- A. The lateral ligament is made up of deep and superficial parts
- B. The talus is narrow anteriorly and broad posteriorly
- C. The nerve supply is by deep peroneal and tibial nerves
- D. Extensor hallucis longus crosses the joint medial to tibialis anterior
- E. The posterior talofibular ligament descends vertically from the fibula to insert into the talus

151. Regarding the popliteal fossa

- A. The lateral border is semitendinosus
- B. The tibial nerve runs through it laterally
- C. The common peroneal nerve distinguishes right from left
- D. The floor does not include any bone surfaces
- E. The popliteal artery lies between the popliteal vein and tibial nerve

152. Regarding the extensor retinaculum of the wrist

- A. It includes attachment to the ulna
- B. It overlies 6 fibrous compartments
- C. Tension of the retinaculum is reduced with pronation
- D. It has the palmaris longus fused with it
- E. Is pierced by extensor carpi radialis longus

153. Which of the following is a branch of the posterior cord of brachial plexus

- A. Dorsal scapular nerve
- B. Long thoracic nerve
- C. Musculocutaneous nerve
- D. Ulnar nerve
- E. Thoracodorsal nerve

154. All of the following muscles are supplied by the tibial nerve except

- A. Short head of biceps femoris
- B. Semimembranosus
- C. Semitendinosus
- D. Adductor magnus
- E. Long head of biceps femoris

155. In the hand, the deep palmar arch

- A. Is normally incomplete
- B. Is formed by the superficial branch of the ulnar artery
- C. Crosses the palm 1 cm distal to the superficial arch
- D. Gives off 3 metacarpal arteries
- E. Does not anastomose with anterior carpal arch

156. All of the following bursae usually communicate with the knee joint except

- A. Suprapatellar bursa
- B. Popliteal bursa
- C. Bursa under the medial head of gastrocnemius
- D. Bursa under the lateral head of gastrocnemius
- E. Infrapatellar bursa

157. Regarding the interossei of the hand

- A. They insert into the middle phalanges
 - B. The palmar interossei have two heads of origin
 - C. They are solely innervated from T1
 - D. There are three dorsal muscles
 - E. The palmar muscles abduct the digits
158. In the popliteal fossa
- A. The common peroneal nerve is on the medial aspect
 - B. The tibial nerve is medial to the popliteal vein
 - C. Sartorius forms the medial border
 - D. The sural nerve branches from the common peroneal nerve
 - E. The popliteal artery is medial to the popliteal vein
159. Which is not a branch of the anterior division of the internal iliac artery
- A. Internal pudendal
 - B. Superior gluteal
 - C. Uterine
 - D. Obturator
 - E. Superior vesical
160. Which is not true of abdominal aorta
- A. Begins at T12
 - B. Ends at L5
 - C. Inclines to left
 - D. Direct continuation is median sacral artery
 - E. Gives off 4 pairs of lumbar arteries
161. Which structure in the inguinal canal is not part of the spermatic cord
- A. Testicular artery
 - B. Genital branch of genitofemoral nerve
 - C. Ilioinguinal nerve
 - D. Ductus deferens
 - E. Cremasteric artery
162. Pick the correct boundary of inguinal canal
- A. Floor - lacunar ligament
 - B. Posterior wall - inguinal ligament
 - C. Superficial ring - opening in internal oblique
 - D. Anterior wall - conjoint tendon
 - E. Roof - external oblique
163. Which is true of coeliac trunk and its branches
- A. Inferior pancreaticoduodenal artery encircles the head of pancreas
 - B. Left gastric artery supplies the stomach only
 - C. Gastroduodenal artery runs in front of the 1st part of duodenum
 - D. Hepatic artery runs up in front of the portal vein
 - E. Right gastroepiploic artery runs along the lesser curvature of stomach
164. Which is true of the superior mesenteric artery and its branches
- A. Right colic artery is the main supply of the caecum

- B. Superior mesenteric artery runs anterior to the 1st part of duodenum
 - C. Right colic artery passes behind the right ureter
 - D. Superior mesenteric arises from aorta at level of L2
 - E. Main trunk of the superior mesenteric artery ends at the level of Meckel's diverticulum
165. Which is true of the inferior mesenteric artery and its branches
- A. Inferior mesenteric ends as the superior rectal artery
 - B. The main trunk crosses the left ureter, but its branches pass behind it
 - C. It arises from the aorta at the level of L2
 - D. The descending branch of the left colic supplies the sigmoid colon only
 - E. There is very little anastomosis between the branches
166. Direct tributaries of the portal vein include all but
- A. Right gastric vein
 - B. Short gastric vein
 - C. Splenic vein
 - D. Superior pancreaticoduodenal vein
 - E. Left gastric vein
167. Which is the correct portosystemic anastomosis
- A. Portal = Tributary of inferior mesenteric vein
Systemic = Tributary of internal iliac vein
 - B. Portal = Periumbilical vein
Systemic = Phrenic veins
 - C. Portal = Intrahepatic portal branches
Systemic = Azygos vein
 - D. Portal = Left gastric vein
Systemic = IVC via oesophageal veins
 - E. Portal = Middle rectal vein
Systemic = Inferior rectal vein
168. Which is not true of the surface markings of the liver
- A. Lies below ribs 7-11 in the right midaxillary line
 - B. Highest point on right is 5th rib
 - C. Superior surface crosses the xiphisternal joint
 - D. Inferior margin lies level with right costal margin in most cases
 - E. Highest point on left is 6th intercostal space
169. Which is the correct order of structures in the portal hepatis (anterior-posterior)
- A. Right and left hepatic arteries, right and left portal veins, right and left hepatic ducts
 - B. R/L portal veins, R/L hepatic ducts, R/L hepatic arteries
 - C. R/L hepatic ducts, cystic duct, R/L hepatic arteries, R/L portal veins
 - D. R/L hepatic ducts, R/L hepatic arteries, cystic duct, R/L portal veins
 - E. R/L hepatic ducts, R/L hepatic arteries, R/L portal veins

170. Which is true of the liver
- A. Protected from ischaemia by good anastomosis between R & L lobes
 - B. Divided functionally into right and left lobes along the line of the falciform ligament
 - C. Drains into 3 hepatic veins, which have a long extrahepatic course
 - D. Left lobe may be supplied by a branch of the left gastric artery
 - E. Caudate lobe has no connection with the right lobe
171. Which is true of the relations of kidney
- A. Left hilum lies just below the transpyloric plane
 - B. Middle colic artery crosses the lower pole of right kidney
 - C. The structures in the hilum from front to back are vein, artery, ureter
 - D. Vertical axis lies in the same axis as the vertebral column
 - E. Right adrenal gland lies medial to the upper pole
172. Which does not cross the ureter
- A. Right colic artery
 - B. Gonadal vessels
 - C. Apex of sigmoid mesocolon
 - D. Ileocolic artery
 - E. Inferior mesenteric artery
173. Which is true of the ureter's blood supply
- A. Poor anastomosis makes blood supply easily endangered
 - B. Receives supply from the gonadal vessels
 - C. Common iliac artery supplies only the most distal portion
 - D. Distal portion receives its supply from the posterior division of internal iliac artery
 - E. Renal artery provides no blood supply
174. Right adrenal gland
- A. Lies on the medial surface of the upper pole of right kidney
 - B. Lies on the quadrate lobe of liver
 - C. Adrenal vein drains into the right renal vein
 - D. Is supplied by a branch of the renal artery only
 - E. Is separated from the kidney by renal fascia
175. Which is true of the spleen
- A. Lower pole extends forwards to the anterior axillary line
 - B. Long axis lies in the line of the 10th rib
 - C. Medial border is notched
 - D. Kidney lies anterior to the hilum
 - E. Gastrosplenic ligament runs from the lower pole to the lesser curvature of stomach
176. Which is the correct relation of the duodenum
- A. 1st part - behind IVC
 - B. 2nd part - anterior to hilum of right kidney
 - C. 3rd part - crossed by the inferior mesenteric artery
 - D. 3rd part - level of L2
 - E. All but last 2cm is retroperitoneal
177. Which is not a structure of the retroperitoneum

- A. Kidney
- B. Adrenal gland
- C. Cisterna chyli
- D. Spleen
- E. Pancreas

178. Which is not a structure in the transpyloric plane

- A. Pancreas
- B. Superior mesenteric artery origin
- C. Fundus of gallbladder
- D. Tip of 9th costal cartilage
- E. Lower pole of right kidney

179. Which is true of the sternum

- A. Jugular notch lies at the level of T4
- B. 2nd costal cartilage articulates separately with the manubrium and the body of the sternum
- C. Sternohyoid attaches to the manubrium, below the 1st costal cartilage
- D. Interclavicular ligament makes no attachment to the sternum
- E. Posterior surface of the manubrium is completely covered with pleura

180. Which is not a true muscle attachment to the ribs

- A. Pectoralis minor - anterior surface of ribs 3-5
- B. Serratus posterior superior - lateral to the angle of ribs 2-5
- C. Internal oblique - inner surface of last 6 costal cartilages
- D. Levator costae - lateral to tubercle, on upper border
- E. Rectus abdominis - anterior surface of 5-7th cartilages

181. Which is not a feature of a typical rib

- A. Medial facet of the tubercle faces backwards
- B. Angle is the most posterior point
- C. Necks are all of equal length
- D. There are 3 costotransverse ligaments
- E. Intraarticular ligament attaches from horizontal ridge on the head, to the intervertebral disc

182. Which is true of the first rib

- A. Scalenus medius attaches to the scalene tubercle
- B. Subclavian vein lies in the subclavian groove
- C. Supreme intercostal vein lies medial to the superior intercostal artery
- D. Scalenus posterior attaches lateral to the tubercle
- E. Head articulates with vertebrae C7 and T1

183. Which is true of the intercostal nerves
- A. First intercostal nerve has no cutaneous supply
 - B. Posterior intercostal nerve supplies the skin medial to the angle of the rib
 - C. Lateral cutaneous branch pierces the intercostal muscles at anterior axillary line
 - D. Anterior cutaneous branch is a cutaneous branch only
 - E. Anterior cutaneous branch runs behind the internal thoracic artery
184. Attachments of the diaphragm include all but
- A. Left crus
 - B. Tip of 12th rib
 - C. Xiphisternum
 - D. Median arcuate ligament
 - E. 7th costal cartilage
185. Which is the correct site of the diaphragmatic openings
- A. Aorta - T10
 - B. Oesophagus - T8
 - C. Thoracic duct - behind median arcuate ligament
 - D. Hemiazygos vein - right crus
 - E. Left phrenic nerve - central tendon
186. Which is true of the neurovascular supply of the diaphragm
- A. Inferior phrenic arteries are the sole supply of the diaphragm
 - B. Phrenic nerves are motor only
 - C. All of fibres of the right crus are supplied by the right phrenic nerve
 - D. Phrenic nerve divides into anterior, posterior and lateral branches on the thoracic surface of the diaphragm
 - E. Lower intercostal nerves supply proprioception only
187. Which structure does not lie in the plane of the lower border of T4 vertebra
- A. Convexity of the arch of aorta
 - B. Junction between superior and inferior mediastinum
 - C. Sternomanubrial joint
 - D. Azygos vein enters SVC
 - E. Bifurcation of trachea
188. Which relation of the aortic arch is incorrect
- A. Left recurrent laryngeal nerve is on its right
 - B. Pulmonary trunk bifurcation in its concavity
 - C. Ligamentum arteriosum from its concavity, distal to the origin of the left subclavian artery
 - D. Left supreme intercostal vein on its left
 - E. Oesophagus on its right

189. Which is true of the trachea

- A. Begins at the level of C7
- B. Isthmus of the thyroid lies anterior to the 2nd, 3rd and 4th rings
- C. Has 15-20 complete cartilaginous rings
- D. Receives its blood supply from the inferior thyroid artery alone
- E. Pulmonary artery bifurcates anterior to its lower end

190. Which is not true of the oesophagus

- A. There is usually a constriction at 27 cm from the lips, where the left main bronchus crosses
- B. Crosses in front of the descending aorta
- C. Upper part drains into the azygos vein
- D. Begins at the level of C6 vertebra
- E. Receives nerve supply from the recurrent laryngeal nerve

191. Phrenic nerve supplies the sensation to all but

- A. Diaphragm
- B. Mediastinal pleura
- C. Peritoneum
- D. Left ventricle
- E. Pericardium

192. Which is true of the vagus nerves

- A. Left vagus is held away from the trachea by branches of the aortic arch
- B. Run in front of the lung roots
- C. Vagal trunks receive fibres from the ipsilateral nerve only
- D. Left vagus crosses the aortic arch superficial to the left superior intercostal vein
- E. Right vagus runs superficial to the azygos vein

193. Which is true of the thoracic sympathetic trunk

- A. Passes into the abdomen behind lateral arcuate ligament
- B. Greater splanchnic nerve comes from 3rd to 7th thoracic ganglia
- C. 1st thoracic ganglion often fuses with the inferior cervical ganglion
- D. Crosses 1st rib lateral to the superior intercostal artery
- E. Gives fibres to the oesophageal plexus

194. Pleural reflection lies at which rib level in the midaxillary line

- A. 6th
- B. 8th
- C. 9th
- D. 10th
- E. 12th

195. Which is true of the coronary circulation

- A. Majority receive SA nodal supply from the left coronary
- B. Majority receive AV nodal supply from the left coronary
- C. There is little anastomosis between the right and left sided circulation
- D. Interventricular septum receives most of its supply from the anterior interventricular branch
- E. Circumflex artery is the most commonly affected by disease

ANATOMY ANSWERS

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

121. D	141. C	161. C	181. A
122. D	142. A	162. A	182. C
123. A	143. D	163. D	183. A
124. C	144. D	164. E	184. D
125. A	145. A	165. A	185. C
126. B	146. B	166. B	186. E
127. C	147. C	167. A	187. A
128. B	148. D	168. E	188. D
129. C	149. D	169. E	189. B
130. C	150. C	170. D	190. C
131. D	151. C	171. C	191. D
132. D	152. B	172. E	192. A
133. E	153. E	173. B	193. C
134. B	154. A	174. E	194. D
135. A	155. D	175. B	195. D
136. E	156. E	176. B	
137. C	157. C	177. D	
138. D	158. E	178. E	
139. A	159. B	179. B	
140. B	160. B	180. C	

1. Sebaceous glands, all except
 - a. not in palms and soles
 - b. lie in dermis
 - c. open onto hair follicle
 - d. errector pilli lies on other (?same) side

2. Deltoid ligament (Repeat question)
 - a. continuous with spring ligament

3. Breast, which is false
 - a. supplied mainly by lateral thoracic artery
 - b. supraclavicular nodes drain it
 - c. the base is fairly inconstant
 - d. modified apocrine sweat gland
 - e. lymphatics run between.....

4. thoracic artery (internal mammary)
 - a. is from the second branch of the subclavian artery

- b. has 2 anterior vertebral branches
 - c. descends straight down
5. scapular anastomosis
- a. the link between the 3rd part of the axilla and subclavian arteries
6. submandibular ganglion
- a. has fibres to ciliary body
 - b. has fibres to nasal...
 - c. parasympathetic to superior salivatory nucleus
7. Testes
- a. has no parasympathetic supply
 - b. epididymus lies posteromedially to the testes
 - c. vas deferens lies lateral to the testis
 - d. testis appendix is inferior
 - e. Lymph drain to para-aortic and inguinal nodes
8. Ovary lymph drainage
- a. para-aortic lymph nodes
9. Teeth (!!! ...we were shocked too)
- a. cementum does not resemble bone
 - b. periodontal ligament runs transversely
 - c. nerve and vessel supply is through the alveolar foramen
 - d. dentine does not develop until adulthood
 - e. ...meets enamel midway down
10. Infants v. Adults, which is false
- a. have a bigger tongue
 - b. have a shorter neck
 - c. larynx lies higher up
 - d. spinal cord ends at L3
11. (Repeat question) Skull bone that ossifies in membrane
12. Mandibular nerve branch
- a. auriculotemporal
 - b. zygomaticotemporal
 - c. zygomaticofacial
 - d. infraorbital
 - e. infratrochlear
12. Facial nerve supply
- a. supratrochlear supplies mid-frontal region
 - b. lacrimal supplies medial eye
13. All are branches of the ophthalmic nerve except (Repeat Question)
- a. infraorbital

- b. external nasal
- c. supraorbital
- d. infratrochlear
- e. supratrochlear

14. facial nerve ganglion is in the (repeat question)

- a. pons
- b. medulla

15. Triangular space and quadrangular space (repeat question)

16. Brachial artery question (learn it well)

17. Feet interossei

- a. plantar are bipennate muscle
- b. axis is 4th toe
- c. plantar abduct
- d. when act together flex MTP and extend IPJ

18. Injury to maxillary sinus floor results in (repeat question)

- a. loss of sensation over molars
- b. loss of sensation over canines

(I actually asked a max.fax reg who had just passed his exam what the answer to this is. His response was interesting – there is no true floor to the maxillary sinus, and the nerve travels in the wall, hence the question is wrong. However I believe the examiners are referring to the infraorbital nerve)

19. Regarding dermatomes (repeat question, straight from text)

- a. axial line is discontinuous

20. Which does not drain to inguinal lymph nodes?

- a. testes
- b. anal canal
- c. scrotum
- d. urethra

21. FPD

- a. most powerful muscle in the forearm
- b. ring and middle tendons under others
- c. separate synovial sheaths
- d. origin is...

22. FDS

- a. arises from coronoid process and medial collateral ligament
- b. flexes DIP

23. Radial artery, which is false

- a. deep to heads of adductor pollicis
- b. between heads of 1st dorsal interossei

- c. gives off artery to thumb and forefinger
24. right coronary artery
- a. from left posterior sinus
 - b. gives off posterior interventricular in most cases
 - c. runs between left infundibulum and right auricle
25. Ulnar nerve
- a. lies to the radial side of the artery
26. What is not supplied by the tibial nerve?
- a. short head of biceps femoris
 - b. long head of biceps femoris
 - c. other muscles....
27. FPL (repeat question)
- a. fibres from radial side
28. Abdominal plans
- a. hypochondrium is...
 - b. mid-inguinal lines is
 - c. Prepyloric region is line between ischial spines
29. Femoral artery
- a. may extend into retroperitoneal spaces
 - b. palapted miway between pubic tubercle and ASIS

Introduction to Regional Anatomy:

1. Which of the following statements about the deep fascia is FALSE?
 - a) The iliotibial tract is a development of the deep fascia.
 - b) There is no deep fascia over the face.
 - c) The deep fascia never passes freely over bone, always being anchored to the periosteum.
 - d) The nerve supply for the deep fascia comes from that for the overlying skin.
 - e) The nerve supply for the deep fascia comes from the nerves supplying the muscles which it invests.

2. Which of the following is NOT an example of fibrocartilage?
 - a) The intervertebral discs.
 - b) The glenoid labrum.
 - c) The epiglottis.
 - d) The menisci of the knee joint.
 - e) The articular surfaces of the clavicle.

3. An example of a bipennate muscle is :
- Supraspinatus.
 - Subscapularis.
 - Deltoid.
 - Flexor pollicis longus.
 - Tibialis anterior.
4. According to Hilton's Law, the motor nerve to a muscle which moves a joint also gives a branch of supply to:
- The antagonising muscle(s).
 - The skin over the joint.
 - The articular cartilage of the joint.
 - The next joint distal to that moved by the muscle.
 - The marrow cavity of the bone immediately proximal to the joint.
5. All of the following statements about veins are correct EXCEPT:
- They are always bigger than their corresponding arteries.
 - They are often double.
 - Venous valves usually consist of two apposed cusps.
 - The inferior vena cava, portal and pelvic veins have only a few true valves.
 - Large veins commonly dilate greatly during periods of increased blood flow.
6. The T4 dermatome commonly innervates the region of the:
- Sternal notch.
 - Nipples.
 - Xiphoid.
 - Umbilicus.
 - Axilla.
7. The skin overlying the medial malleolus is innervated by:

- a) S2
- b) L3
- c) S1
- d) L4
- e) L5

8. In the context of spinal injury, preservation of elbow flexion and the biceps jerk but loss of elbow extension implies a lesion immediately below what spinal cord level?

- a) C4
- b) C5
- c) C6
- d) C7
- e) C8

1. Which of the following statements about coracobrachialis muscle is correct ?

- a) Its tendon is fused to the lateral side of the short head of biceps.
- b) The median nerve passes through the muscle.
- c) It is supplied by nerve roots C5, C6 and C7.
- d) The muscle consists of two fused heads.
- e) It is an extensor and adductor of the shoulder joint.

2. Which of the following lies posterior to the medial intermuscular septum midway along the arm ?

- a) Brachialis muscle.
- b) Medial cutaneous nerve of the arm.
- c) Radial nerve.
- d) Ulnar nerve.
- e) Median nerve.

3. All of the following are true of the median nerve except:

- a) It has no muscular branches in the arm.
- b) It has sympathetic branches in the arm.
- c) It commences lateral to the axillary artery.
- d) Its surface marking is a line from the groove behind coracobrachialis to the antecubital fossa, medial to the brachial artery.
- e) It takes origin from nerve roots C5, C6, C7 and C8 only.

4. All of the following statements about triceps muscle are correct except:

- a) Part of the medial head lies lateral to the lateral head during contraction.
- b) The nerve supply is from C6, C7 and C8.
- c) It is an extensor and a stabiliser of the shoulder joint.
- d) Part of the muscle's insertion is into the capsule of the elbow joint.
- e) Fractures of the humeral mid-shaft are unlikely to cause paralysis of triceps.

5. Which of the following is correct ?

- a) The elbow joint capsule does not communicate with the proximal radio-ulnar joint.
- b) The elbow joint is the most commonly dislocated joint in the body.
- c) The most commonly injured nerve in the region of the elbow is the ulnar nerve.
- d) The elbow joint receives its innervation solely from the median, ulnar and radial nerves.
- e) The deep or "middle" band is the strongest part of the ulnar collateral ligament of the elbow joint.

11. Which of the following muscles is not pierced by its nerve of supply?

- a) Supinator.
- b) Brachialis.
- c) Coracobrachialis.
- d) Pronator teres.
- e) Flexor carpi ulnaris.

12. Which of the following does not cross the elbow joint ?

- a) Brachioradialis.
- b) Flexor carpi ulnaris.
- c) Flexor carpi radialis.
- d) Pronator teres.
- e) Flexor digitorum profundus.

13. Which muscle is not involved in providing grip strength ?

- a) Flexor digitorum profundus.
- b) Extensor carpi radialis longus.
- c) Flexor digitorum superficialis.
- d) Flexor carpi radialis.
- e) Flexor pollicis longus.

14. Which of the following forms part of the floor of the anatomical snuffbox ?

- a) The base of the proximal phalanx of the thumb.
- b) The scaphoid tubercle.
- c) The dorsal tubercle of Lister.
- d) The radial styloid process.
- e) The trapezoid.

15. Which of the following is not correct of the extensor retinaculum ?

- a) It attaches to the triquetrum and the pisiform.
- b) It is continuous with the deep fascia.
- c) It prevents “bowstringing” of the extensor tendons of the forearm.
- d) It has six compartments lying deep to it.
- e) It attaches to the ulnar styloid.

16.

1. The only carpal bone to give attachment to both the extensor retinaculum and the flexor retinaculum is the :

- a) Triquetrum.
- b) Scaphoid.
- c) Hamate.
- d) Pisiform.
- e) None of the above.

2. Which of the following can not be used to examine the function of a particular motor nerve ?

- a) Abductor pollicis brevis.
- b) Flexor pollicis brevis.
- c) Adductor pollicis.
- d) Abductor digiti minimi.
- e) None of the above.

3. Which of the following represents the correct arrangement of the contents of a web space, from superficial (palmar) to deep (dorsal) ?

- a) Superficial transverse metacarpal ligament → digital arteries → digital nerves → deep transverse metacarpal ligament → lumbrical tendons → interosseous tendons

- b) Superficial transverse metacarpal ligament → digital arteries → digital nerves → lumbrical tendons → deep transverse metacarpal ligament → interosseous tendons.
- c) Superficial transverse metacarpal ligament → digital nerves → digital arteries → lumbrical tendons → interosseous tendons → deep transverse metacarpal ligament.
- d) Superficial transverse metacarpal ligament → digital nerves → digital arteries → deep transverse metacarpal ligament → lumbrical tendons → interosseous tendons.
- e) Superficial transverse metacarpal ligaments → digital nerves → digital arteries → lumbrical tendons → deep transverse metacarpal ligament → interosseous tendons.

4. Which of the following is incorrect ?

- a) The dorsal interossei are more powerful than the palmar interossei.
- b) Paralysis of the interossei causes a claw hand deformity.
- c) Contraction of the dorsal interossei causes adduction of the fingers toward the midline of the palm.
- d) The interossei are invariably supplied by the ulnar nerve.
- e) The main function of the interossei is to act as flexors of the metacarpal joints.

5. Which of the following combinations is not correct ?

- a) Adductor pollicis : deep branch of ulnar nerve.
- b) All hypothenar muscles : deep branch of ulnar nerve.
- c) Palmaris brevis : superficial branch of ulnar nerve.
- d) All lumbricals : deep branch of ulnar nerve.
- e) Sensory supply to ulnar 1 ½ fingers : superficial branch of ulnar nerve.

1. Concerning brachial plexus injury, which of the following is incorrect?

- a) Horner's syndrome may be an associated finding.
- b) If the function of infraspinatus and supraspinatus is preserved, the injury must be distal to the upper trunk.
- c) Erb's paralysis is associated with sensory loss over the lateral side of the arm and forearm.
- d) C8/T1 lesions are the most common pattern of brachial plexus injury.
- e) None of the above.

2. Radial nerve injury due to a mid-shaft humeral fracture is likely to be associated with all of the following except:
- a) Wrist drop.
 - b) Loss of MCP joint extension with preservation of interphalangeal joint extension.
 - c) Loss of elbow extension.
 - d) Preservation of shoulder joint extension.
 - e) Sensory loss in a small area over the first dorsal interosseous only.
3. Which is not supplied by the ulnar nerve ?
- a) A part of the elbow joint.
 - b) A part of flexor digitorum profundus.
 - c) Adductor pollicis.
 - d) The second dorsal interosseous.
 - e) Extensor digiti minimi.
4. The most commonly fractured carpal bone is the:
- a) Trapezium.
 - b) Triquetrum.
 - c) Scaphoid.
 - d) Hamate.
 - e) Fifth metacarpal.
5. Which of the following is correct ?
- a) The pisiform is the only sesamoid bone found in the hand.
 - b) The intercarpal joints form a continuous synovial space with the wrist joint.
 - c) The pisiform is part of the distal row of carpal bones.
 - d) The carpus is all cartilagenous at birth.
 - e) The hamate is the largest carpal bone.
1. Concerning the great saphenous vein, which of the following is not correct ?
- a) It passes 2 cm. anterior to the medial malleolus.
 - b) It lies one handsbreadth behind the medial border of the patella.
 - c) It passes through the cribriform fascia to join the medial side of the femoral vein.
 - d) It has more valves above the knee than below.

e) It may be distinguished from the femoral vein by its multiple tributaries just prior to joining the femoral vein.

2. Which of the following is not correct ?

a) The vertical group of inguinal lymph nodes drain all structures superficial to the deep fascia in the leg.

b) The medial group of inguinal lymph nodes drain the perineum, the urethra and the testes (in the male).

c) The vertical group of lymph nodes lie lateral to the termination of the great saphenous vein.

d) The lateral group of inguinal lymph nodes drain the buttock, flank and back below waist level.

e) All three groups of superficial lymph nodes drain to the deep inguinal lymph nodes.

3. Which of the following does not form part of the floor of the femoral triangle ?

a) Adductor brevis.

b) Pectineus.

c) Psoas.

d) Adductor longus.

e) Iliacus.

4. Which of the following is incorrect concerning psoas major muscle ?

a) It is a powerful flexor and external rotator of the hip.

b) It overlies the front of the capsule of the hip joint.

c) It's nerve supply comes from L1, L2 and L3 (predominantly L2).

d) It is a flexor of the lumbar spine.

e) It inserts via a rounded tendon into the lesser trochanter.

5. The medial boundary of the femoral ring is formed by:

a) The medial part of the inguinal ligament.

b) The femoral vein.

- c) The pectineal ligament.
- d) The lacunar ligament.
- e) Efferent lymphatic vessels passing from the deep inguinal lymph nodes to the abdomen.

6. Which of the following lies deep to the lateral circumflex femoral artery ?

The medial femoral cutaneous nerve.

The nerve to sartorius.

The nerve to pectineus.

The intermediate femoral cutaneous nerve.

None of the above.

7. Which of the following is the most important stabilising factor for the patella ?

- a) The lateral condyle of the femur.
- b) The patellar retinaculum.
- c) Articularis genu.
- d) The lateral intermuscular septum and vastus lateralis.
- e) The lower fibres of vastus medialis.

8. The adductor canal contains all of the following except:

- a) The saphenous nerve.
 - b) The ascending genicular artery.
 - c) The femoral artery.
 - d) The nerve to vastus medialis.
 - e) The infrapatellar branch of the saphenous nerve.
- 9.