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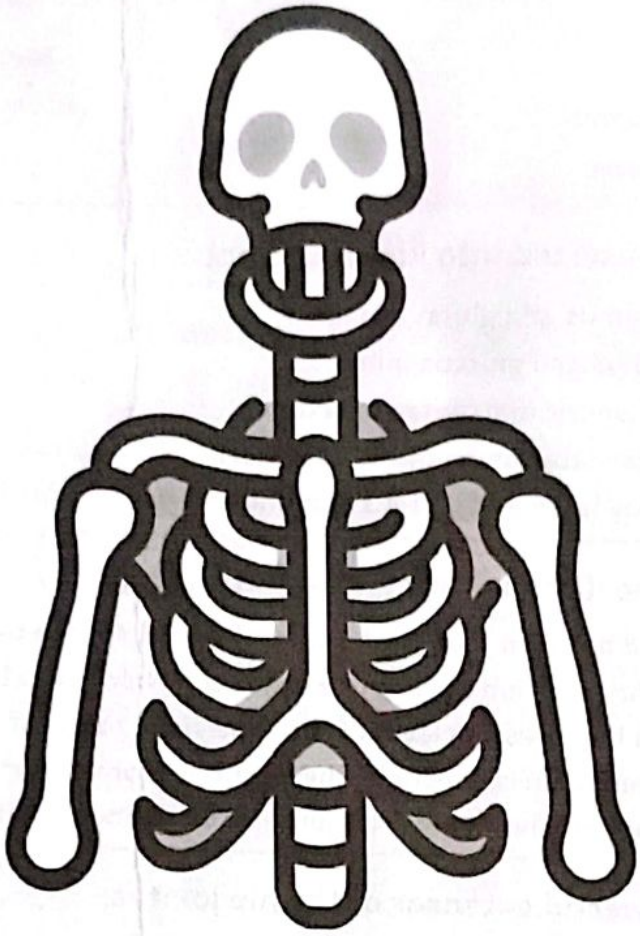


MSK - Lecture 8

4 L.E

MCQ

DR:

HOSSAM SELIM

1. One of the following muscles produce abduction of hip joint:
   A. Gluteus medius.
   B. Pectineus.
   C. Gracilis.
   D. Adductor magnus.
   E. Adductor brevis.

2. Muscle pair inserted into iliotibial tract:
   A. Gluteus maximus and gluteus medius
   B. Gluteus medius and gluteus minimus
   C. Quadratus femoris and gluteus maximus
   D. Tensor fasciae latae and quadratus femoris
   E. Tensor fasciae latae and gluteus maximus

3. Regarding the iliotibial tract; which is true:
   A. It is attached between iliac crest & lateral condyle of the tibia.
   B. It receives the insertion of gluteus medius & tensor fascia lata.
   C. It belongs to the investing layer of the superficial fascia of the thigh.
   D. It is connected to linea aspera by the lateral intermuscular septum.
   E. It helps to support the flexed knee joint in the sitting position

4. The most powerful extensor of the hip joint is:
   A. Semimemhranosus.
   B. Gluteus maximus.
   C. Sacrospinalis.
   D. Gluteus medius.
   E. obturator externus

5. The powerful extension of the thigh, required when one is standing from a sitting position, is a function of the:
   A. Gluteus maximus muscle.
   B. Psoas major muscle.
   C. Iliacus muscle.
   D. quadriceps muscle.
   E. Piriformis muscle

6. In walking, the hip bone of the suspended leg is raised by which of the following muscles acting on the supported side of the body:
   A. Gluteus maximus.
   B. Obturator internus.
   C. Gluteus medius.
   D. Obturator externus.
   E. Quadratus femoris.

7. one of the following statement is true for the tensor fascia lata muscle,:
   A. Attached to the anterior inferior iliac spine.
   B. Inserted into the iliotibial tract.
   C. Innervated by the inferior gluteal nerve.
   D. Lies deep to the gluteus medius muscle.
   E. it produce flexion of hip

8. The iliotibial tract receives muscle attachment from:
   A. Tensor fasciae lata muscle.
   B. Gluteus medius muscle.
   C. Iliacus.
   D. Gluteus minimus.
   E. Sartorius.

9. ..... doesn't lie deep to the gluteus maximus:
   A. Capsule of the hip joint.
   B. Inferior gluteal nerve.
   C. Straight head of rectus femoris muscle.
   D. Greater trochanter of femur.
   E. gluteus minimus

10. Regarding the gluteus maximus, one of the following is CORRECT
   A. flexes the hip joint:
   B. Is attached to sacrospinous ligament.
   C. Inserts entirely into gluteal ridge
   D. Stabilizes weight bearing on extended knee joint
   E. Is supplied by the superior gluteal nerve

11. Paralysis of the gluteus medius and minimus will result in the:

A. Inability to extend the thigh at the hip joint.
B. Inability to adduct the thigh at the hip joint.
C. Sinking of pelvis on the normal side when opposite foot is raised.
D. Dipping (Trendlenburg) gate in case of unilateral paralysis of the muscles.
E. waddling gait in case of unilateral paralysis of the muscles

12. Regarding the action of the glutei muscles:

A. Gluteus maximus is medial rotator of the thigh.
B. Gluteus medius is adductor of the hip joint.
C. Gluteus minimus is flexor of the hip joint.
D. Both glutei maximus and medius are extensors of the hip joint.
E. Both glutei medius and minimus are powerful abductor of the hip joint.

13. Which of the following muscle prevent tilting of the pelvis to opposite side:

A. Gluteus maximus.
B. Obturator internus.
C. Glueus medius.
D. Obturator externus.
E. Qudratus femoris

14. Which of the following best describes the anatomy of the gluteal muscles?

A. Gluteus maximus is supplied by the superior gluteal artery.
B. Gluteus maximus inserts into the greater trochanter.
C. Gluteus medius is a lateral rotator at the hip joint.
D. They all take origin from the ilium.
E. Gluteus minimus is innervated by the inferior gluteal nerve

15. Abductors of the hip joint are:

A. Called into action during walking.
B. Their paralysis cause waddling gait.
C. Gluteus medius and minimus.
D. All the above is true.

16. one of the following muscle produce Lateral rotation of the thigh:

A. Gluteus midius.

B. rectus femoris.

C. Gluteus minimus.

D. biceps femoris.

E. Piriformis.

17. one of The following muscle is a lateral rotator of the thigh:

A. The iliopsoas.
B. The rectus femoris.
C. The gluteus medius.
D. The biceps femoris.
E. The obturator internus.

18. one of the Following muscles produce lateral rotation of hip joint:

A. Gluteus medius.
B. semitendonisus.
C. Superior gemellus.
D. rectus femoris.
E. biceps femoris.

19. Muscles which flex hip and knee:

A. Rectus femoris
B. Semitendinosus
C. Biceps femoris.
D. Sartorius
E. None of the above

20. The sciatic nerve supply one of the following muscles:

A. Biceps femoris
B. Sartorius
C. rectus femoris
D. Gluteus maximus
E. Adductor magnus

21. which of the following muscles, is supplied by The sciatic nerve :

A. obturator externus.

B. adductor magnus.

C. obturator internus.

D. Quadratus femoris.

E. Semitendnosus.

22. One of Following statements regarding hamstring muscles (Posterior compartment of thigh) is true:

A. All are supplied by femoral nerve.

B. They can extends the knee.

C. They extend the hip.

D. Biceps femoris produces medial rotation of knee.

E. Upper half of semitendinsosu is membranous.

23. Regarding the hamstring muscles one of the following is CORRECT

A. Arise from ischeal tuberosity

B. Insert into linea aspera

C. Receive blood from the obturator artery

D. Are innervated entirely by the femoral nerve

E. They are more important than gluteus maximus in extension of hip joint during standing from sitting position

24. Which statement best describes the posterior compartment of the thigh?

A. Common origin for hamstrings muscles is the ischial spine.

B. Ischial head of Adductor magnus is a hamstring muscle.

C. All the hamstring muscles are innervated by the obturator nerve.

D. Both heads of biceps femoris take origin from the pelvis.

E. Muscles of medial aspect of thigh are innervated by sciatic nerve

25. Femoral vessels enter popliteal fossa through hiatus of:

A. Adductor longus.

B. Rectus femoris.

C. Adductor magnus.

D. Gracilis.

E. Vastus medialis.

26. The sciatic nerve supply one of the following muscles:

A. Biceps femoris

B. Sartorius

C. rectus femoris

D. Gluteus maximus

E. Adductor magnus

27. which of the following muscles, is supplied by The sciatic nerve :

A. obturator externus.

B. adductor magnus.

C. obturator internus.

D. Quadratus femoris.

E. Semitendnosus.

28. The sciatic nerve:

A. Is formed entirely by sacral spinal nerves

B. Consists of two components, which pass through the greater and lesser sciatic foramina respectively

C. Passes midway between the greater trochanter and the ischial tuberosity

D. Rests on adductor longus

E. Terminates by dividing into superficial and deep peroneal nerves

29. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants?

A. Upper outer quadrant.

B. Lower outer quadrant.

C. Upper inner quadrant.

D. Lower inner quadrant.

E. Any one of the above quadrants

30. The nerve commonly injured in fractured neck of the fibula is the:

A. Sciatic nerve.

B. Superficial peroneal nerve.

C. Deep peroneal nerve.

D. Tibial nerve.

E. Common peroneal nerve.

31. Effects of common peroneal nerve injury include one of the following:

A. Foot drop and inversion of the foot

B. Foot drop and eversion of the foot.

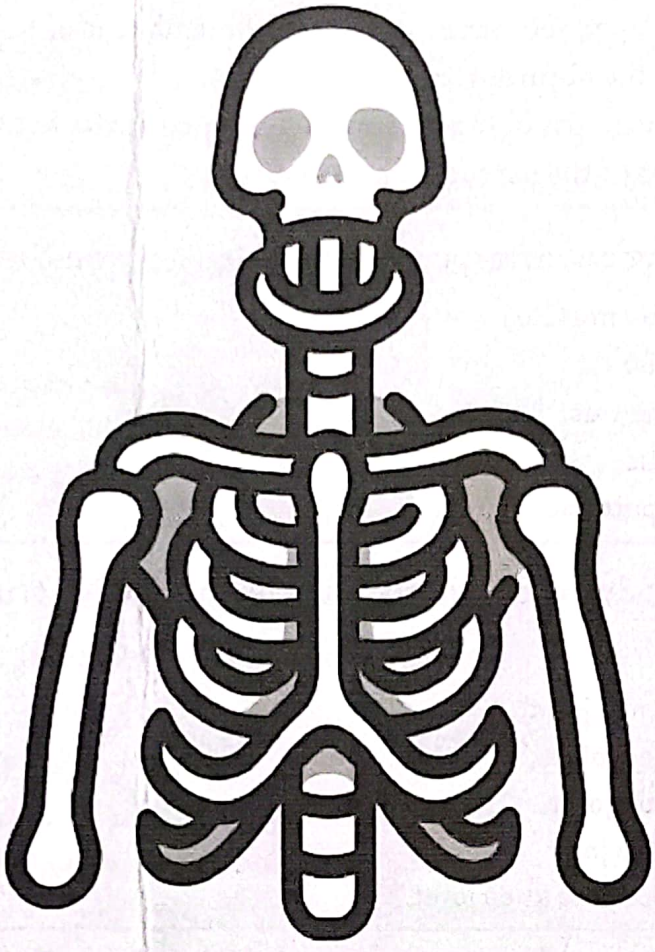
C. Dorsi flexion and eversion of the foot.

D. Dorsi flexion and inversion of the foot.

E. Loss of sensation on the medial side of the leg

1.	A
2.	E
3.	A
4.	B
5.	A
6.	C
7.	B
8.	A
9.	C
10.	D
11.	D
12.	E
13.	C
14.	D
15.	D
16.	E
17.	E
18.	C
19.	D
20.	A
21.	E
22.	C
23.	A
24.	B
25.	C
26.	A
27.	E
28.	C
29.	A
30.	E
31.	A

2024



MSK - Lecture 7

3 L.E

MCQ

DR:

HOSSAM SELIM

1. The articularis genu muscle, mark the correct statement:
   A. Is the deep fibers of the vastus medialis muscle.
   B. Is fixed to the upper border of the synovial membrane of knee..
   C. Is supplied by the obturator nerve.
   D. Arises from the upper half of the medial surface of the femur.
   E. The deep fibers of the vastus lateralis muscle

2. The head of the quadriceps muscle which acts on the hip joint;
   A. Vastus lateralis muscle.
   B. Rectus femoris.
   C. Vastus intermedius.
   D. vastus medialis
   E. Ligamentum patellae.

3. Regarding quadriceps femoris muscle, mark ONE true statement; thus it:
   A. Extends the knee joint.
   B. Flexes the knee joint.
   C. Extends the hip joint.
   D. Abducts the hip joint
   E. Medially rotates the knee joint.

4. The rectus femoris muscle:
   A. Is an extensor of the hip joint
   B. Is supplied by the obturator
   C. Arises by two heads
   D. Inserts into the midshaft of femur
   E. Is a flexor of knee joint

5. The sartorius muscle:
   A. Flexes the knee joint and extends the hip joint.
   B. Is not one of the boundaries of the femoral triangle.
   C. Arises from the anterior superior iliac spine.
   D. Is fusiform muscle
   E. supplied by obturator nerve

6. One of the following statements describe the sartorius muscle:
   A. It is innervated by the femoral nerve.
   B. It arises from the anterior inferior iliac spine.
   C. It inserts on the lateral surface of the fibula.
   D. It forms the roof of the femoral triangle.
   E. Its contraction produces extension, abduction and lateral rotation of hip joint.

7. Breaking of anterior superior iliac spine would damage the origin of the;
   A. Biceps femoris muscle.
   B. Pectineus muscle.
   C. Rectus femoris muscle.
   D. Tensor fasciae latae muscle.
   E. Sartorius.

8. The quadriceps femoris muscle is not characterized by one of the following
   A. Arises entirely from the femur
   B. Is the main extensor of the knee joint
   C. Is supplied by the femoral nerve
   D. Gives fibrous expansions to inforce capsule of knee joint
   E. Is inserted via the ligamentum patelie into the upper epiphysis of the tibia

9. The orifice in adductor muscle transmit?
   A. Femoral vessels
   B. Femoral nerve
   C. Saphenous nerve
   D. Tibial nerve
   E. Sciatic nerve

10. Flexion of the hip joint is done by which of the following muscle,:
   A. vastus medialis muscle.
   B. Sartorius muscle.
   C. Semimembranosus muscle.
   D. biceps femoris muscle.
   E. gluteus medius

11. Which of the following muscles is a powerful flexor of the thigh:
    A. Superior gamellus.
    B. Adductor longus.
    C. Gracilis.
    D. Psoas major.
    E. Obturator internus.

12. Flexion of the hip joint is carried out by:
    A. Iliopsoas
    B. Vastus intermedius
    C. *Semimembranosus*
    D. Gluteus maximus
    E. Quadratus femoris

13. in the floor of the femoral triangle which of the following muscles are seen:
    A. Adductor longus.
    B. Vastus lateralis.
    C. Vastus mediaiis.
    D. gracilis.
    E Adductor brevis

14. The floor of the femoral triangle is formed by one of the following muscles:
    A. biceps femoris
    B. rectus femoris
    C. adductor magnus
    D. Psoas major.
    E. Adductor brevis.

15. The superior boundary (base) of the femoral triangle is formed by the:
    A. Sartorius muscle.
    B. Adductor longus muscle.
    C. Inguinal ligament.
    D. Pubic tubercle.
    E. Pectineus muscle

16. One of the following statements concerning the femoral triangle is true:

A. The inguinal ligament forms the superior border of the femoral triangle.
B. Adductor brevis, pectineus, and iliacus form the floor of femoral triangle.
C. The femoral artery lies medial to the femoral vein in the femoral triangle.
D. The femoral nerve lies medial to the femoral artery in the femoral triangle.
E. A femoral hernia cannot protrude onto the floor of the femoral triangle

17. The boundaries of the femoral triangle is by the following:

A. Adductor longus, pectineus and sartorius.
B. Inguinal ligament, sartorius and adductor longus.
C. Inguinal ligament, sartorius and adductor brevis.
D. Adductor brevis, pectineus and sartorius.
E. None of the above

18. The adductor (subsartorial) canal, one of the following is true:

A. Vastus lateralis muscle in its lateral aspect.
B. Nerve plexus embedded in its floor.
C. Descending genicular branch from femoral artery which takes part in the anastomosis around the knee.
D. Nerve to the vastus lateralis muscle present as a content.
E. Saphenous nerve present outside it

19. One of the following is true concerning the adductor canal:

A. Begins at the apex of femoral triangle it is bounded by the sartorius posteriorly.
B. It is bounded by the vastus lateralis laterally.
C. It is bounded by the adductor brevis medially.
D. It transmits only structures found within the femoral sheath.
E. It terminates at the opening in the adductor magnus

20. One of the following structures is in the adductor canal:

A. Femoral artery.
B. Femoral nerve.
C. Profunda femoris artery.
D. Nerve to vastus lateralis.
E. Middle genicular artery

21. Regarding adductor canal, the following statements is true:

A. It begins at the base of the femoral triangle.
B. It ends at the adductor hiatus.
C. It transmits the femoral nerve.
D. Its posterior wall is formed by the adductor brevis muscle only.
E. Its lateral wall is formed by the vastus lateralis.

22. Regarding the adductor canal and its contents, mark one correct statement:

A. Its anteromedial wall is formed by the vastus medialis.
B. Its lateral wall is formed by the vastus lateralis.
C. Its posterior wall is formed by the adductor longus and magnus.
D. femoral artery is covered by a fibrous sheet as it courses through the canal.
E. The saphenous nerve crosses femoral artery from medial to lateral

23. Contents of the adductor (sub sartorial) canal include one of the following.:

A. Great saphenous vein.
B. Saphenous nerve.
C. Superficial inguinal lymph nodes.
D. Obturator artery.
E. Nerve to vastus lateralis

24. Artery in adductor canal:

A. Femoral
B. Obturator
C. Profunda femoris
D. Perforating branch of profunda femoris
E. Medial circumflex femoral

1.	B
2.	B
3.	A
4.	C
5.	C
6.	A
7.	E
8.	A
9.	A
10.	B
11.	D
12.	A
13.	A
14.	D
15.	C
16.	A
17.	B
18.	C
19.	E
20.	A
21.	B
22.	C
23.	B
24.	A

1. Regarding tibialis posterior muscle; indicate the correct statement:
   A. It arises from posterior surface of tibia, fibula and interosseous membrane.
   B. Its tendon passes superficial to that of flexor digitorum longus.
   C. It produces eversion of the foot by acting at the subtalar joint.
   D. It does not help in suspending the medial longitudinal arch of the foot.
   E. Its slips of insertion lie in the third layer of the sole of foot

2. Regarding the gastrocnemius muscle; mark the proper account
   A. Its medial head is attached to the tibia below its medial condyle.
   B. Its lateral head is attached to the femur above its lateral condyle.
   C. It has no role in the forward propulsive movement of the body during walking.
   D.It receives its nerve supply from the tibial nerve in the popliteal fossa.
   E. Its tendon unites with the tendon of the soleus and the united tendon is attached to talus.

3. Which of the following is an intraarticular tendon?
   A. Sartorius.
   B. Semitendinosus.
   C. Anconeus.
   D. Popliteus.
   E. Biceps femoris.

4. Unlocking of the knee joint to permit flexion is caused by action of:
   A. Vastus medialis.
   B. Articularisgenu
   C. Gastrocnemius.
   D. Biceps femoris.
   E. Popliteus.

5. Eversion and inversion of the foot occurs at:

A. Ankle joint.
B. Subtalar joints.
C. Inferior tibiofibuiar joint.
D. First tarsometatarsal joint.
E. tarsometatarsal joints

6. Inversion of the foot is done by; mark the correct answer:

A. Tibialis anterior and tibialis posterior muscles.
B. Extensor digitorum brevis.
C. Peroneus longus.
D. Peroneus tertius.
E. Peroneus brevis.

7. Consider the lateral compartment of the leg. Which statement is correct?

A. All muscles of lateral compartment innervated by superficial peroneal nerve.
B. It contains the peroneal artery.
C. It contains peroneus longus, brevis and tertius.
D. The peroneus longus tendon grooves the lateral malleolus.
E. The muscles of the lateral compartment principally invert the foot.

8. The superficial calf (back of leg) muscles; select the correct statement:

A. Plantar flex the ankle joint.
B. Invert the foot.
C. Enters the foot by passing deep to the flexor retinaculum.
D. Are five in number?
E. supplied by lateral popliteal nerve

9. One of The following statements is true for flexor hallucis longus muscle;
   A. Grooves the upper surface of the sustentaculum tali.
   B. An important factor in maintaining the transverse arch of the foot.
   C. Lies deep to the extensor retinaculum.
   D. Plantar extension of the ankle joint.
   E. Supplied by posterior tibial nerve

10. One of these structures is located in the anterior compartment of the leg;
   A. Posterior tibial artery.
   B. Soleus.
   C. Extensor digitorum longus.
   D. Tibial nerve.
   E. Medial plantar artery.

11. The superficial muscles of the posterior compartment of the leg insert on which of the following bones:
   A. Talus.
   B. Navicular.
   C. Calcaneus.
   D. Tibia.
   E. Fibula.

12. One of the Following statements regarding muscles of front of leg is true:
   A. These are all supplied by tibial nerve.
   B. These receive their blood supply by posterior tibial artery.
   C. They produce plantar flexion of foot.
   D. Tibialis anterior can invert foot.
   E. Soleus and gastrocnemius are inserted into calcaneus by separate tendons.

13. Which one of the following muscles is supplied by the deep peroneal nerve:

A. Tibialis anterior.
B, Tibialis posterior.
C. Flexor digitorum longus.
D. Peroneus brevis.
E. Peroneus longus

14. One of the Following statements regarding muscles of the anterior compartment of the leg is false:

A. Peroneus tertius.
B. Peroneus brevis.
C. Tibialis anterior.
D. Extensor hallucis longus.
E. Extensor digitorum longus.

15. Which statement correctly describes the anterior compartment of the leg?

A. It is separated from posterior compartment by anterior intermuscular septum,
B. All muscles of the compartment are innervated by the deep peroneal nerve.
C. The anterior tibial artery arises in the anterior compartment.
D. It contains extensor digitorum brevis.
E. Tibialis anterior assists in eversion of the foot.

16. The tibialis anterior

A. Arises from the medial surface of tibia
B. Inserts into the medial surface of the medial cuneiform bone
C. Passes beneath the flexor retinacula of the ankle
D. Supplied by tibial nerve
E. It everts the foot,

17. The muscles supplied by the superficial peroneal nerve; mark the most appropriate answer:

A. Evert the foot.
B. Invert the foot.
C. extend the foot.
D. Dorsiflex the foot.
E. Peroneus longus & tertious

18. Superficial peroneal nerve supplies:

A. Peroneus tertius.
B. Peroneus longus.
C. Tibialis anterior.
D, Flexor digitorum longus.
E. Extensor digitorum longus.

1.	A
2.	D
3.	D
4.	E
5.	B
6.	A
7.	A
8.	A
9.	E
10.	C
11.	C
12.	D
13.	A
14.	B
15.	B
16.	B
17.	A
18.	B

1. Which of the following muscles planter flex the foot at the ankle joint: A. Peroneus tertius. B. Extensor digitorum brevis. C. Tibialis posterior. D. Extensor hallucis brevis. E. Tibialis anterior.	C
2. Which of the following ligaments prevented posterior displacement of the tibia on the femur? A. Oblique popliteal B. Anterior cruciate C. Posterior cruciate D. Lateral collateral E. Medial collateral	C

3. The common types of football injuries are rupture of the: A. Tibial collateral ligament. B. Fibular collateral ligament. C. Posterior cruciate ligament D. Plantar aponeurosis. E. Lateral meniscus.	A
4. You are concerned that your patient's medial deltoid ligament may have been torn from its proximal attachment. Which of the following would you palpate for tenderness? A. The medial aspect of the tibial shaft B. The lateral aspect of the fibular shaft C. The lateral malleolus D. The medial malleolus E. The calcaneus	D
5. Regarding the ankle joint, one the followings is correct: A. Synovial joint of condylar variety. B. It is unstable joint. C. The medial or deltoid ligament is weaker than the lateral one. D. Movements of inversion and eversion do not take place at the ankle joint. E. Muscles of anterior compartment of leg planter flex it.	D

6. A 17-year-old football player complains of severe knee pain after being tackled from the side. When the knee is flexed, the tibia can be moved anteriorly. Rupture or tearing of which of the following ligaments would most likely account for this observation? A. Anterior cruciate ligament B. Fibular collateral ligament C. Lateral meniscus D. Medical meniscus E. Posterior cruciate ligament	A

7. Which of the following actions would you most likely expect to be the weakest if your patient has a lesion of tibial nerve in the popliteal fossa? A. Dorsiflexion of the ankle B. Extension of the hip C. Extension of the digits D. Flexion of the knee E. Flexion of the digits	E
8. Which statement is correctly describe the ligaments of the knee joint? A. The medial meniscus is smaller than the lateral meniscus. B. The lateral meniscus is attached to the lateral collateral ligament. C. The transverse ligament of the knee attaches to both menisci. D. The anterior cruciate ligament prevents hyperflextion of the knee. E. The posterior cruciate ligament inserts onto the lateral femoral condyle.	C

9. The deltoid ligament; mark the correct answer: A. Lies on the lateral aspect of the ankle joint B. Attached inferiorly to the spring ligament. C. Is rather a weak ligament. D. Is quadrilateral in shape. E. It receive insertion of peroneus brevis.	B
10. Injury of the common peroneal nerve is indicated by A. Inability to dorsiflex the ankle B. Inability to plantarflex the ankle C. Anaesthesia of the medial border of the foot	A

D. Anaesthesia of the sole E. The foot is everted	

11. A patient comes to you complaining of his inability to stand on his tiptoes. Which of the following nerve injuries is most likely to be involved? A. Femoral nerve B. Tibial nerve C. Common fibular nerve D. Deep fibular nerve E. Superficial fibular nerve	B
12. Tibial nerve supplies: A. Peroneus tertius. B. Peroneus longus. C. Tibialis anterior. D. Flexor digitorum longus. E. Extensor digitorum longus.	D
13. A patient with the hip dislocation is also exhibiting weakness of extension of the thigh at the hip. This would indicate possible damage to which of following? A. Femoral nerve B. Obturator nerve C. Common fibular portion of the sciatic nerve D. Tibial portion of the sciatic nerve E. Saphenous nerve	D

14. Which one of the following muscles is supplied by the deep peroneal nerve: A. Tibialis anterior. B. Tibialis posterior. C. Flexor digitorum longus. D. Peroneus brevis. E. Peroneus longus.	A
15. A 23-year-old female postpartum day 1 with right foot weakness numbness, and foot drop after a difficult vaginal delivery. What is the most likely diagnosis?	C

A. Femoral nerve B. Obturator nerve C. Common peroneal portion of the sciatic nerve D. Tibial portion of the sciatic nerve E. Saphenous nerve	

16. You have examined a patient and find there is weakness in the ability to flex knee. This indicates a problem with which of the following nerves? A. Femoral nerve B. Tibial nerve C. Common fibular nerve D. Deep fibular nerve E. Superficial fibular nerve	B
17. Which of the following actions would you most likely expect to be the weakest if your patient has a lesion of the tibial nerve in the popliteal fossa? A. Dorsiflexion of the ankle B. Extension of the hip C. Extension of the digits D. extension of the knee E. Flexion of the digits	E

18. The nerve commonly injured in fractured neck of the fibula is the: A. Sciatic nerve. B. Superficial peroneal nerve. C. Deep peroneal nerve. D. Tibial nerve. E. Common peroneal nerve.	E

19. Effects of common peroneal nerve injury include one of the following: A. Foot drop and inversion of the foot B. Foot drop and eversion of the foot. C. Dorsi flexion and eversion of the foot. D. Dorsi flexion and inversion of the foot. E. Loss of sensation on the medial side of the leg.	A

20. Injury of the common peroneal nerve is indicated by A. Inability to dorsiflex the ankle B. Inability to plantarflex the ankle C. Anaesthesia of the medial border of the foot D. Anaesthesia of the sole E. The foot is everted	A
21. Which one of the following muscles is supplied by deep peroneal nerve: A. Tibialis anterior. B. Tibialis posterior. C. Flexor digitorum longus. D. Peroneus brevis. E. Peroneus longus.	A
22. Which of the following muscles would be susceptible to paralysis following a crushing injury to the lateral aspect of the head and neck of the fibula? A. Extensor digitorum longus. B. Tibialis anterior. C. Peroneus longus. D. All of the above. E. None of the above	D

23. Superficial peroneal nerve supplies: A. Peroneus tertius. B. Peroneus longus. C. Tibialis anterior. D. Flexor digitorum longus. E. Extensor digitorum longus.	B
24. When administering an intramuscular gluteal injection in the superior-lateral quadrant, healthcare provider would most likely avoid injury of? A. Femoral nerve B. Genitofemoral nerve C. Inguinal nerve D. Obturator nerve E. Sciatic nerve	E

VESSELS OF LL

MSK MCQ

DR: FATMA TAREK

1. Which of the following doesn't share in formation of popliteal fossa boundaries: A. Gastrocnemius B. Biceps femoris C. Semitendinosus D. Adductor Longus	D
2. Which of the following Is Not true regarding femoral artery? A. Pass through adductor canal B. Continuation of internal iliac artery C. In the femoral triangle, it lies lateral to femoral vein D. It gives profunda femoris artery	B
3. Which of the following is true regarding dorsalis pedis artery A. Lies in posterior compartment of the leg B. Continuation of posterior tibial artery C. Lies between extensor digitorum and peroneus tertius muscle D. May be absent as a normal vartiation	D
4. Which is true regarding small saphenous vein? A. Ends in Great saphenous vein. B. Drain in Popliteal vein. C. Lies on medial side of the leg D. runs with Anterior tibial vein	B
5. The anterior tibial artery ends by continuing as which artery at which point? A. Dorsalis pedis artery midway between the two malleoli B. Popliteal artery at the adductor hiatus C. Medial plantar artery behind the medial malleolus D. Lateral plantar artery behind the medial malleolus E. Peroneal artery at the neck of the fibula	A
6. Regarding popliteal artery what is Wrong? A. It gives genicular arteries B. It begins at the opening at adductor longus C. It ends at lower border of popliteus D. It gives cutaneous arteries	B

7. The plantar arch is formed mainly of: A. Medial plantar B. Lateral plantar C. Dorsalis pedis : D. Deep plantar E. Posterior tibial artery	B
8. The cribriform fascia of saphenous opening is pierced by which of the following: A. small saphenous vein. B. Femoral vein. C. Deep circumflex iliac artery. D. Saphenous nerve E. Long saphenous vein	E
9. Which is false regarding femoral vein? A. Terminates as popliteal vein at adductor hiatus B. Receives long saphenous vein C. Lies in the intermediate compartment of femoral sheath D. Lies in femoral triangle E. Receives medial circumflex femoral vein	A
10. One of the Following statements regarding femoral artery is true : A. It lies medial to femoral vein. B. Its uppermost part is enclosed within fascia lata. C. It enters the thigh at midpoint of inguinal ligament. D. It lies behind adductor brevis in the adductor canal. E. It passes through opening in adductor magnus & continues as popliteal artery	E

11. Which of the following isn't a branch from anterior tibial artery? A. Anterior tibial recurrent B. Posterior tibial recurrent C. Anterior medial malleolar D. Anterior lateral malleolar E. Posterior medial malleolar	E

12. The superficial external pudendal artery is a branch of: A. Femoral artery B. External iliac artery C. Internal iliac artery D. Aorta E. Obturator artery	A
13. The superficial epigastric artery is a branch from…… artery: A. Femoral B. Popliteal C. Profunda femoris D. External iliac E. Internal iliac	A
14. The orifice in adductor muscle transmits: A. Femoral vessels B. Femoral nerve C. Saphenous nerve D. Tibial nerve E. Sciatic nerve	A
15. Femoral vessels enter popliteal fossa through hiatus of: A. Adductor longus. B. Rectus femoris. C. Adductor magnus. D. Gracilis. E. Vastus medialis.	C

16. The fibular artery is a branch from…… A. Popliteal B. Anterior tibial C. Posterior tibial D. Profunda femoris E. Dorsalis pedis	C
17. Regarding femoral artery, what is Wrong? A. It begins at midpoint of inguinal ligament B. Its pulsation can be felt	A

C. It passes in femoral sheath and triangle D. It lies between femoral nerve and femoral vein E. Its branches share in anastomosis around knee	
18. One of the following statements regarding popliteal artery: A. It begins at the opening in the adductor magnus (Adductor hiatus). B. It ends at the upper border of the popliteus muscle. C. It gives two genicular branches. D. It courses through the popliteal fossa from superior to lateral angle E. It courses through the popliteal fossa from superior to medial angle	A
19. The popliteal artery one of statements is true: A. Gives four genicular branches. B. Lies superficial to popliteal vein. C. Is crossed anteriorly by the tibial nerve. D. Terminates by dividing into anterior and posterior tibial artery E. Ends at the upper border of popliteus muscle.	D

20. Reduced blood supply to the lateral compartment of the leg results primarily from damage to: A. Anterior tibial artery. B. Femoral artery. C. Lateral malleolar artery. D. Circumflex fibular artery. E. Peroneal artery.	E
21. Regarding arteries of lower limb, one of the following statements is true: A. Femoral artery begins superficial to inguinal ligament. B. Profunda femoris artery gives four perforating branches. C. Posterior tibial artery enters the sole behind the lateral maleolus D. Dorsalis pedis artery is continuation of posterior tibial artery on dorsum of foot. E. Plantar arch is mainly formed by the medial plantar artery.	B
22. Ligation of the anterior tibial artery would affect which of this branches: A. Dorsalis pedis artery. B. Lateral plantar artery. C. Planter arch. D. Peroneal artery.	A

E. Circumflex fibular artery.	
23. The Peroneal artery is a branch of which artery: A. Anterior tibial artery. B. Popliteal artery. C. Posterior tibial artery. D. Arcuate artery. E. Lateral planter artery.	C

24. The dorsalis pedis artery is terminated by: A. Dividing in the cleft between great and second toes B. Joining the plantar branch C. Forming a dorsal arterial arch D. Dividing Into medial and lateral plantar arteries E. Supplying the ankle Joint	B

25. Regarding saphenous vein, following statements is true: A. It starts at lateral end of dorsal venous arch. B. It passes behind medial malleolus. C. It empties into femoral vein. D. It has not any valves. E. It runs most of its course laterally in the superficial fascia.	C
26. The plantar arterial arch is formed by the lateral plantar artery and the: A. Plantar metatarsal artery. B. Anterior tibial artery. C. Posterior tibial artery. D. Peroneal artery. E. Dorsalis pedis artery.	E
27. As an orthopedic surgeon is operating in the posterior compartment of the thigh, the branches of which of the following arteries supplies it? A. Profunda femoris artery B. Femoral artery C. Superior gluteal artery D. Inferior gluteal artery E. Obturator artery	A

28.Concerning short (small) saphenous vein: mark the most suitable answer A. Pass in front of lateral malleolus. B. Descends over the back of the calf. C. Ends in the popliteal vein. D. Run with small saphenous nerve. E. Pierce cribriform fascia.	C

1. Regarding tibialis posterior muscle; indicate the correct statement:
   A. It arises from posterior surface of tibia, fibula and interosseous membrane.
   B. Its tendon passes superficial to that of flexor digitorum longus.
   C. It produces eversion of the foot by acting at the subtalar joint.
   D. It does not help in suspending the medial longitudinal arch of the foot.
   E. Its slips of insertion lie in the third layer of the sole of foot

2. Regarding the gastrocnemius muscle; mark the proper account
   A. Its medial head is attached to the tibia below its medial condyle.
   B. Its lateral head is attached to the femur above its lateral condyle.
   C. It has no role in the forward propulsive movement of the body during walking.
   D.It receives its nerve supply from the tibial nerve in the popliteal fossa.
   E. Its tendon unites with the tendon of the soleus and the united tendon is attached to talus.

3. Which of the following is an intraarticular tendon?
   A. Sartorius.
   B. Semitendinosus.
   C. Anconeus.
   D. Popliteus.
   E. Biceps femoris.

4. Unlocking of the knee joint to permit flexion is caused by action of:
   A. Vastus medialis.
   B. Articularisgenu
   C. Gastrocnemius.
   D. Biceps femoris.
   E. Popliteus.

5. Eversion and inversion of the foot occurs at:

A. Ankle joint.
B. Subtalar joints.
C. Inferior tibiofibuiar joint.
D. First tarsometatarsal joint.
E. tarsometatarsal joints

6. Inversion of the foot is done by; mark the correct answer:

A. Tibialis anterior and tibialis posterior muscles.
B. Extensor digitorum brevis.
C. Peroneus longus.
D. Peroneus tertius.
E. Peroneus brevis.

7. Consider the lateral compartment of the leg. Which statement is correct?

A. All muscles of lateral compartment innervated by superficial peroneal nerve.
B. It contains the peroneal artery.
C. It contains peroneus longus, brevis and tertius.
D. The peroneus longus tendon grooves the lateral malleolus.
E. The muscles of the lateral compartment principally invert the foot.

8. The superficial calf (back of leg) muscles; select the correct statement:

A. Plantar flex the ankle joint.
B. Invert the foot.
C. Enters the foot by passing deep to the flexor retinaculum.
D. Are five in number?
E. supplied by lateral popliteal nerve

9. One of The following statements is true for flexor hallucis longus muscle;
   A. Grooves the upper surface of the sustentaculum tali.
   B. An important factor in maintaining the transverse arch of the foot.
   C. Lies deep to the extensor retinaculum.
   D. Plantar extension of the ankle joint.
   E. Supplied by posterior tibial nerve

10. One of these structures is located in the anterior compartment of the leg;
   A. Posterior tibial artery.
   B. Soleus.
   C. Extensor digitorum longus.
   D. Tibial nerve.
   E. Medial plantar artery.

11. The superficial muscles of the posterior compartment of the leg insert on which of the following bones:
   A. Talus.
   B. Navicular.
   C. Calcaneus.
   D. Tibia.
   E. Fibula.

12. One of the Following statements regarding muscles of front of leg is true:
   A. These are all supplied by tibial nerve.
   B. These receive their blood supply by posterior tibial artery.
   C. They produce plantar flexion of foot.
   D. Tibialis anterior can invert foot.
   E. Soleus and gastrocnemius are inserted into calcaneus by separate tendons.

13. Which one of the following muscles is supplied by the deep peroneal nerve:

A. Tibialis anterior.
B, Tibialis posterior.
C. Flexor digitorum longus.
D. Peroneus brevis.
E. Peroneus longus

14. One of the Following statements regarding muscles of the anterior compartment of the leg is false:

A. Peroneus tertius.
B. Peroneus brevis.
C. Tibialis anterior.
D. Extensor hallucis longus.
E. Extensor digitorum longus.

15. Which statement correctly describes the anterior compartment of the leg?

A. It is separated from posterior compartment by anterior intermuscular septum,
B. All muscles of the compartment are innervated by the deep peroneal nerve.
C. The anterior tibial artery arises in the anterior compartment.
D. It contains extensor digitorum brevis.
E. Tibialis anterior assists in eversion of the foot.

16. The tibialis anterior

A. Arises from the medial surface of tibia
B. Inserts into the medial surface of the medial cuneiform bone
C. Passes beneath the flexor retinacula of the ankle
D. Supplied by tibial nerve
E. It everts the foot,

17. The muscles supplied by the superficial peroneal nerve; mark the most appropriate answer:

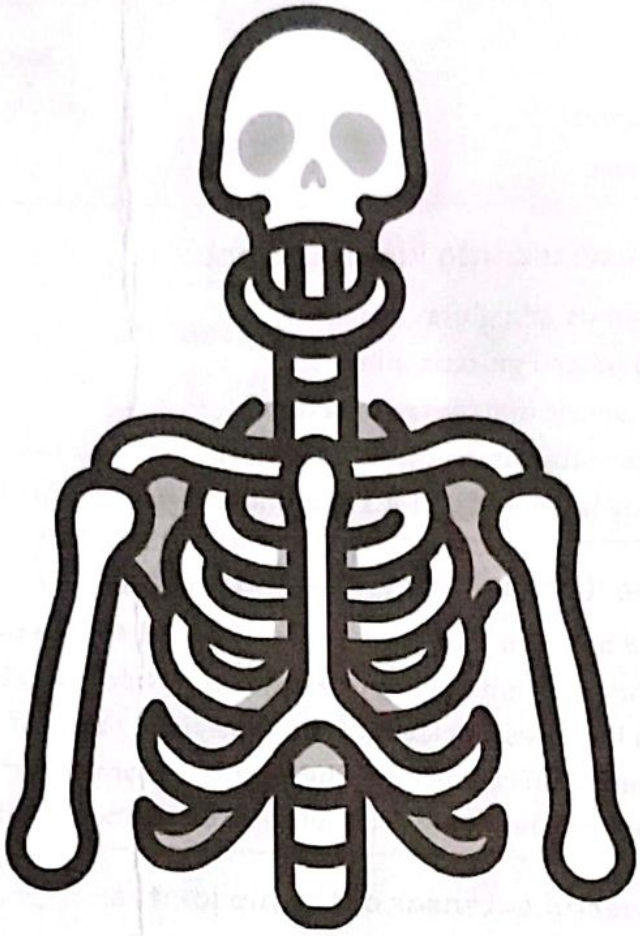
A. Evert the foot.
B. Invert the foot.
C. extend the foot.
D. Dorsiflex the foot.
E. Peroneus longus & tertious

18. Superficial peroneal nerve supplies:

A. Peroneus tertius.
B. Peroneus longus.
C. Tibialis anterior.
D, Flexor digitorum longus.
E. Extensor digitorum longus.

1.	A
2.	D
3.	D
4.	E
5.	B
6.	A
7.	A
8.	A
9.	E
10.	C
11.	C
12.	D
13.	A
14.	B
15.	B
16.	B
17.	A
18.	B

2024



MSK - Lecture 8

4 L.E

MCQ

DR:

HOSSAM SELIM

1. One of the following muscles produce abduction of hip joint:
   A. Gluteus medius.
   B. Pectineus.
   C. Gracilis.
   D. Adductor magnus.
   E. Adductor brevis.

2. Muscle pair inserted into iliotibial tract:
   A. Gluteus maximus and gluteus medius
   B. Gluteus medius and gluteus minimus
   C. Quadratus femoris and gluteus maximus
   D. Tensor fasciae latae and quadratus femoris
   E. Tensor fasciae latae and gluteus maximus

3. Regarding the iliotibial tract; which is true:
   A. It is attached between iliac crest & lateral condyle of the tibia.
   B. It receives the insertion of gluteus medius & tensor fascia lata.
   C. It belongs to the investing layer of the superficial fascia of the thigh.
   D. It is connected to linea aspera by the lateral intermuscular septum.
   E. It helps to support the flexed knee joint in the sitting position

4. The most powerful extensor of the hip joint is:
   A. Semimemhranosus.
   B. Gluteus maximus.
   C. Sacrospinalis.
   D. Gluteus medius.
   E. obturator externus

5. The powerful extension of the thigh, required when one is standing from a sitting position, is a function of the:
   A. Gluteus maximus muscle.
   B. Psoas major muscle.
   C. Iliacus muscle.
   D. quadriceps muscle.
   E. Piriformis muscle

6. In walking, the hip bone of the suspended leg is raised by which of the following muscles acting on the supported side of the body:
   A. Gluteus maximus.
   B. Obturator internus.
   C. Gluteus medius.
   D. Obturator externus.
   E. Quadratus femoris.

7. one of the following statement is true for the tensor fascia lata muscle,:
   A. Attached to the anterior inferior iliac spine.
   B. Inserted into the iliotibial tract.
   C. Innervated by the inferior gluteal nerve.
   D. Lies deep to the gluteus medius muscle.
   E. it produce flexion of hip

8. The iliotibial tract receives muscle attachment from:
   A. Tensor fasciae lata muscle.
   B. Gluteus medius muscle.
   C. Iliacus.
   D. Gluteus minimus.
   E. Sartorius.

9. ..... doesn't lie deep to the gluteus maximus:
   A. Capsule of the hip joint.
   B. Inferior gluteal nerve.
   C. Straight head of rectus femoris muscle.
   D. Greater trochanter of femur.
   E. gluteus minimus

10. Regarding the gluteus maximus, one of the following is CORRECT
   A. flexes the hip joint:
   B. Is attached to sacrospinous ligament.
   C. Inserts entirely into gluteal ridge
   D. Stabilizes weight bearing on extended knee joint
   E. Is supplied by the superior gluteal nerve

11. Paralysis of the gluteus medius and minimus will result in the:

A. Inability to extend the thigh at the hip joint.
B. Inability to adduct the thigh at the hip joint.
C. Sinking of pelvis on the normal side when opposite foot is raised.
D. Dipping (Trendlenburg) gate in case of unilateral paralysis of the muscles.
E. waddling gait in case of unilateral paralysis of the muscles

12. Regarding the action of the glutei muscles:

A. Gluteus maximus is medial rotator of the thigh.
B. Gluteus medius is adductor of the hip joint.
C. Gluteus minimus is flexor of the hip joint.
D. Both glutei maximus and medius are extensors of the hip joint.
E. Both glutei medius and minimus are powerful abductor of the hip joint.

13. Which of the following muscle prevent tilting of the pelvis to opposite side:

A. Gluteus maximus.
B. Obturator internus.
C. Glueus medius.
D. Obturator externus.
E. Qudratus femoris

14. Which of the following best describes the anatomy of the gluteal muscles?

A. Gluteus maximus is supplied by the superior gluteal artery.
B. Gluteus maximus inserts into the greater trochanter.
C. Gluteus medius is a lateral rotator at the hip joint.
D. They all take origin from the ilium.
E. Gluteus minimus is innervated by the inferior gluteal nerve

15. Abductors of the hip joint are:

A. Called into action during walking.
B. Their paralysis cause waddling gait.
C. Gluteus medius and minimus.
D. All the above is true.

16. one of the following muscle produce Lateral rotation of the thigh:

A. Gluteus midius.

B. rectus femoris.

C. Gluteus minimus.

D. biceps femoris.

E. Piriformis.

17. one of The following muscle is a lateral rotator of the thigh:

A. The iliopsoas.
B. The rectus femoris.
C. The gluteus medius.
D. The biceps femoris.
E. The obturator internus.

18. one of the Following muscles produce lateral rotation of hip joint:

A. Gluteus medius.
B. semitendonisus.
C. Superior gemellus.
D. rectus femoris.
E. biceps femoris.

19. Muscles which flex hip and knee:

A. Rectus femoris
B. Semitendinosus
C. Biceps femoris.
D. Sartorius
E. None of the above

20. The sciatic nerve supply one of the following muscles:

A. Biceps femoris
B. Sartorius
C. rectus femoris
D. Gluteus maximus
E. Adductor magnus

21. which of the following muscles, is supplied by The sciatic nerve :

A. obturator externus.

B. adductor magnus.

C. obturator internus.

D. Quadratus femoris.

E. Semitendnosus.

22. One of Following statements regarding hamstring muscles (Posterior compartment of thigh) is true:

A. All are supplied by femoral nerve.

B. They can extends the knee.

C. They extend the hip.

D. Biceps femoris produces medial rotation of knee.

E. Upper half of semitendinsosu is membranous.

23. Regarding the hamstring muscles one of the following is CORRECT

A. Arise from ischeal tuberosity

B. Insert into linea aspera

C. Receive blood from the obturator artery

D. Are innervated entirely by the femoral nerve

E. They are more important than gluteus maximus in extension of hip joint during standing from sitting position

24. Which statement best describes the posterior compartment of the thigh?

A. Common origin for hamstrings muscles is the ischial spine.

B. Ischial head of Adductor magnus is a hamstring muscle.

C. All the hamstring muscles are innervated by the obturator nerve.

D. Both heads of biceps femoris take origin from the pelvis.

E. Muscles of medial aspect of thigh are innervated by sciatic nerve

25. Femoral vessels enter popliteal fossa through hiatus of:

A. Adductor longus.

B. Rectus femoris.

C. Adductor magnus.

D. Gracilis.

E. Vastus medialis.

26. The sciatic nerve supply one of the following muscles:

A. Biceps femoris

B. Sartorius

C. rectus femoris

D. Gluteus maximus

E. Adductor magnus

27. which of the following muscles, is supplied by The sciatic nerve :

A. obturator externus.

B. adductor magnus.

C. obturator internus.

D. Quadratus femoris.

E. Semitendnosus.

28. The sciatic nerve:

A. Is formed entirely by sacral spinal nerves

B. Consists of two components, which pass through the greater and lesser sciatic foramina respectively

C. Passes midway between the greater trochanter and the ischial tuberosity

D. Rests on adductor longus

E. Terminates by dividing into superficial and deep peroneal nerves

29. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants?

A. Upper outer quadrant.

B. Lower outer quadrant.

C. Upper inner quadrant.

D. Lower inner quadrant.

E. Any one of the above quadrants

30. The nerve commonly injured in fractured neck of the fibula is the:

A. Sciatic nerve.

B. Superficial peroneal nerve.

C. Deep peroneal nerve.

D. Tibial nerve.

E. Common peroneal nerve.

31. Effects of common peroneal nerve injury include one of the following:

A. Foot drop and inversion of the foot

B. Foot drop and eversion of the foot.

C. Dorsi flexion and eversion of the foot.

D. Dorsi flexion and inversion of the foot.

E. Loss of sensation on the medial side of the leg

1.	A
2.	E
3.	A
4.	B
5.	A
6.	C
7.	B
8.	A
9.	C
10.	D
11.	D
12.	E
13.	C
14.	D
15.	D
16.	E
17.	E
18.	C
19.	D
20.	A
21.	E
22.	C
23.	A
24.	B
25.	C
26.	A
27.	E
28.	C
29.	A
30.	E
31.	A

1) one of the following muscles lies in the second laver of the sole,:

A. Abductor hallucis brevis.

B. Flexor digitorum brevis.

C. Flexor digitorum accessorius.

D. Abductor digiti minimi.

2) One of The following muscles lies in the second layer of the sole:

A. Flexor hallucis brevis.

B. Lumbrical muscles.

C Flexor digiti minimi.

D. Adductor hallucis.

3) The cuboid bone; mark the most appropriate statement:

A. Articulates with the talus laterally..

B. Gives attachment to the spring ligament.

C It receive insertion of Peroneus tertious

D. It participates in formation of transverse arch.

E. It receive insertion of Peroneus longus.

4) Damage to lateral plantar nerve would affect one of the following muscles:

A. Flexor digiti minimi.

B. Abductor hallucis.

C Flexor digitorum brevis.

D. Flexor hallucis brevis.

E. 1st lumbrical.

5) Structure closest to the skin of the sole:

A. Flexor digitorum brevis

B. Quadratus plantae

C. Plantar aponeurosis

D. Long plantar ligament

E. Short plantar ligament

6) Which ligament prevents dislocation of femur backwards at the knee joint:

A. Posterior cruciate ligament.

B. Anterior cruciate ligament.

C. Medial collateral ligament.

D. Lateral collateral ligument.

E. Transverse ligament

7) One of The following statements about the knee joint is true:

A. The tendon of popliteus muscle is intracapsular, extrasynovial.

B. The popliteus muscle unlock the knee joint at the beginning of extension.

C. The lateral meniscus is more liable to injury than the medial meniscus.

D. Locking of the joint occurs at the end of flexion.

E. It allows adduction and abduction.

8) The common types of football injuries are rupture of the:

A. Tibial collateral ligament.

B. Fibular collateral ligament.

C. Posterior cruciate ligament

D. Plantar aponeurosis.

E. lateral meniscus.

9) Which statement is correctly describe the ligaments of the knee joint?

A. The medial meniscus is smaller than the lateral meniscus.

B. The lateral meniscus is attached to the lateral collateral ligament.

.C The transverse ligament of the knee attaches to both menisci.

D. The anterior cruciate ligament prevents hyperflexion of the knee.

E. The posterior cruciate ligament inserts onto the lateral femoral condyle.

10) One of the statements about the spring ligament is true:

A. Circular in shape.

B. Gives attachment to the short planter ligament.

C. An important factor in maintaining the transverse arch of the foot.

D. Is called plantar calcaneonavicular ligament.

E. It receive insertion of peroneus brevis

11) Weak inversion of the foot would result from damage to

A. Flexor hallucis brevis.

B. Flexor digitorum brevis.

C. Tibialis anterior.

D. Peroneus longus.

.E Extensor digitorum brevis.

12) Which of the following muscles planter flex the foot at the ankle joint:

A. Peroneus tertius.

B. Extensor digitorum brevis.

C. Tibialis posterior.

D. Extensor hallucis brevis.

.E Tibialis anterior.

13) The movements of inversion and eversion take place at:

A. Talo.calcanean joint.

B. Ankle joint.

C. Calcaneo.navicular joint.

D. Inferior tibio.fibular joint.

E. Calcaneo.cuboid joint.

14) Regarding the ankle joint, one the followings is correct:

A. Synovial joint of condylar variety.

B. It is unstable joint.

C. The medial or deltoid ligament is weaker than the lateral one.

D. Movements of inversion and eversion do not take place at the ankle joint.

E. Muscles of anterior compartment of leg planter flex it.

15) A17-year-old football player complains of severe knee pain after being tackled from the side. When the knee is flexed, the tibia can be moved anteriorly , Rupture or tearing of which of the following ligaments would most likely account for this observation?

A. Anterior cruciate ligament

B. Fibular collateral ligament

C. Lateral meniscus

D. Medical meniscus

E. Posterior cruciate ligament

16) in this same patient, which of the following ligaments prevented posterior displacement of the tibia on the femur?

A. Oblique popliteal

B. Anterior cruciate

C. Posterior cruciate

D. Lateral collateral

E. Medial collateral

ANSWERS

1	C	9	C
2	B	10	D
3	D	11	C
4	A	12	C
5	C	13	A
6	B	14	D
7	A	15	A
8	A	16	C

Nerves of LL

MSK MCQ

DR: FATMA TAREK

1. Injury of the common peroneal nerve is indicated by A. Inability to dorsiflex the ankle B. Inability to plantarflex the ankle C. Anaesthesia of the medial border of the foot D. Anaesthesia of the sole E. The foot is everted	A
2. The femoral nerve originates from which of the following roots? A. T12, L1, L2. B. LI, L2, L3. C. L2, L3, L4. D. L3, L4, LS. E. L2, L3.	C
3. Which is true regarding femoral nerve : A. Continue in the sole of the foot B. Motor nerve only C. Pass through adductor canal D. Supplies pectineus in the thigh	D
4. Which is true regarding tibial nerve : A. Branch from femoral nerve B. Runs with anterior tibial artery C. Gives branch to tibialis anterior D. Supplies popliteus	D
5. Fracture neck fibula may cause injury of : A. Femoral N B. Tibial N C. Saphenous N D. Common peroneal N.	D

6. One of the following is correct concerning the femoral nerve: A. Enters the thigh lateral to the femoral sheath.	A

B. Supplies motor nerves to most of muscles of posterior compartment of thigh. C. Lies medial to the femoral artery in the femoral triangle. D. Has motor branches below the knee. E. Supplies cutaneous branches to the lateral surface of the leg.	
7. **A patient comes to you complaining of his inability to stand on his tiptoes. Which of the following nerve injuries is most likely to be involved?** A. Femoral nerve B. Tibial nerve C. Common fibular nerve D. Deep fibular nerve E. Superficial fibular nerve	B
8. **Tibial nerve supplies:** A. Peroneus tertius. B. Peroneus longus. C. Tibialis anterior. D. Flexor digitorum longus. E. Extensor digitorum longus.	D
9. **The femoral nerve supplies one of the following muscles:** A. Semitendinosus. B. Iliacus. C. Gracilis. D. biceps femoris. E. Tensor fascia lata.	B

10. **The saphenous nerve:** A. Is a branch of the obturator B. Gives a branch to the scrotum C. Is closely related to the great saphenous vein in the upper thigh D. Is cutaneous to the medial side of the foot E. Is motor to adductor magnus	D
11. **The Sciatic nerve:** A. Is one of the branches of lumbar plexus. B. Enters the gluteal region by passing through lesser sciatic foramen. C. Lies superficial to gluteus maximus muscle.	E

D. Divides into deep and superficial peroneal nerves. E. Supplies ischeal part of adductor magnus muscle.	
12. Which one of the following muscles is supplied by the deep peroneal nerve: A. Tibialis anterior. B. Tibialis posterior. C. Flexor digitorum longus. D. Peroneus brevis. E. Peroneus longus.	A
13. The sciatic nerve supply one of the following muscles: A. Biceps femoris B. Sartorius C. rectus femoris D. Gluteus maximus E. Adductor magnus	A
14. A 23-year-old female postpartum day 1 with right foot weakness numbness, and foot drop after a difficult vaginal delivery. What is the most likely diagnosis? A. Femoral nerve B. Obturator nerve C. Common peroneal portion of the sciatic nerve D. Tibial portion of the sciatic nerve E. Saphenous nerve	C

15. The sciatic nerve: A. Is formed entirely by sacral spinal nerves B. Consists of two components, which pass through the greater and lesser sciatic foramina respectively C. Passes midway between the greater trochanter and the ischial tuberosity D. Rests on adductor longus: E. Terminates by dividing into superficial and deep peroneal nerves	C

16. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants? A. Upper outer quadrant. B. Lower outer quadrant. C. Upper inner quadrant. D. Lower inner quadrant. E. Any one of the above quadrants.	A
17. Effects of common peroneal nerve injury include one of the following: A. Foot drop and inversion of the foot B. Foot drop and eversion of the foot. C. Dorsi flexion and eversion of the foot. D. Dorsi flexion and inversion of the foot. E. Loss of sensation on the medial side of the leg.	A
18. The common peroneal nerve: A. Supplies the long head of biceps femoris B. Forms the lateral plantar nerve C. Passes between tibia and fibula D. Is a branch of the sciatic nerve E. Passes around the neck of the femur	D
19. Injury of the common peroneal nerve is indicated by A. Inability to dorsiflex the ankle B. Inability to plantarflex the ankle C. Anaesthesia of the medial border of the foot D. Anaesthesia of the sole E. The foot is everted	A
20. Which one of the following muscles is supplied by deep peroneal nerve: A. Tibialis anterior. B. Tibialis posterior. C. Flexor digitorum longus. D. Peroneus brevis. E. Peroneus longus.	A
21. Which of the following muscles would be susceptible to paralysis following a crushing injury to the lateral aspect of the head and neck of the fibula? A. Extensor digitorum longus.	D

B. Tibialis anterior. C. Peroneus longus. D. All of the above. E. None of the above	

22. Superficial peroneal nerve supplies: A. Peroneus tertius. B. Peroneus longus. C. Tibialis anterior. D. Flexor digitorum longus. E. Extensor digitorum longus.	B
23. When administering an intramuscular gluteal injection in the superior-lateral quadrant, healthcare provider would most likely avoid injury of? A. Femoral nerve B. Genitofemoral nerve C. Inguinal nerve D. Obturator nerve E. Sciatic nerve	E
24. Which of the following nerves innervates at least one muscle that acts on both the hip and the knee joints: A. Ilioinguinal nerve. B. Femoral nerve. C. Saphenous nerve. D. Common peroneal nerve. E. Superficial peroneal nerve.	B
25. One of The following muscle is supplied by the obturator nerve: A. Semitendinosus. B. Pectineus. C. Gracilis. D. biceps femoris. E. ischial head of Adductor magnus	C
26. The obturator nerve; mark the most suitable answer: A. Is formed of the ventral divisions of L2, 3 & 4 nerves. B. Is completely motor. C. Supplies all the muscles of medial compartment.	A

D. a & c are true. E. b & c are true.	

27. Regarding the obturator nerve which is true: A. Is formed by dorsal divisions of 2, 3 & 4 lumbar B. Supplies hip joint. C. Crosses the external iliac artery. D. Leaves the pelvis through greater sciatic notch. E. Supplies the ankle joint	B

1) The cribriform fascia of saphenous opening is pierced by one of the following:

A. small saphenous vein.

B. Femoral vein.

C. Deep circumflex iliac artery.

D. Saphenous nerve

E. Long saphenous vein

2) One of the Following statements regarding femoral artery is true:

A. It lies medial to femoral vein.

B. Its uppermost part is enclosed within fascia lata.

C. It enters the thigh at midpoint of inguinal ligament.

D. It lies behind adductor brevis in the adductor canal.

E. It passes through opening in adductor magnus & continues as popliteal artery.

3) The superficial external pudendal artery is a branch of

A. Femoral artery

B. External iliac artery

C. Internal iliac artery

D. Aorta

E. Obturator artery

4) The orifice in adductor muscle transmits

A. Femoral vessels

B. Femoral nerve

C. Saphenous nerve

D. Tibial nerve

E. Sciatic nerve

5) Femoral vessels enter popliteal fossa through hiatus of:

A. Adductor longus.

B. Rectus femoris.

C. Adductor magnus.

D. Gracilis.

E. Vastus medialis.

6) The obturator nerve:

A. Supplies the hip joint.

B. Supplies the knee joint

C. Gives a cutaneous branch to the middle medial side of the thigh.

D. All the above is true.

E. none of the above is true.

7) The obturator nerve; mark the most suitable answer:

A. Is formed of the ventral divisions of L2, 3 & 4 nerves.

B. Is completely motor.

C. Supplies all the muscles of medial compartment.

D. a & c are true.

E. b & c are true.

8) Regarding the obturator nerve which is true:

A. Is formed by dorsal divisions of 2, 3 & 4 lumbar

B. Supplies hip joint.

C. Crosses the external iliac artery.

D. Leaves the pelvis through greater sciatic notch.

E. Supplies the ankle joint

9) The obturator nerve is characterized by one of the following:

A. Enters the thigh by piercing the lacunar ligament

B. Is cutaneous to lateral side of thigh

C. Supplies the biceps femoris muscle

D. Gives branches to both hip and knee joints

E. Originates from the dorsal rami of L2, L3, L4 nerves

10) The sciatic nerve supply one of the following muscles:

A. Biceps femoris

B. Sartorius

C. rectus femoris

D. Gluteus maximus

E. Adductor magnus

11) Which of the following muscles, is supplied by The sciatic nerve :

A. obturator externus.

B. adductor magnus.

C. obturator internus.

D. Quadratus femoris.

E. Semitendnosus.

12) The sciatic nerve:

A. Is formed entirely by sacral spinal nerves

B. Consists of two components, which pass through the greater and lesser sciatic foramina respectively

C. Passes midway between the greater trochanter and the ischial tuberosity

D. Rests on adductor longus

E. Terminates by dividing into superficial and deep peroneal nerves

13) The nerve commonly injured in fractured neck of the fibula is the:

A. Sciatic nerve.

B. Superficial peroneal nerve.

C. Deep peroneal nerve.

D. Tibial nerve.

E. Common peroneal nerve.

14) Effects of common peroneal nerve injury include one of the following:

A. Foot drop and inversion of the foot

B. Foot drop and eversion of the foot.

C. Dorsi flexion and eversion of the foot.

D. Dorsi flexion and inversion of the foot.

E. Loss of sensation on the medial side of the leg.

15) The common peroneal nerve:

A. Supplies the long head of biceps femoris

B. Forms the lateral plantar nerve

C. Passes between tibia and fibula

D. Is a branch of the sciatic nerve

E. Passes around the neck of the femur

16) Injury of the common peroneal nerve is indicated by

A. Inability to dorsiflex the ankle

B. Inability to plantarflex the ankle

C. Anaesthesia of the medial border of the foot

D. Anaesthesia of the sole

E. The foot is everted

17) Which one of the following muscles is supplied by the deep peroneal nerve:

A. Tibialis anterior.

B. Tibialis posterior.

C. Flexor digitorum longus.

D. Peroneus brevis.

E. Peroneus longus.

18) The muscles supplied by the superficial peroneal nerve; mark the most appropriate answer:

A. Evert the foot.

B. Invert the foot.

C. Plantarflex the foot.

D. Dorsiflex the foot.

E. Peroneus longus & tertious

19) Superficial peroneal nerve supplies:

A. Peroneus tertius.

B. Peroneus longus.

C. Tibialis anterior.

D. Flexor digitorum longus.

E. Extensor digitorum longus.

20) Damage to lateral plantar nerve would affect one of the following muscles:

A. Flexor digiti minimi.

B. Abductor hallucis.

C. Flexor digitorum brevis.

D. Flexor hallucis brevis.

E. 1st lumbrical.

21) Regarding the lateral planter nerve one is true:

A. Its gives digital branches to medial 3 1/2 toes.

B. It arises from the anterior tibial nerve deep to the flexor retinaculum.

C. It supplies abductor hallucis muscle.

D. It supplies flexor digitorum brevis muscle.

E. It supplies planter interossei muscles.

22) The planter nerves and vessels lie between:

A. Plantar aponeurosis and the first muscle layer

B. First and second muscle layers

C. Second and third muscle layers

D. Third and fourth muscle layers

E. Plantar aponeurosjs and skin

23)You have examined a patient and find there is weakness in the ability to flex the knee. This indicates a problem with which of the following nerves?

A. Femoral nerve

B. Tibial nerve

C. Common fibular nerve

D. Deep fibular nerve

E. Superficial fibular nerve

24) Which of the following actions would you most likely expect to be the weakest if your patient has a lesion of the tibial nerve in the popliteal fossa?

A. Dorsiflexion of the ankle

B. Extension of the hip

C. Extension of the digits

D. extension of the knee

E. Flexion of the digits

25) A patient with the hip dislocation is also exhibiting weakness of extension of the thigh at the hip. This would indicate possible damage to which of following?

A. Femoral nerve

B. Obturator nerve

C. Common fibular portion of the sciatic nerve

D. Tibial portion of the sciatic nerve

E. Saphenous nerve

26) A 23-year-old female postpartum day 1 with right foot weakness, numbness, and foot drop after a difficult vaginal delivery. What is the most likely diagnosis?

A. Femoral nerve

B. Obturator nerve

C. Common peroneal portion of the sciatic nerve

D. Tibial portion of the sciatic nerve

E. Saphenous nerve

27)A patient comes to you complaining of his inability to stand on his tiptoes. Which of the following nerve injuries is most likely to be involved?

A. Femoral nerve

B. Tibial nerve

C. Common fibular nerve

D. Deep fibular nerve

E. Superficial fibular nerve

28) The Sciatic nerve:

A. Is one of the branches of lumbar plexus.

B. Enters the gluteal region by passing through lesser sciatic foramen.

C. Lies superficial to gluteus maximus muscle.

D. Divides into deep and superficial peroneal nerves.

E. Supplies ischeal part of adductor magnus muscle.

ANSWERS

1	C	15	D
2	A	16	A
3	D	17	A
4	B	18	E
5	D	19	B
6	D	20	A
7	A	21	E
8	B	22	B
9	D	23	B
10	A	24	E
11	E	25	D
12	C	26	C
13	E	27	B
14	A	28	E

MCQs on Lower Limbs

1. One of the following muscles is supplied by the femoral nerve in abdomen: a- Iliacus. b- Vastus lateralis. c- Sartorius. d- Vastus medialis.	A
2. The femoral nerve: a- Comes from the dorsal divisions of the L2, 3 & 4. b- Ends four inches below the inguinal ligament. c- Supply all the muscles of the floor of the femoral triangle except pectineus. d- Passes to the thigh through the lateral compartment of the femoral sheath.	A
3. One of the following structures pass deep to the inguinal ligament: a- Spermatic cord. b- Psoas major muscle. c- Ilioinguinal nerve. d- Great saphenous vein.	B
4. The articularis genu muscle, mark the correct statement: a- Is the deep fibers of the vastus medialis muscle. b- Is fixed to the upper border of the suprapatellar bursa. c- Is supplied by the obturator nerve. d- Arises from the upper half of the medial surface of the femur.	B
5. The head of the quadriceps muscle which acts on the hip joint: a- Vastus lateralis muscle. b- Rectus femoris. c- Vastus intermedius. d- Vastus medialis.	B

6. The sartorius muscle: a- Flexes the knee joint and extends the hip joint. b- Is one of the boundaries of the femoral triangle. c- Arises from the anterior inferior iliac spine. d- Is fusiform muscie.	B
7. One of the following muscles is supplied by the obturator nerve: a- Psoas major. b- Sartorius. c- Iliacus. d- Adductor brevis.	D
8. The obturator nerve: a- Supplies the hip joint. b- Supplies the knee joint. c- Gives. a cutaneous branch to the lower medial side of the thigh. d- Arises from lumbar plexus.	B
9. The most powerful extensor of the hip joint is: a- Semimembranosus. b- Gluteus maximus. c.:. Sacrospinalis. d- Gluteus medius.	B
10. The structure which passes through the greater sciatic foramen is: a- Quadratus femoris. b- Sciatic nerve. c- Tendon of obturator externus muscle. d- Nerve to obturator internus.	B

11. The tensor fascia lata, muscle: a- Attached to the posterior part of iliac crest. b- Inserted into the iliotibial tract. c- Innervated by the inferior gluteal nerve. d- Lies deep to the gluteus medius muscle.	C
12. The following structure deep lies to the gluteus maximus: a- Iliofemoral ligament. b- Obturator nerve. c- Straight head of rectus femoris muscle. d- Greater trochanter of femur.	D
13. Extension of the hip joint is done by the following muscle: a- Iliacus muscle. b- Sartorius muscle. c- Semimembranosus muscle. d- Rectus femoris muscle.	C
14. Abductors of the hip joint are: a- Called into action in sitting. b- Their paralysis cause waddling gait. c- Gluteus medius and maximus. d- Supplied by inferior gluteal nerve.	B
5. The sciatic nerve supplies one of the following muscles: a- Semimembranosus. b- Vastus medialis. c- Rectus femoris. d- Quadratus femoris.	A

16. The obturator nerve; mark the most suitable answer: a- Is formed of the ventral divisions of L2, 3 & 4 nerves. b- Is completely motor. c- Supplies all the adductor and flexor thigh muscles. d- It passes through the adductor canal.	A
17. Paralysis of the saphenous nerve results in the following deformity: a- Inability to invert the foot. b- Loss of sensation on the lateral malleolus. c- Loss of sensation on the medial malleolus. d- Loss of sensation on pocalized area on the dorsum of the foot.	C
18. The powerful extension of the thigh, required when one is standing from a sitting position, is a function of the: a- Gluteus maximus muscle. b- Psoas major muscle. c- Iliacus muscle. d- Obturator externus muscle.	A
19. significant weakness in abduction of the thigh would involve the following muscle: a- Gluteus medius. b- Pectineus. c- Gracilis. d- Adductor magnus.	A
20. The sartorius muscle is : a- It is innervated by the obturator nerve. b- It arises from the anterior superior iliac spin. c- It inserts on the lateral surface of the tibia. d- It forms the medial border of the femoral triangle.	B

21. Medial rotation of the thigh is dcme the following muscle: a- Gluteus maximus. b- Quadratus femoris. c- Gluteus minimus. d- Superior gemellus.	C
22. Which of the following structures passes through the lesser sciatic foramen: a- Piriformis muscle. b- Inferior gluteal nerve. c- Tendon of obturator internus muscle. d- Sciatic nerve.	C
23. The quadratus femoris is inserted into, choose the correct answer: a- Greater trochanter of the femur, b- Lesser trochanter of the femur. c- Middle of trochanteric line. d- Quadrate tubercle.	D
24. Damage to the femoral nerve on the lateral wall of the pelvis would affect the function of the following muscle: a- Sartorius. b- Gracilis. c- Adductor longus. d- Adductor brevis.	A
25. The iliotibial tract receives attachment of the following muscle: a- Tensor fasciae lata muscle. b- Gluteus medius muscle. c- Iliacus. d- Gluteus minimus.	A

26. A crushing blow that breaks the anterior superior iliac spine would damage the origin of the: a- Biceps femoris muscle. b- Pectineus muscle. c- Rectus femoris muscle. d- Sartorius musde.	B
27. Which of the following nerves innervates at least one muscle that acts on both the hip and the knee joints: a- Ilioinguinal nerve. b- Femoral nerve. c- Saphenous nerve. d- Common peroneal nerve.	B
28. In walking, the hip bone of the suspended leg is raised by which of the following muscles acting on the supported side of the body: a- Gluteus maximus. b- Obturator internus. c- Gluteus medius. d- Obturator externus.	C
29. Which of the following muscles is a flexor of the thigh: a- Superior gamellus. b- Adductor longus. c- Gracilis. d- Psoas major.	D
30. The following structure pass through the lesser sciatic foramen: a- Superior gluteal artery. b- Sciatic nerve. c- Obturator internus tendon. d- Pudendal nerve.	C

31. The femoral nerve originates from which of the following roots? a- T12, LI, L2. b- LI, L2, L3. c- L2, L3, L4. d- L3, L4, L5.	C
32. Loss of extension of the knee would result from damage to the:. a- Femoral nerve. b- Tibial nerve. c- Tibial and common peroneal nerves. d- Obturator and femoral nerves.	A
33. Muscle that extends leg include the following muscle: a- Biceps femoris. b- Rectus femoris. c- Semitendinosus. d- Gradlis.	B
34. Concerning the femoral nerve it: a- Enters the thigh medial to the femoral sheath. b- Supplies motor nerves to most of the muscles of the anterior and medial compartments of the thigh. c- Lies medial to the femoral artery in the femoral triangle. d- Has no motor branches below the knee.	D
Regarding the iliotibial tract: a- It is attached between iliac crest and lateral condyle of the tibia. b- It receives the insertion of gluteus medius and tensor fascia lata. c- It belongs to the investing layer of the deep fascia of the thigh. d- It is connected to linea aspra by the medial intermuscular septum.	B

36. Regarding the obturator nerve, mark correct a- Is formed by ventral divisions of 2, 3 and 4' lumbar nerves. b- Supplies ankle joint. c- Crosses the internal iliac artery. d- Leaves the pelvis through femoral sheath.	A
37. Paralysis of the gluteus medius and minimus will result in the: a- Inability to adduct the thigh at the hip joint. b- Sinking of pelvis on the normal side when same foot is raised. c- Inability to laterally rotate the thigh at the hip joint. d- Waddling gate in case of bilateral paralysis of the muscles.	D
38. One of the following muscles is lateral rotator of the thigh: a- The iliopsoas. b- The rectus femoris. c- The biceps femoris. d- The obturator internus.	D
39. The obturator nerve supplies the following muscle: a- Sartorius. b- Iliacus. c- Gracilis. d- Rectus femoris.	C
40. regarding the hamstring muscles (Posterior compartment of thigh), mark correct statement: a- All are supplied by common peroneal nerve. b- They can extend the knee. c- Biceps femoris produces medial rotation of knee. d- Upper half of semimembranosus is membranous.	A

41. Following muscle produce abduction of hip joint: a- Gluteus medius. b- Obturator internus. c:- Superior gemellus. d- Quadratus femoris.	**A**
42. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	**A**
43. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants? a- Upper outer quadrant. b- Lower outer quadrant. c- Upper inner quadrant. d- Lower inner quadrant.	**A**
44. Regarding the action of the glutei muscles, one answer is correct: a- Gluteus maximus is medial rotator of the thigh. b- Glutei.Js medius is adductor of the hip joint. c- Both glutei maximus and medius are extensors of the hip joint. d- Both glutei medius and minimus are powerful abductor of the hip joint.	**D**
45. Regarding the patella, choose the correct answer: a. It gives attachment to the quadriceps tendon to its upper part and ligamentum patellae to the lower part. b. Its displacement in the medial direction is prevented by the large medial condyle of the femur. c. It is separated from the skin by a fascia which is liable to become inflamed, producing visible swelling. d. It receives lower horizontal fibers of the adductor longus on its medial side forming patellar retineculum.	**A**

46. In the floor of the femoral triangle one of the following muscles is seen: a- Adductor magnus. b- Iliacus. c- Vastus medialis. d- Tensor fascialata.	**B**
47. The boundaries of the femoral triangle is by the following: **a-** Adductor longus, pectineus and sartorius. **b-** Inguinal ligament, sartorius and adductor longus. c- Inguinal ligament, sartorius and adductor brevis. **d-** Inguinal ligament, sartorius and adductor magnus.	**B**
48. The cribriform fascia is pierced by: a- Great saphenous vein. b- Superior epigastric artery. c- Deep circumflex iliac artery. d- Obturator.	**A**
49. The femoral sheath: a- Its medial compartment is occupied by the femorai artery. b- Its lateral compartment is occupied by the femoral nerve. c- The intermediate compartment is occupied by the femoral vein. d- The anterior wall is formed by fascia iliaca.	**C**
50. The femoral ring is bounded medially by: a- Lacunar ligament. b- Inguinal ligament. c- Pubic ramus. d- Femoral artery.	**A**

... triangle one of the following branches arise from femoral artery: a- Superior epigastric. b- Obturator artery. c- Superficial circumflex iliac. d- Deep circumflex iliac.	C
52. One of the following structures is in the adductor canal: a- Femoral artery. b- Femoral lymph node. c- Profunda femoris artery. d- Great saphenous vein.	A
53. The blood supply of the head of the femur is: a- Only from the trochanteric anastomosis. b- Only from the obturator artery. c- From the gluteal, circumflex femoral and the obturator arteries. d- Mainly from the obturator artery and partially from trochanteric anastomosis.	C
4. Regarding the knee joint: a- The tendon of popliteus muscle is intracapsular, intrasynovial. b- The popliteus muscle lock the knee joint at the beginning of flexion. c- The lateral meniscus is more liable to injury than the medial meniscus. d- Locking of the joint occurs at the end of extension.	D
. The popliteal artery, choose the correct answer: a- Ends at the level of the medial epicondyle of the femur. 6- Is deeper than the popliteal vein. c- Gives no articular branches in the popliteal fossa. d- Accompanies the lateral popliteal nerve in the popliteal fossa.	B

56. The following is inside the knee joint: a- Tendon of biceps femoris muscle. b- Cruciate ligaments. c- Semimembranosus bursa. d- Collateral ligaments.	B
57. The muscles supplied by the superficial peroneal nerve; mark the correct answer: a- Evert the foot. b- Invert the foot. c- Passes in front of the lateral malleolus. d- Dorsiflex the foot.	A
58. Eversion and inversion of the foot occurs at; mark the suitable answer: a- Ankle joint. b- Subtalar joints. c- Inferior tibiofibular joint. d- First tarsometatarsal joint.	B
59. The superficial calf muscles; select the correct statement: a- Plantar flex the ankle joint. b- Invert the foot. c- Enters the foot by passing deep to the flexor retinaculum. d- Are five in number.	A
60. Inversion of the foot is done by; mark the correct answer: a- Tibialis anterior and tibialis posterior muscles. b- Extensor digitorum longus. c- Peroneus longus. d- Peroneus tetieus.	A

61. The following structure attaches to the calcaneus: aa Tibialis posterior tendon. b- Gastrocnemius tendon. c- Flexor hallucis longus tendon. d- Popliteus muscle.	B
62. Concerning the muscles of the first layer of the sole, choose the correct statement: a- Abductor hallucis lies on the lateral side. b- Flexor digitorum brevis lies on the medial side. c- Flexor digitorum accessorius lies in this layer. d- Abductor digiti minimi lies on the lateral side.	D
63. Concerning the third layer of the sole, choose the correct statement: a- Flexor hallucis brevis lies on the lateral side. b- Lumbrical muscles lie in this layer. c- Flexor digiti minimi lies on the medial side. d- Adductor hallucis has two heads.	D
64. Concerning the flexor hallucis longus muscle, choose the correct answer: a- Grooves the lower surface of the calcaneus. b- An important factor in maintaining the transverse arch of the foot. c- Lies superficial to the flexor retinaculum. d- Is supplied by posterior tibial nerve.	D
65. The deltoid ligament; mark the correct answer: a- Lies on the lateral aspect of the ankle joint. b- Attached inferiorly to the spring ligament. c- Is rather a week ligament. d- Is quadrilateral in shape.	B

66. Reduced blood supply to the lateral compartment of the leg results primarily from damage to the: a- Anterior tibial artery. b- Lateral malleolar artery . c- Circumflex fibular artery. d- Peroneal artery.	D
67. The tibial collateral ligament (medial collateral ligament) of the knee extends from the medial epicondyle of the femur to the: a- Lateral condyle of the tibia. b- Medial condyle of the tibia. c- Articular capsule. d- Neck of the fibula.	B
68. The muscles of the posterior compartment of the thigh receive blood supply primarily by branches of the: a- Popliteal artery. b- Profunda femoris artery. c- Superior gluteal artery. d- Femoral artery.	B
69. Concerning the short (small) saphenous vein; mark the most suitable answer: a- Passes in front the lateral malleolus. b- Ascends over the back of the calf. c- Ends in the long saphenous vein. d- -connected directly with femoral vein.	B
70. Concerning the great (long) saphenous vein; tick the most suitable answer: a- Begins at the lateral end of the dorsal venous plexus on the dorsum of foot. b- Ascends immediately behind the lateral malleoulus. c- Ascends along the lateral side of the leg to the knee. d- Ends in the femoral vein.	D

71. The quadratus femoris is inserted into, choose the correct answer: a- Greater trochanter of the femur, b- Lesser trochanter of the femur. c- Middle of trochanteric line. d- Quadrate tubercle.	D
72. Concerning the femoral sheath, choose the correct answer: a- It encloses the proximal portions of the popliteal artery and vein. b- Posteriorly it is formed by the fascia transversalis. c- The femoral nerve is medial to the femoral sheath. d- The inguinal ligament is anterior to the femoral sheath.	D
73. Weak inversion of the foot would result from damage to which of the following muscles: a- Flexor hallucis brevis. b- Flexor digitorum brevis. c- Tibialis anterior. d- Peroneus longus.	D
74. The superficial muscles of the posterior compartment of the leg insert on which of the following bones: a- Talus. b- Navicular. c- Calcaneus. d- Tibia.	C
75. Which of the following muscles dorsiflexes the foot at the ankle joint: a- Peroneus longus. b- Extensor digitorum brevis. c- Tibialis posterior. d- Tibialis anterior.	D
76. The base of the femoral triangle is formed by the: a- Sartorius muscle. b- Adductor longus muscle. c- Inguinal ligament. d- Pubic tubercle.	C
77. The following muscle evert the foot: a- Tibialis anterior. b- Extensor hallucis longus. c- Flexsor hallucis longus. d- Peroneus tertius.	D
78. Concerning the dorsalis pedis artery, choose the correct answer: a- It is a continuation of the anterior tibial artery. b- It enters the sole of the foot by passing between the two heads of second dorsal interosseouus muscle. c- It can be palpated on the dorsum of the foot between the tendons of tibialis anterior and the extensor hallucis brevis muscles. d- It joins the medial plantar artery.	A
79. The structure contribute to the above and lateral boundary of popliteal fossa: a- Semimembranosus muscle. b- Plantaris. c- Biceps femoris. d- Medial head of the gastrocnemius muscle.	C
80. The following structure pass through the lesser sciatic foramen: a- Superior gluteal artery. b- Sciatic nerve. c- Obturator internus tendon. d- Pudendal nerve.	C

81. The femoral ring is bounded anteriorly by: a- Femoral vein. b- Lacunar ligament. c- Obturator artery. d- Inguinal ligament.	D
82. A femoral hernia descends through the femoral canal, and the neck of the hernial sac lies: a- At the saphenous opening. b- Above and medial to the pubic tubercle. c- At the femoral ring. d- In the obturator canal.	C
83. The following structures pass through othe subsartorial canal from upper to lower end is: a- Posterior division of the obturator nerve. b- Saphenous nerve. c- Femoral artery. d- Nerve to the vastus intermedius.	C
84. The floor of the femoral triangle is bounded medially by: a- Pectineus. b- Adductor longus. c- Iliacus. d- Psoas major.	B
85. The peroneal Artery is a branch of which artery: a- Anterior tibial artery. b- Popliteal artery. c- Posterior tibial artery. d- Arcutate artery.	C

86. Which statement is true regarding the ankle joint: a- It is strengthened laterally by the deltoid ligament. b- It is a condylar joint. c- It is formed by the articulation of talus and the distal ends of tibia and fibula. d- It is most stable in the fully planter-flexed position.	C
87. Unlocking of the knee joint to permit flexion Is caused by the action of which muscle: a- Vastus medialis. b- Articularis genu. c- Biceps femoris. d- Popliteus.	D
88. In the adult, the chief arterial supply of the head of femur is from: a- Obturator artery. b- Inferior gluteal artery. c- Deep external pudendal artery. d- Branches from medial and lateral circumflex femoral arteries.	D
89. Damage to the posterior tibial nerve would affect the following muscle: a- Flexor digitorum longus. b- Abductor hallucis. c- F1exor digitorum brevis. d- Flexor hallucis brevis.	A
90. The movements of inversion and eversion take place at: a- First tarsometatarsal joint. b- Ankle joint. c- Talo-calcaneo-navicular joint. d- Inferior tibio-fibular joint.	C
91. The following muscle lies in the lateral compartment of the leg: a- Peroneus tertius. b- Peroneus brevis. c- Tibialis anterior. d- Extensor haHucis longus.	B

2. Regarding muscle actions in lower limb, the following is correct statement: a- Quadriceps femoris flexes the knee joint. b- Abduction and adductkln of the toes by the interossei take place from middle of the second toe. c- Muscles inserted in tendo calcaneus are dorsi flexors. d- Gluteus maximus is a powerful flexor of hip joint.	B
3. Regarding popliteal artery: a- It begins at the opening in the adductor canal. b- It ends at the lower border of the adductor longus muscle. c- Its pulsation can be felt while the knee is extended. d- It gives five genicular branches.	D
4. The nerve commonly injured in fractured neck of the fibula is the: a- Sciatic nerve. b- Superficial peroneal nerve. c- Deep peroneal nerve. d- Common peroneal nerve.	D
5. Following structure passes deep to the extensor retinaculum: a- Tibialis anterior. b- Flexor digitorum longus. c- Posterior tibial vessels. d- Posterior tibial nerve.	A
. Movements of flexion and extension of the foot occur in the following joint: a- Subtalar joint. b- Talocalcaneonavicular joint. - Mid tarsal joint. l- Ankle joint.	D
Following muscle everts the foot: - Tibialus anterior. - Tibialis posterior. · Extensor hallucis longus. - Peroneus brevis.	D

98. The following statement regarding the clinical findings of superficial peroneal nerve injury is correct: a- There is loss of planter flexion of the ankle. b- There is loss of sensations of the sole of the foot. c- Muscles of lateral compartment of the leg are paralyzed. d- Muscles of the sole of the foot are paralyzed.	C
99. Effects of common peroneal nerve injury include one of the following: a- Foot drop and inversion of the foot. b- Foot drop and eversion of the foot. c- Dorsi flexion and eversion of the foot. d- Dorsi flexion and inversion of the foot.	A
100. The following is important factor in maintaining arches of the foot: a- Lateral longitudinal arch is supported by tibialis posterior. b- Abductor digiti minimi supports the medial longitudinal arch. c- Tendon of peroneus longus supports the transverse arch. d- Tendon of flexor hellucis longus supports the arch.	C
101. Regarding adductor canal, the following statement is correct: a- It ends at the adductor hiatus. b- It transmits the femoral nerve. c- Its posterior wall is formed by the adductor brevis muscle only. d- Its lateral wall is formed by the vastus lateralis.	A
102. Regarding the knee joint, the following is true: a- Its lateral meniscus is damaged more frequently than the medial. b- Its lateral meniscus is attached to the lateral collateral ligament. c- Rupture of its anterior cruciate ligament results in excessive backward movement of tibia on femur. d- Stability of the joint depends largely on tone of quadriceps femoris muscle.	D

103. Regarding the femoral sheath and femoral hernia, the following statement is true: a- Femoral sheath is a prolongation of facial lining from the abdominal walls, along the upper part of femoral vessels. b- Femoral canal is the lateral compartment of the femoral sheath. c- Femoral hernia is more common in men than in women. d- Neck of the femoral hernia lies below and medial to the pubic tubercle.	**A**
104. Superficial peroneal nerve supplies one of the following muscles: a- Peroneus tertius. b- Peroneus longus. c- Tibialis anterior. d- Flexor digitorum longus.	**B**
105. One of the following muscles is supplied by the deep peroneal nerve: a- Tibialis anterior. b- Tibialis posterior. c- F1exor digitorum longus. d- Peroneus brevis.	**A**
106. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	**A**
107. Femoral canal contains: a- Femoral artery. b- Femoral vein. c- Femoral nerve. d- Lymphatic vessels.	**D**
108. Regarding great saphenous vein, following statements are true: a- It starts at lateral end of dorsal venous arch. b- It passes behind medial malleolus. c- It empties into femoral vein. d- It has no valves.	**C**
109. Regarding the ankle joint, the following is correct: a- Sprains of the ankle are usually caused by excessive inversion of the foot. b- The medial or deltoid ligament is stronger than the lateral one. c- Its fracture dislocations is caused by forced external rotation and over eversion of the foot. d- Movements of inversion and eversion take place at the ankle joint.	**C**
110. Regarding the arches of the foot, the following is correct statement: a- The head of talus is the .. keystone .. in the center of the lateral longitudinal arch. b- The short and long plantar ligaments support medial longitudinal arch. c- Flat foot is produced by the depression of the arches. d- The cuboid is the center of the medial longitudinal arch.	**C**
111. Regarding the adductor (subsartorial) canal and its contents, mark one correct statement: a- Its anteromedial wall is formed by the vastus medialis. b- Its lateral wall is formed by the vastus lateralis. c- Its posterior wall is formed by the adductor longus and magnus. d- The femoral artery has no branches in the canal.	**C**
112. Regarding the fascia of the thigh, mark the correct statements: a- The fascia lata of thigh is thickened medially to form iliotibial tract. b- The saphenous opening is a gap in the fascia lata. c- The saphenous opening is 6 em below and lateral to pubic tubercle. d- Two facial septa pass from fascia lata to the femur.	

103. Regarding the femoral sheath and femoral hernia, the following statement is true: a- Femoral sheath is a prolongation of facial lining from the abdominal walls, along the upper part of femoral vessels. b- Femoral canal is the lateral compartment of the femoral sheath. c- Femoral hernia is more common in men than in women. d- Neck of the femoral hernia lies below and medial to the pubic tubercle.	A
104. Superficial peroneal nerve supplies one of the following muscles: a- Peroneus tertius. b- Peroneus longus. c- Tibialis anterior. d- Flexor digitorum longus.	B
105. One of the following muscles is supplied by the deep peroneal nerve: a- Tibialis anterior. b- Tibialis posterior. c- Flexor digitorum longus. d- Peroneus brevis.	A
106. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	A
107. Femoral canal contains: a- Femoral artery. b- Femoral vein. c- Femoral nerve. d- Lymphatic vessels.	D

108. Regarding great saphenous vein, following statements are true: a- It starts at lateral end of dorsal venous arch. b- It passes behind medial malleolus. c- It empties into femoral vein. d- It has no valves.	C
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Regarding the popliteal artery, select correct statement: a- Lies superficial to popliteal vein. b- Is crossed anteriorly by the tibial nerve. c- Terminates by dividing into anterior and posterior tibial arteries. d- Ends at the upper border of popliteus muscle.	C
114. Following are important factors in maintaining arches of the foot: a- The medial longitudinal arch is supported by long plantar ligament. b- The lateral longitudinal arch is supported by tibialis posterior. c- Tendon of tibialis anterior suspends the lateral longitudinal arch. d- Tendon of peroneus longus acts as a tie beam for the transverse arch.	D
115. Regarding the medial planter nerve, select the correct answer: a- It arises from the anterior tibial nerve deep to the flexor retinaculum. b- It supplies adductor hallucis muscle. c- It supplies flexor digitorum brevis muscle. d- It supplies medial two planter interossei muscles.	D
16. Regarding tibialis posterior muscle, indicate the correct statement: a- It arises from tibia, fibula and interosseous membrane. b- Its tendon passes superficial to that of flexor digitorum longus. c- It produces inversion of the foot by acting at the ankle joint. d- It helps in suspending the lateral longitudinal arch of the foot.	A
7. The bone which fracture in over doing the movement of eversion is: a- The lateral malleolus. b- The calcaneum. c- The medial malleolus. d- The inferior margin of lower end of tibia.	A

118. If a surgeon wants to take bone chips for grafting, the most suitable place in the leg and foot is: a- Medial malleolus. b- Anteromedial surface of the tibia. c- The first metarsal bone. d- The fibula.	D
119. Regarding the fracture of the neck of the femur, select true statement: a- Is common in young age. b- Produces necrosis of the greater trochanter. c- Is easy to heal in old age. d- The limb rotates laterally after this fracture.	D
120. In a "locked knee" which of the following ligaments become a- Fibular collateral. b- Tibial collateral. c- Anterior cruciate. d- Posterior cruciate.	C
121. The common type of football injuries in the knee joint is rupture of choose the correct answer: a- Fibular collateral ligament. b- Posterior cruciate ligament. c- Plantar aponeurosis. d- Medial meniscus.	D
122. The muscle which act as plantar flexors of the foot include: a- Extensor hallucis longus. b- Extensor digitorum longus. c- Tibialis anterior. d- Soleus.	D

...-old man suffered a superior gluteal nerve injury in a motorcycle crash in which his right lower limb was caught beneath the bike. He is stabilized in the emergency department. Later he is examined and he exhibits a waddling gait and a positive Trendelenburg sign. Which of the following would be the most likely physical finding in this patient? a. Difficulty in standing from a sitting position b. The left side of the pelvis droops or sags when he attempts to stand with his weight supported just by the right lower limb c. The right side of the pelvis droops or sags when he attempts to stand with his weight supported just by the left lower limb d. Weakened flexion of the right hip e. Difficulty in sitting from a standing position	B
2. After dividing the overlying superficial tissues and gluteal musculature in a 68-year-old female patient, the orthopedic surgeon carefully identified the underlying structures while performing a total hip arthroplasty. The key landmark in the gluteal region, relied upon in surgical explorations of this area, is provided by which of the following structures? A. Gluteus medius B. Obturator internus tendon C. Sciatic nerve D. Piriformis muscle E. Spine of the ischium	D
A 56-year-old man with advanced bladder carcinoma suffers from difficulty while walking. Muscle testing reveals weakened adductors of right thigh. Which nerve is most likely compressed by tumor to result in walking difficulty? A. Femoral B. Obturator C. Common fibular (peroneal) D. Tibial Sciatic	B

4. A 32-year-old patient received a badly placed intramuscular injection to the posterior part of his gluteal region. The needle injured a motor nerve in the area. Later, he had great difficulty rising to a standing position from a seated position. Which muscle was most likely affected by the injury? A. Gluteus maximus B. Gluteus minimus C. Hamstrings D. Iliopsoas E. Obturator internus	A
5. A 22-year-old woman is admitted to the emergency department after another vehicle collided with the passenger side of the convertible in which she was riding. Radiologic examination reveals an avulsion fracture of the greater trochanter. Which of the following muscles would continue to function normally if such an injury was incurred? A. Piriformis B. Obturator internus C. Gluteus medius D. Gluteus maximus E. Gluteus minimus	D
6. A 29-year-old construction worker falls onto some rusty wire mesh and suffers a deep laceration to his right buttock. When the ambulance arrives to transporthim to the emergency department and it is noted that he has difficulty stepping up into the ambulance with his right leg. Which nerve has probably been damaged? A. Superior gluteal B. Tibial C. Common fibular (peroneal) D. Inferior gluteal E. Nerve to piriformis	D

7. **A 43-year-old man visits the outpatient clinic with a painful, swollen knee joint. The patient's history reveals chronic gonococcal arthritis. A knee aspiration is ordered for bacterial culture of the synovial fluid. A standard suprapatellar approach is used, and the needle passes from the lateral aspect of the thigh into the region immediately proximal to and deep to the patella. Through which of the following muscles would the needle pass?**

A. Adductor magnus
B. Short head of biceps femoris
C. Rectus femoris
D. Sartorius
E. Vastus lateralis

E

8. **A 23-year-old man is taken to the emergencyDepartment because of anorexia, nausea, vomiting, and Severe abdominal pain in the right lower quadrant. On Examination, he has tenderness in the right lower quadrant with rebound tenderness. The physician suspects Appendicitis. The patient was unable to straighten the patient's flexed thigh. Which of theFollowing muscles most likely caused this symptom?**

A. Adductor magnus
B. Psoas major
C. Biceps femoris
D. Obturator internus
E. Gluteus Medius

B

9. **Three years following a 62-year-old's hip replacement, the man's CT scans indicated that two of his larger hip muscles had been replaced by adipose tissue. The opinion is offered that his superior gluteal nerve could have been injured during the replacement procedure, and the muscles supplied by that nerve had atrophied and been replaced by fat. Which of the following muscles receives its innervation from the superior gluteal nerve?**

A. Tensor fasciae latae
B. Rectus femoris
C. Gluteus maximus
D. Piriformis

A

10. **During a gymnastic session, a 24-year-old woman Suddenly developed pain and swelling on the right Buttock. This happened following a forceful thigh Movement. There is severe weakness of right hip extension and knee flexion. Adduction of the thigh is also Slightly weak. An avulsion fracture of the ischial tuberosity is found on a radiograph. Which of the following Group of muscles has most likely involved in this Process?**

A. Adductor brevis, adductor longus, adductor magnus, pectineus, and gracilis
B. Biceps femoris, semimembranosus, semitendinosus, and adductor magnus
C. Iliacus and psoas major
D. Gluteus medius and gluteus minimus
E. Gluteus maximus and adductor magnus
F. Iliacus, psoas major, rectus femoris and sartorius

B

11. **A 22-year-old woman is admitted with high fever and vaginal discharge. Physical and laboratory examinations reveal gonorrheal infection. A series of intramuscular antibiotic injections are ordered. Into which of the following parts of the gluteal region should the antibiotic be injected to avoid nerve injury?**

A. Anterior and superior to a line between the posterior superior iliac spine and the greater trochanter
B. In the middle of a line between the anterior superior iliac spine and the ischial tuberosity
C. Inferolateral to a line between the posterior superior iliac spine and the greater trochanter
D. Inferomedial to a line between the posterior superior iliac spine and the greater trochanter
E. Halfway between the iliac tuberosity and the greater trochanter

A

12. A 45-year-old intoxicated man was struck by a tour bus while walking in the middle of the street. The man was admitted to the emergency department andduring physical examination was diagnosed with "adductor gait," in which an individual crosses one limb in front of the other, due to powerful hip adduction. Which of the following nerves was most likely involved in this condition? **D**

A. Tibial
B. Obturator
C. Inferior gluteal
D. Superior gluteal
A. Femoral

13. A 6-year-old boy with a family history of muscular disease leading to wheelchair dependency in his maternal uncles presents with difficulty in standing from the seated position. He bends forward, uses his hands to help him push up from the floor, and then straightens his knees to stand. Which of the following muscles is most likely involved by this disease process? **D**

A. Tibialis posterior and gastrocnemius
B. Quadratus femoris
C. Gluteus medius and gluteus minimus
D. Gluteus maximus
E. Hamstrings

14. The neurosurgeon had removed a portion of the dense tissue (dura mater) covering the brain of the patient when she removed the tumor that had invaded the skull. To replace this important tissue covering of the brain, she took a band of the aponeurotic tissue of the lateral aspect of the thigh, covering the vastus lateralis muscle. What muscle, supplied by the inferior gluteal nerve, inserts into this band of dense tissue as part of its insertion? **C**

A. Gluteus medius
B. Gluteus minimus
C. Gluteus maximus
D. Tensor fasciae latae
Rectus femoris

15. In the radiographs of the knee of a male 28-yearold basketball player, who had apparently suffered a tear in a medial ligament of the knee, the tubercle on the superior aspect of the medial femoral condyle could be seen more clearly than in most individuals. What muscle attaches to this tubercle? **D**

A. Semimembranosus
B. Gracilis
C. Popliteus
D. Adductor magnus
E. Vastus medialis

16. A 51-year-old immigrant with tuberculosis is found to have large flocculent masses over the lateral lumbar spine. There is a similar mass located in the ipsilateral upper medial side of thigh. This pattern of involvement most likely suggests an abscess tracking along which of the following muscles? **B**

A. Piriformis
B. Psoas major
C. Adductor longus
D. Gluteus maximus
E. Obturator internus

17. A 29-year-old woman is involved in a car crash and is taken to the emergency department. Radiographs reveal a fracture of her pelvis. During healing of the pelvic fracture, a nerve becomes entrapped in the bone callus. Musculoskeletal examination reveals an inability to adduct the thigh. Which of the following nerves is most likely affected? **A**

A. Obturator
B. Femoral
C. Inferior gluteal
D. Superior gluteal
E. . Tibial

... is a psychiatric patient suddenly becomes aggressive. In order to calm him down, the patient is given an intramuscular injection in the upper lateral quadrant of thebuttock. The injection is given at this specific locationto prevent damage to which of the following nerves?

A. Lateral femoral cutaneous
B. Sciatic
C. Superior gluteal
D. Obturator
A. E. Inferior gluteal

B

19. A 58-year-old woman presents to the outpatient surgery clinic for removal of varicose veins on the medial aspect of her foot. The operation was successful however, one month later she reports loss of sensationover the medial aspect of her leg and foot. Which of the following nerves was most likely injured during theprocedure?

A. Saphenous
B. Obturator
C. Lateral femoral cutaneous
D. Tibial
E. Femoral

A

20. After a revascularization procedure involving the common iliac artery, a 68-year-old man has difficulty walking. Nerve conduction studies reveal decreased activity in the nerve that innervates the adductors of the thigh. Which nerve is this?

A. Femoral
B. Obturator
C. Common fibular (peroneal)
D. Tibial
E. Sciatic

B

21. A 23-year-old woman was taken to the emergency department after being involved in a head-on collision with a truck. On physical examination a hematoma was seen in the medial thigh. A CT scan revealed a fracture of the femur with a ruptured femoral artery. She was taken to the operating room for repair of the damaged structures. Two days postoperatively during physicalexamination the patient has loss of sensation to the anterior medial thigh and medial side of her leg and foot. Branches of which of the following nerves were most likely injured in the repair of the fracture?

A. Femoral
B. Saphenous
C. Obturator
D. Tibial
E. Fibular (peroneal)

A

22. A 43-year-old victim of a drunk driving car crash is undergoing reconstructive arm surgery. The surgeon performs an autograft using a weak adductor of the leg located superficially on the medial side of the thigh. Which muscle is most likely being harvested to perform this reconstruction?

A. Gracilis
B. Sartorius
C. Rectus femoris
D. Vastus lateralis
E. Vastus medialis

A

23. During a 100-meter sprint a 25-year-old male Olympic athlete suddenly pulls up in discomfort and is seen to be clutching the back of his left thigh in agony.Upon further examination the athlete describes the pain as a "tearing" sensation and is unable to flex his knee. Based on these symptoms which of the following actions are affected due to this injury?

A. Flexion of the hip and extension of the knee
B. Extension of the hip and dorsiflexion
C. Medial rotation of the hip
D. Lateral rotation of the hip
E. Hip extension and knee flexion

24. A 42-year-old man is admitted to the emergency department after his automobile hit a tree. He is treated for a pelvic fracture and several deep lacerations. Physical examination reveals that dorsiflexion and inversion of the left foot and extension of the big toe are very weak. Sensation from the dorsum of the foot, skin of the sole, and the lateral aspect of the foot has been lost and the patellar reflex is normal. The foot is everted and plantar flexed. Which of the following structures is most likely injured?

A

a. The lumbosacral trunk at the linea terminalis
b. L5 and S1 spinal nerves torn at the intervertebral foramen
c. Fibular (peroneal) division of the sciatic nerve at the neck of the fibula
d. Sciatic nerve injury at greater sciatic foramen ("doorway to gluteal region")
e. Tibial nerve in the popliteal fossa

25. A 23-year-old man is admitted to the emergency department with a deep, bleeding stab wound of the pelvis. After the bleeding has been arrested, a magnetic resonance imaging (MRI) examination gives evidence that the right ventral primary ramus of L4 has been transected. Which of the following problems will most likely be seen during physical examination?

A

a. Reduction or loss of sensation from the medial aspect of the leg
b. Loss of the Achilles tendon reflex
c. Weakness of abduction of the thigh at the hip joint
d. Inability to evert the foot

26. A 45-year-old man is treated at the hospital after he fell from his bicycle. Radiologic examination reveals fractures both of the tibia and the fibula. On physical examination the patient has a foot drop, but normal eversion. Which of the following nerves is most likely injured?

E

a. *Tibial*
b. *Common fibular (peroneal)*
Superficial fibular (peroneal)
Saphenous
Deep fibular (peroneal)

27. A 49-year-old male construction worker is admitted to the emergency department with a painful lump on the proximal medial aspect of his thigh. Radiologic and physical examinations reveal that the patient has a herniation of abdominal viscera beneath the inguinal ligament into the thigh. Through which of the following openings will a hernia of this type initially pass to extend from the abdomen into the thigh?

A

a. Femoral ring
b. Superficial inguinal ring
c. Deep inguinal ring
d. Fossa ovalis
e. Obturator canal

28. A 37-year-old man is admitted to the hospital after an injury to his foot while playing flag football with friends on a Saturday morning. A series of radiographs demonstrates a fracture involving the talocrural (tibiotalar, ankle) joint. Which movements are the major ones to be affected by this injury?

A

a. Plantar flexion and dorsiflexion
b. Inversion and eversion
c. Plantar flexion, dorsiflexion, inversion, and eversion
d. Plantar flexion and inversion
e. Dorsiflexion and eversion

29. A 45-year-old man presents at the local emergency clinic with the complaint of a painful knee and difficulty in walking. A computed tomography (CT) scan examination reveals a very large cyst in the popliteal fossa compressing the tibial nerve. Which movement will most likely be affected?

E

a. Dorsiflexion of the foot
b. Flexion of the thigh
c. Extension of the digits
d. Extension of the leg
e. Plantar flexion of the foot

30. A 19-year-old football player was hit on the lateral side of his knee just as he put that foot on the ground. Unable to walk without assistance, he is taken to the hospital. An MRI examination reveals a torn medial collateral ligament. Which structure would most likely also be injured due to its attachment to this ligament? a. Medial meniscus b. Anterior cruciate ligament c. Lateral meniscus d. Posterior cruciate ligament e. Tendon of the semitendinosus	**A**
31. A 49-year-old man underwent a coronary bypass graft procedure using the great saphenous vein. Postoperatively, the patient complains of pain and general lack of normal sensation on the medial surface of the leg and foot on the limb from which the graft was harvested. Which nerve was most likely injured during surgery? a. Common fibular (peroneal) b. Superficial fibular (peroneal) c. Lateral sural d. Saphenous e. Tibial	**D**
32. A 72-year-old woman is admitted to the hospital with a painful right foot. A CT scan examination reveals a thrombotic occlusion of the femoral artery in the proximal part of the adductor canal. Which artery will most likely provide blood supply to the leg through the genicular anastomosis? a. Medial circumflex femoral b. Descending branch of the lateral circumflex femoral c. First perforating branch of the deep femoral d. Inferior gluteal e. Descending genicular branch of femoral	**B**
33. A 75-year-old woman is admitted to the hospital after falling in her bathroom. Radiologic examination reveals an extracapsular fracture of the femoral neck. Which artery is most likely at risk for injury? a. Inferior gluteal b. First perforating branch of deep femoral c. Medial circumflex femoral d. Obturator e. Superior gluteal	**C**
34. Upon removal of a knee-high leg cast, a 15-yearold boy complains of numbness of the dorsum of his right foot and inability to dorsiflex and evert his foot. Which is the most probable site of the nerve compression that resulted in these symptoms? a. Popliteal fossa b. Neck of the fibula c. Lateral compartment of the leg d. Anterior compartment of the leg	**B**
35. During the preparation of an evening meal a female medical student dropped a sharp, slender kitchen knife. The blade pierced the first web space of her foot, resulting in numbness along adjacent sides of the first and second toes. Which nerve was most likely injured? a. Saphenous b. Deep fibular (peroneal) c. Superficial fibular (peroneal) d. Sural e. Common fibular (peroneal)	**B**
36. The news reported that the 58-year-old ambassador received a slashing wound to the medial thigh and died from exsanguination in less than 2 minutes. What was the most likely nature of his injury? a. The femoral artery was cut at the inguinal ligament b. A vessel or vessels were injured at the apex of the femoral triangle c. The femoral vein was transected at its junction with the saphenous vein d. The medial circumflex femoral was severed at its origin	**B**

37. Following an injury suffered in a soccer match, a 32-year-old woman is examined in a seated position in the orthopedic clinic. Holding the right tibia with both hands, the clinician can press the tibia backward under the distal part of her femur. The left tibia cannot be displaced in this way. Which structure was most likely damaged in the right knee?

a. Anterior cruciate ligament
b. Lateral collateral ligament
c. Medial collateral ligament
d. Medial meniscus
e. Posterior cruciate ligament

E

38. A 72-year-old woman suffered a hip dislocation when she fell down the steps to her garage. Which of the following is most significant in resisting hyperextension of the hip joint?

a. Pubofemoral ligament
b. Ischiofemoral ligament
c. Iliofemoral ligament
d. Negative pressure in the acetabular fossa
e. Gluteus maximus muscle

C

39. A 75-year-old man is transported to the emergency department with severe pain of his right hip and thigh. A radiologic examination reveals avascular necrosis of the femoral head. Which of the following conditions most likely occurred to produce avascular necrosis in this patient?

a. Dislocation of the hip with tearing of the ligament of the head of the femur
b. Intertrochanteric fracture of the femur
c. Intracapsular femoral neck fracture
d. Thrombosis of the obturator artery
e. Comminuted fracture of the extracapsular femoral neck

C

40. A 58-year-old male farmer was accidentally struck with a scythe (a long, curved cutting blade) by another worker while they were cutting wheat. He was admitted to the county hospital with severe bleeding. During physical examination the doctor noted that the patient had a foot drop; sensation was present over the dorsum of the foot and the skin of the posterior calf. Which of the following nerves was injured?

A. Femoral nerve
B. Sciatic nerve
C. Superficial fibular (peroneal) nerve
D. Deep fibular (peroneal) nerve
E. Common fibular (peroneal) nerve

D

41. A 46-year-old woman stepped on a broken wine bottle on the sidewalk and the sharp glass entered the posterior part of her foot. The patient was admitted to the hospital, and a physical examination concluded that her lateral plantar nerve had been transected (cut through). Which of the following conditions will most likely be confirmed by further physical examination?

A. Loss of sensation over the plantar surface of the third toe
B. Paralysis of the abductor hallucis
C. Paralysis of the interossei and adductor hallucis
D. Flexor hallucis brevis paralysis
E. Flexor digitorum brevis paralysis

C

42. A 22-year-old male martial arts competitor was examined by the clinician because of pain and serious disability suffered from a kick to the side of his knee. Physical examination revealed a dark bruise just distal to the head of the fibula. Which of the following muscles will most likely be paralyzed?

A. Tibialis anterior and extensor digitorum longus
B. Tibialis posterior
C. Soleus and gastrocnemius
D. Plantaris and popliteus
E. Flexor digitorum longus and flexor hallucis Longus

A

43. In an accident during cleanup of an old residential area of the city, the Achilles tendon of a 32-year-old worker was cut through by the blade of a brush cutter. The patient is admitted to the hospital and a laceration of the Achilles tendon is diagnosed. Which of the following bones serves as an insertion for the Achilles tendon? a. Calcaneus b. Fibula c. Cuboid d. Talus E. Navicular	A
44. During a football game a 21-year-old wide receiver was illegally blocked by a linebacker, who threw himself against the posterolateral aspect of the runner's left knee. As he lay on the ground, the wide receiver grasped his knee in obvious pain. Which of the following structures is frequently subject to injury from this type of force against the knee? A. Fibular collateral ligament B. Anterior cruciate ligament C. Lateral meniscus and posterior cruciate ligament D. Fibular collateral and posterior cruciate ligament E. All the ligaments of the knee will be affected	B
45. Lower limb angiography of an 82-year-old woman reveals a possible cause for her limb pain during her workout routines in the health spa. The artery that was occluded is one that should have been demonstrable passing between the proximal part of the space between the tibia and fibula. Which of the following arteries is most likely affected? A. Deep femoral B. Popliteal C. Posterior tibial D. Fibular (peroneal) E. Anterior tibial	E

46. A 34-year-old male power lifter visits the outpatient clinic because he has difficulty walking. During physical examination it is observed that the patient has a problem unlocking the knee joint to permit flexion of the leg. Which of the following muscles is most likely damaged? A. Biceps femoris B. Gastrocnemius C. Popliteus D. Semimembranosus E. Rectus femoris	C
47. A popliteal arterial aneurysm can be very fragile, bursting with great loss of blood and the potential loss of the leg if it is not dealt with safely and effectively. In the 18th century, Dr. John Hunter (1728-1793) discovered that if a primary artery of the thigh is temporarily compressed, blood flow in the popliteal artery can be reduced long enough to treat the aneurysm in the popliteal fossa surgically, with safety. What structure is indicated in Fig. 5-3 that is related to his surgical procedure? A. Sartorius B. Femoral vein C. Femoral artery D. Gracilis E. Adductor brevis	A
48. A 49-year-old male worker fell from a ladder, with his weight impacting on the heels of his feet. Radiologic examination reveals comminuted calcaneal fractures. After the injury the contraction of which one of the following muscles could most likely increase the pain in the injured foot? A. Flexor digitorum profundus B. Gastrocnemius C. Tibialis posterior D. Tibialis anterior E. Fibularis (peroneus) longus	B

49. A 24-year-old woman received a small-caliber bullet wound to the popliteal fossa from a drive-by assailant. The patient was admitted to the emergency department, where the surgeons recognized that the bullet had severed the tibial nerve. Such an injury would most likely result in?

A. Inability to extend the leg at the knee
B. Foot drop
C. A dorsiflexed and everted foot
D. A plantar flexed and inverted foot

C

50. An 82-year-old grandmother slipped on the polished floor in her front hall and was transported to the emergency department and admitted for examination with a complaint of great pain in her right lower limb. During physical examination it is observed by the resident that the right lower limb is laterally rotated and noticeably shorter than her left limb. Radiologic examination reveals an intracapsular fracture of the femoral neck. Which of the following arteries supplies the head of the femur in early childhood but no longer in a patient of this age?

A. Superior gluteal
B. Lateral circumflex femoral
C. A branch of the obturator artery
D. Inferior gluteal

C

51. The swollen and painful left foot of a 23-year-old female long distance runner is examined in university orthopedic clinic. She states that she stepped on unseen sharp object while running through the park several days earlier. Emergency surgery is ordered to deal with her tarsal tunnel syndrome. The tarsal tunnel is occupied normally by tendons, vessels, and nerves that pass beneath a very strong band of tissue (flexor retinaculum) on medial side of ankle. What is the most anterior of structures that pass through this tunnel?

A. Flexor hallucis longus tendon
B. Plantaris tendon
C. Tibialis anterior tendon
D. Tibialis posterior tendon

D

52. A 22-year-old man is admitted to the emergency department after falling from his bicycle. Radiologic examination reveals a fracture of the tibia above the ankle. MRI and physical examination reveal that the tibial nerve is severed on the posterior aspect of the tibia. Which of the following signs will most likely be present during physical examination?

A. Sensory loss of the dorsum of the foot
B. Sensory loss on the sole of the foot
C. Foot drop
D. Paralysis of the extensor digitorum brevi
E. Sensory loss of the entire foot

B

53. A 24-year-old man is admitted to the emergency department after a car collision. Radiologic examination reveals a fracture at the junction of the middle and lower thirds of the femur. An MRI examination provides evidence that the popliteal vessels were injured when the distal fragment of the fracture was pulled posteriorly. Which of the following muscles is most likely to displace the distal fracture fragment?

A. Soleus
B. Gastrocnemius
C. Semitendinosus
D. Gracilis

B

54. A 65-year-old man is admitted to the hospital after falling from his roof while cleaning leaves and pine needles from the gutters. Among other injuries suffered in his fall, radiologic examination reveals a fracture of the talus bone in one foot. Much of the blood supply of this bone can be lost in such an injury and can result in osteonecrosis. From what artery does this bone receive its primary vascular supply?

A. Medial plantar
B. Lateral plantar
C. Dorsalis pedis
D. Anterior tibial
E. Posterior tibial

E

35. A 34-year-old male long-distance runner complained to the team physician of swelling and pain of his shin. Skin testing in a physical examination showed normal cutaneous sensation of the leg. Muscular strength tests showed marked weakness of dorsiflexion and impaired inversion of the foot. Which nerve serves the muscles involved in the painful swelling? A. Common fibular (peroneal) B. Deep fibular (peroneal) C. Sciatic D. Superficial fibular (peroneal) E. Tibial	**B**
36. A 7-year-old girl accidentally stepped on a sharp snail shell while walking to the beach. She was admitted to the hospital, where she received a tetanus shot, and the wound was cleaned thoroughly and sutured. One week later, during a return visit to her physician, it is seen that she has great difficulty in flexing her big toe, even though there is no inflammation present in the sole of the foot. Which nerve was most likely damaged by the piercing of the shell? A. Lateral plantar nerve B. Medial plantar nerve C. Sural nerve D. Superficial fibular (peroneal) nerve	**B**
37. A 49-year-old man is admitted to the emergency department with a cold and pale foot. Physical examination reveals that the patient suffers from peripheral vascular disease; duplex ultrasound studies indicate possible occlusion of his popliteal artery, and the pulse of the posterior tibial artery is absent. What is the most common location for palpation of the pulse of the posterior tibial artery? A. Lateral to the muscular belly of the abductor hallucis B. Posteroinferior to the medial femoral condyle C. Groove midway between the lateral malleolus and the calcaneus D. Groove midway between the medial malleolus and the calcaneus E. Medially, between the two heads of the gastrocnemius	**D**

58. Young parentswere concerned thattheir 14-monthold daughter had not yet begun walking. Their pediatrician reassured them, saying that one of the muscles of the leg, the fibularis (peroneus) tertius, had to complete its central neurologic development before the child could lift the outer corner of the foot and walk without stumbling over her toes. What is the most common nerve supply of this muscle? A. Sural B. Lateral plantar C. Deep fibular (peroneal) D. Superficial fibular (peroneal) E. Tibial	**C**
59. A 55-year-old man is admitted to the hospital for an iliofemoral bypass. The operation is performed successfully and the blood flow between the iliac and femoral arteries is restored. During rehabilitation which of the following arteries should be palpated to monitor good circulation of the lower limb? A. Anterior tibial B. Deep fibular (peroneal) C. Deep plantar D. Dorsalis pedis E. Dorsal metatarsal	**D**
60. A 55-year-old woman is bitten by a dog in the dorsum of the foot and is admitted to the emergency department. The wound is cleaned thoroughly, during which it is seen that no tendons have been cut, but the dorsalis pedis artery and the accompanying nerve have been injured. Which of the following conditions would be expected during physical examination? A. Clubfoot B. Foot drop C. Inability to extend the big toe D. Numbness between the first and second toes	**D**

61. A 31-year-old woman presents to the department of surgery with a complaint of facial paralysis (Bell's palsy), which had appeared a year earlier and had resulted in paralysis of muscles of one side of her face. The chief of plastic surgery recommends a nerve graft, taking a cutaneous nerve from the lower limb to replace the defective facial nerve. The surgery is successful. Six months after the procedure, there is restoration of function of previously paralyzed facial muscles. There is an area of skin on the back of the leg laterally and also on the lateral side of the foot that has no sensation. What nerve was used in the grafting procedure? A. Superficial fibular (peroneal) B. Tibial C. Common fibular (peroneal) D. Sural	**D**
62. A 27-year-old woman had suffered a penetrating injury in the popliteal region by an object thrown from a riding lawnmower. She was admitted to the emergency department for removal of the foreign object. After making a midline incision in the skin of the popliteal fossa, the surgical resident observed a vein of moderate size in the superficial tissues. What vein would be expected at this location? A. Popliteal vein B. Perforating tributary to the deep femoral vein C. Great saphenous vein D. Lesser (short) saphenous vein	**D**
63. A 58-year-old diabetic patient is admitted to the hospital with a painful foot. Physical examination reveals that the patient suffers from peripheral vascular disease. There is no detectable dorsalis pedis arterial pulse, but the posterior tibial pulse is strong. Which of the following arteries will most likely provide adequate collateral supply from the plantar surface to the toes and dorsum of the foot? A. Anterior tibial B. Fibular (peroneal) C. Arcuate D. Medial plantar E. Lateral plantar	**E**
64. A 45-year-old is admitted to the hospital after his left leg impacted a fence post when he was thrown from a powerful four-wheel all-terrain vehicle. Radiologic examination reveals posterior displacement of the tibia upon the femur. Which of the following structures was most likely injured? A. Anterior cruciate ligament B. Posterior cruciate ligament C. Lateral collateral ligament D. Lateral meniscus ligament E. Patellar ligament	**B**
65. A 55-year-old man visits the outpatient clinic complaining that he cannot walk more than 5 minutes without feeling severe pain in his feet. An image of the feet of this patient is shown in Fig. 5-10. What is the most common cause of this condition? A. Collapse of medial longitudinal arch, with eversion and abduction of the forefoot B. Exaggerated height of the medial longitudinal arch of the foot C. Collapse of long plantar ligament D. Collapse of deltoid ligament E. Collapse of plantar calcaneonavicular ligament	**A**
66. A 32-year-old man is admitted to the emergency department after a car collision. Radiologic examination reveals a distal fracture of the femur. The patient is in severe pain, and a femoral nerve block is administered. What landmark is accurate for localizing the nerve for injection of anesthetics? A. 1.5 cm superolateral to the pubic tubercle B. 1.5 cm medial to the anterior superior iliac spine C. 1.5 cm lateral to the femoral pulse D. 1.5 cm medial to the femoral pulse E. Midway between the anterior superior iliac spine and pubic symphysis	**C**

67. A 48-year-old woman is admitted to the hospital with severe abdominal pain. Several imaging methods reveal that the patient suffers from intestinal ischemia. An abdominopelvic catheterization is ordered for antegrade angiography. A femoral puncture is performed. What is the landmark for femoral artery puncture? A. Halfway between anterior superior iliac spine and pubic symphysis B. 4.5 cm lateral to the pubic tubercle C. Midpoint of the inguinal skin crease D. Medial aspect of femoral head E. Lateral to the fossa ovalis	D
68. A 23-year-old man is admitted to the emergency department after injuring his knee while playing football. During physical examination there is pain and swelling of the knee, in addition to locking of the knee in full extension. Radiologic examination reveals a bucket handle meniscal tear (Fig. 5-12). Which of the following ligaments is most likely injured? A. Posterior cruciate B. Medial collateral C. Lateral collateral D. Anterior cruciate E. Coronary	D
69. In preparing to isolate the proximal portion of the femoral artery, the vascular surgeon gently separated it from surrounding tissues. Posterior to the femoral sheath, what muscle forms the lateral portion of the floor of the femoral triangle? A. Adductor longus B. Iliopsoas C. Sartorius D. Pectineus E. Rectus femoris	B

70. A 50-year-old man is admitted to the emergency department after a car crash. An MRI examination reveals an injured anterior cruciate ligament. Physical examination reveals a positive drawer sign. Which of the following signs is expected to be present during physical examination? A. The tibia can be slightly displaced anteriorly B. The tibia can be slightly displaced posteriorly C. The fibula can be slightly displaced posteriorly D. The fibula can be slightly displaced anteriorly E. The tibia and fibula can be slightly displaced anteriorly	A
71. A 23-year-old male basketball player injured hisfoot during training and is admitted to the emergency department. An MRI examination reveals a hematoma around the medial malleolus. Upon physical examination the patient shows excessive eversion of his foot. Which of the following ligaments most likely has a tear? A. Plantar calcaneonavicular (spring) B. Calcaneofibular C. Long plantar D. Short plantar E. Deltoid	E
72. A 5-year-old boy is admitted to the emergency department after a car collision. Radiologic examination reveals a fracture of the head of the femur. An MRI examination reveals a large hematoma. Which of the following arteries is most likely injured? A. Deep circumflex iliac B. Acetabular branch of obturator C. Descending branch of lateral circumflex femoral D. Medial circumflex femoral E. Radicular branches of circumflex artery	B

73. A 49-year-old man is admitted to the emergency department with a cold and pale foot. Physical examination reveals that the patient suffers from peripheral vascular disease; his popliteal artery is occluded and no pulse is felt upon palpation. What is the landmark to feel the pulse of the femoral artery?

A. Adductor canal
B. Femoral triangle
C. Popliteal fossa
D. Inguinal canal
E. Pubic symphysis

B

74. A 49-year-old man is admitted to the emergency department complaining that he has difficulties walking. Physical examination reveals that the patient suffers from peripheral vascular disease. An ultrasound examination reveals an occlusion of his femoral artery at the proximal portion of the adductor canal. Which of the following arteries will most likely provide collateral circulation to the thigh?

A. Descending branch of the lateral circumflex femoral
B. Descending genicular
C. Medial circumflex femoral
D. First perforating branch of deep femoral
E. Obturator artery

A

75. A 34-year-old man is lifting heavy weights while doing squats. Unfortunately, while making a maximal effort, he drops the weight and immediately grabs at his upper thigh, writhing in pain. The man is admitted to the emergency department and during physical examination is diagnosed with a femoral hernia. What reference structure would be found immediately lateral to the herniated structures?

A. Femoral vein
B. Femoral artery
C. Pectineus muscle
D. Femoral nerve
E. Adductor longus muscle

A

76. A 25-year-old man, an intravenous drug abuser, had been injecting himself with temazepam (a powerful intermediate acting drug in the same group as diazepam (Valium) and heroin for 5 years, leaving much residual scar tissue over points of vascular access. The patient is admitted to the emergency department for a detoxification program requiring an intravenous infusion. The femoral veins in his groin are the only accessible and patent veins for intravenous use. Which of the following landmarks is the most reliable to identify the femoral veins?

A. The femoral vein lies medial to the femoral artery.
B. The femoral vein lies within the femoral canal.
C. The femoral vein lies lateral to the femoral artery.
D. The femoral vein lies directly medial to the femoral nerve.

A

77. A 22-year-old soccer player collides with one of her teammates. During examination on the field, the posterior drawer test was performed and the tibia moved backward in relation to her femur. Injury to which structure is confirmed by performing this test?

A. Anterior cruciate ligament
B. Lateral collateral ligament
C. Medial collateral ligament
D. Medial meniscus
E. Posterior cruciate ligament

E

78. A 29-year-old man is brought to the physician for removal of a cast from his left leg. He had sustained a fracture of the left lower extremity 6 weeks prior which was immobilized in a cast that extended from just below the knee to the foot. At the time of injury, there was severe pain but normal strength in the extremity. When the cast was removed, physical examination showed a pronounced left foot drop with paresthesia and sensory loss over the dorsum of the left foot and lateral leg. Injury to which nerve is the most likely cause?

A. Common fibular (peroneal)
B. Superficial fibular (peroneal)
C. Deep fibular (peroneal)
D. Sciatic

A

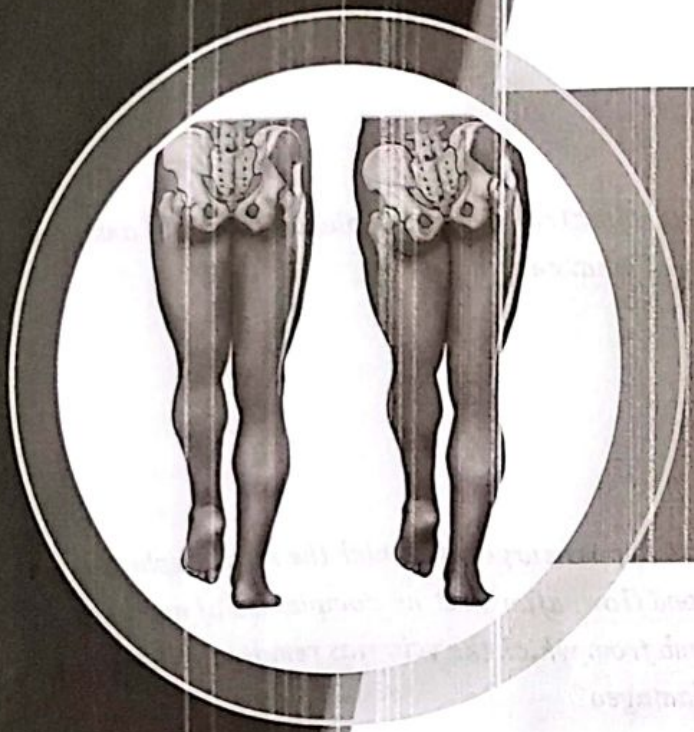
79. A 16-year-old boy presents to the emergency department with a fracture of the first and second toes of his right foot. He received an anesthetic injection in the first web space of his foot, to permit easy manipulation and correction. Which nerve was blocked by the anesthesia? A. Saphenous B. Cutaneous branch of deep fibular (peroneal) C. Cutaneous branch of superficial fibular (peroneal) D. Sural E. Common fibular (peroneal)	B
80. A lateral blow to the knee during a tackle in a football game injures a 24-year-old woman. Field examination reveals an "anterior drawer sign." An MRI demonstrates injury to several structures of the knee, including her medial meniscus. Which structure might also have been injured by the tackle? A. Medial collateral ligament B. Lateral collateral ligament C. Lateral meniscus D. Posterior cruciate ligament E. Tendon of the semitendinosus	A
81. A 37-year-old unconscious man is rushed to the emergency department after being retrieved from a motor vehicle crash. On physical examination bruising and obvious deformity is seen over his left knee joint. Radiological studies showed a posteriorly dislocated supracondylar fracture with severe compression of the popliteal artery. Which of the following arteries would ensure adequate blood supply to the leg and foot in this patient? A. Medial femoral circumflex B. Lateral femoral circumflex C. Anterior tibial artery D. Posterior tibial artery	B
82. A 60-year-old retired male marathon runner complains to his primary care physician that during his daily morning jog he experiences bouts of numbness and tingling on the medial aspect of his heel. Upon further examination the doctor discovers the patient has trouble tiptoeing and shows a positive Tinel's sign. Which of the following conditions is most characteristic of these symptoms? A. Plantar fasciitis B. Ankle inversion sprain C. Morton's neuroma D. Lateral ligament E. Tarsal tunnel syndrome	E
83. A 50-year-old diabetic man presents for a routine wellness checkup. During physical examination it is noted that he has paraesthesia in a classic glove and stocking distribution. The physician decides on a complete peripheral vascular system examination, which includes palpating the pulse of the dorsalis pedis. Where can the dorsalis pedis pulse be palpated? A. Between the tendons of extensor hallucis and extensor digitorum longus on the dorsum of the foot B. Superior to flexor hallucis longus just distal to the tarsal tunnel C. Inferolateral to the pubic symphysis and medial to the deep dorsal vein of the penis D. 2 cm anterior to the medial malleolus	A
84. A 22-year-old male professional football player is admitted to the emergency department with acute right knee pain after sustaining a kick injury to an extended leg. A radiograph and a subsequent MRI revealed that the trauma caused anterior displacement of the tibia with respect to her femur. Which of the following ligaments was most likely injured? A. Fibular (lateral) collateral B. Tibial (medial) collateral C. Patellar D. Anterior cruciate E. Posterior cruciate	D

85. A 27-year-old man has had increasing difficulty walking and complained of an area of numbness on the dorsum of his right foot. Examination reveals a hard mass at the anterolateral aspect of his right leg just below the knee. Imaging studies reveal a large bone tumor between the fibula and tibia that is compressing a nerve, accounting for his neurological symptoms. Which of the following is the most likely description of abnormalities on neurological examination? A. Decreased/absent knee jerk reflex and decreased sensation on the medial aspect of the leg B. Weakness of flexion at the knee and decreased sensation of the plantar aspect of the foot C. Weakness of eversion at the ankle and decreased sensation between the first and second toes D. Weakness of inversion, dorsiflexion at the ankle, and decreased sensation between the first and second toes	D
86. A 56-year-old diabetic man complains of repeated injury and ulcers to his right big toe. He also complains that he finds it difficult maintaining his shoes because the tips of the shoes around the toe area easily wear down. He also complains that for a while now, his first two toes "feel funny." He used to enjoy playing soccer on weekends but has found it difficult to be involved. Which of the following nerves is most likely affected? A. Superior gluteal nerve injury B. Inferior gluteal nerve injury C. Deep fibular (peroneal) nerve injury D. Superficial fibular (peroneal) nerve injury E. Common fibular (peroneal) nerve injury	C

87. After being struck from behind by a motor vehicle, a 55-year-old man presents to the hospital with a swelling of his right knee. Imaging reveals a large hematoma of the popliteal artery compressing his tibial nerve. Upon neurologic examination which movement would likely be diminished in strength? A. Dorsiflexion of the foot B. Flexion of the thigh C. Extension of the digits D. Extension of the leg E. Plantar flexion of the foot	E
88. A lateral blow to the knee during a tackle in a football game injures a 24-year-old woman. Field examination reveals an "anterior drawer sign." An MRI demonstrates injury to several structures of the knee, including her medial meniscus. Which structure might also have been injured by the tackle? A. Medial collateral ligament B. Lateral collateral ligament C. Lateral meniscus D. Posterior cruciate ligament E. Tendon of the semitendinosus	A
89. A 45-year-old man is admitted to the emergency department after a fall and subsequent leg injury. On physical examination the patient has a foot drop but eversion is unaffected. Which nerve is most likely injured? A. Tibial B. Common fibular (peroneal) C. Superficial fibular (peroneal) D. Saphenous E. Deep fibular (peroneal)	E

10. A 32-year-old man is brought to the emergency department with complaints of pain to the left ankle and knee. The patient recalls that during a football game, his left foot landed in a hole as he was running on an uneven dirt field. The ankle was externally rotated and everted while the knee twisted medially. He was unable to bear weight subsequently. During physical examination, the right ankle is swollen and there is exquisite tenderness over the right medial malleolus and the proximal lateral leg. Radiologic examination of the right lower limb reveals a displaced fracture of the neck of right fibula and a comminuted fracture of the tibial plafond and medial malleolus. Which of the following describes the most likely consequences of this injury? A. Weak "push-off" while walking and numbness over the posteromedial leg B. Weak ankle eversion and numbness over the dorsum of the foot C. High stepping gait and numbness over the dorsum and first web space of the foot D. Waddling gait and inability to feel a pin prick over the anterolateral leg E. Swing-out gait and numbness over the medial leg	C

TIPS & TRICKS



LOWER LIMB

MCQ & CASES

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Cases

1. A physician tests patellar tendon reflex. A normal response of quadriceps femoris muscle contraction is noted. This reflex confirms the integrity of what nerve

A. Tibial nerve
B. Deep fibular nerve
C. Superficial fibular nerve
D. Obturator nerve
E. Femoral nerve

2. A 70-year-old man reports an inability to climb stairs and stand up from a sitting position. Further examination also shows weakness when laterally rotating the thigh against resistance. What nerve is most likely compromised in this patient?

A. Femoral nerve
B. Obturator nerve
C. Sciatic nerve
D. Superior gluteal nerve
E. Inferior gluteal nerve

3. A physician tests the calcaneal tendon (ankle jerk) reflex. Normal plantar flexion of ankle joint is noted. This reflex confirms the integrity of what nerve?

A. Tibial nerve
B. Deep fibular nerve
C. Superficial fibular nerve
D. Medial plantar nerve
E. Lateral plantar nerve

4. A 76-year-old man recently had coronary bypass surgery in which the small saphenous vein was harvested to establish coronary blood flow. after that, he complained of numbness and paresthesia lateral side of sole in the limb from which the vein was removed.. No motor loss was noted. What nerve was most likely damaged?

A. Sural nerve
B. Saphenous nerve
C. Superficial fibular nerve
D. Deep fibular nerve
E. Lateral plantar nerve

5. Human feet are everted so that their soles lie fully on the ground during ambulation. What muscle is developmentally unique to humans, inserts into the base of the fifth metatarsal, and assists in eversion (or pronation)?

A. Extensor digitorum longus
B. Extensor digitorum brevis
C. Peroneus longus
D. Peroneus tertius
E. Flexor digiti minimi brevis

6. ***A 25-year-old woman is brought to the emergency room in severe pain due to an ankle injury. She tells the attending physician she was wearing high-heel shoes, stepped off the curb into the street, lost her balance and landed awkwardly, causing her foot to turn extremely outward (eversion). Which of the following ligaments is most likely damaged?***

   A. *Plantar calcaneonavicular (spring) ligament*
   B. *Calcaneofibular ligament*
   C. *Deltoid ligament*
   D. *Anterior talofibular ligament*
   E. *Plantar calcaneocuboid (long plantar) ligament*

7. ***A 75-year-old female patient fell in a hospital and landed on her hip. X-ray reveals fragmentation of superolateral portion of the greater trochanter. Which of the following muscles is most likely detached in association with the fracture fragment?***

   A. *Gluteus maximus*
   B. *Gluteus medius*
   C. *Iliopsoas*
   D. *Biceps femoris*
   E. *Sartorius*

8. ***Two 11-year-old boys sneak up on their friend from behind, they shove him suddenly, which forcefully pushes his hips forward. Which of the following ligaments best resists anterior dislocation of the head of the femur?***

   A. *Iliofemoral ligament*
   B. *Pubofemoral ligament*
   C. *Ischiofemoral ligament*
   D. *Lacunar ligament*
   E. *Ligament of the head of the femur*

9. ***A 15-year-old girl is struck by a car while crossing the street. She suffers numerous pelvic injuries, including tearing of the sacrotuberous ligament. The damage to this ligament will most likely cause direct trauma to which of the following muscles?***

   A. *Gluteus maximus*
   B. *Gluteus medius*
   C. *Gluteus minimus*
   D. *Gemelli*
   E. *Obturator externus*

10. ***A 16-year-old boy feels intense pain below his right knee and collapses to the ground, unable to straighten his leg. The plain X-ray of the lateral knee reveals an avulsion fracture at the tibial tuberosity. Which of the following muscles is most likely detached?***

   A. *Gastrocnemius*
   B. *Tibialis anterior*
   C. *Adductor magnus*
   D. *Rectus femoris*
   E. *Semitendinosus*

11. When standing upright, the femur moves into the locked position by slightly hyperextending, gliding posteriorly, and medially rotating on the tibial plateaus. Which of the following muscles acts to initiate the unlocking of the knee?

A. Biceps femoris
B. Gastrocnemius
C. Popliteus
D. Sartorius
E. Plantaris

12. A soccer player injures his left knee when he twists the flexed knee. While performing a knee examination, his physician pulls the flexed knee toward her (the physician's) body. This clinical test is a check for the integrity of which of the following ligaments?

A. Tibial (medial) collateral ligament (TCL)
B. Fibular (lateral) collateral ligament (FCL)
C. Anterior cruciate ligament (ACL)
D. Posterior cruciate ligament (PCL)
E. Patellar ligament

13. A veteran infantry soldier develops painful flat feet after several years of service including hundreds of miles of marches. The pain is particularly acute on the medial aspect of his sole. Which of the following structures is most likely strained in this condition?

A. Calcaneal (Achilles) tendon
B. Plantar calcaneocuboid (long plantar) ligament
C. Extensor retinaculum
D. Tendon of the fibularis (peroneus) longus muscle
E. Plantar calcaneonavicular (spring) ligament

14. A 62-year-old man recently had coronary bypass surgery in which the great saphenous vein was harvested for reestablishing coronary blood flow. Following the procedure, he complained of loss of sensation in medial side of leg and foot in the limb from which the vein was harvested. Which of the following nerves was most likely damaged during the surgery?

A. Sural nerve
B. Obturator nerve
C. Saphenous nerve
D. Deep fibular (peroneal) nerve
E. Superficial fibular (peroneal) nerve

15. A young man suffers a dislocation of the right hip in a car accident. During recovery, he finds he has an abnormal gait in which his left hip sinks when he lifts that foot to take a step. The problem may be the result of damage to which of the following structures?

A. Right gluteus maximus and inferior gluteal nerve
B. Left gluteus maximus and superior gluteal nerve
C. Left gluteus medius and inferior gluteal nerve
D. Right gluteus medius and superior gluteal nerve
E. Right gluteus minimus and inferior gluteal nerve

16. A 72-year-old woman slips and falls on a wet floor, fracturing the neck of her right femur. Subsequent physical examination in the ER shows her right foot is laterally rotated, and the right lower extremity appears slightly shorter than the left. Which of the following muscles is mainly responsible for the rotated posture of the right limb?

A. *Semitendinosus*
B. *Adductor longus*
C. *Gluteus maximus*
D. *Rectus femoris*
E. *Gracilis*

17. A 36-year-old woman injured in an automobile accident tells the paramedics at the scene that her upper thigh hurts badly and she can barely flex her hip. A plain film of the hip joint reveals an avulsion fracture of lesser trochanter, Which of the following muscles is most likely detached?

A. *Adductor magnus*
B. *Iliopsoas*
C. *Rectus femoris*
D. *Biceps femoris*
E. *Sartorius*

18. Zizo injures his left extended knee when hit from the lateral side by Hamdi Fathi trying to tackle him. During examination, his physician applies pressure to his tibia pushing it posteriorly. This clinical test is a check for the integrity of which of the following ligaments?

A. *Tibial (medial) collateral ligament (TCL)*
B. *Fibular (lateral) collateral ligament (FCL)*
C. *Anterior cruciate ligament (ACL)*
D. *Posterior cruciate ligament (PCL)*
E. *Patellar ligament*

19. A 55-year-old woman recently had pelvic surgery during which cancerous lymph nodes were removed from the lateral wall of her pelvis. During a postoperative examination, she says she has been having painful muscle spasms in her thigh. Which of the following muscles is most likely involved?

A. *Sartorius*
B. *Biceps femoris*
C. *Tensor muscle of fascia lata*
D. *Vastus medialis*
E. *Gracilis*

20. A 6-year-old boy playing barefoot in his backyard steps on a piece of broken glass and suffers a large transverse cut on his sole, at the level of the midfoot. In the emergency room, the examining physician determines the cut is to the depth of the first layer of the plantar muscles. Which of the following structures is most likely damaged in this injury?

A. Plantar arterial arch
B. Tendons of the flexor digitorum longus muscle
C. Tendon of the fibularis (peroneus) longus muscle
D. Abductor hallucis muscle
E. Superficial fibular (peroneal) nerve

21. A man working in a junkyard trip and falls into a pile of scrap metal, suffering a deep cut immediately posterior to the lateral malleolus. Which is most likely to be injured?

A. Saphenous nerve
B. Tendon of the fibularis (peroneus) tertius
C. Tendon of the fibularis (peroneus) longus
D. Posterior tibial artery
E. Great saphenous vein

22. A physician performs some simple muscle tests on a 35-year-old male patient when he complains of weakness in his lower limbs. The patient is asked to touch his buttocks with his heel while working against resistance. What muscle group is being tested?

A. Quadriceps femoris
B. Hamstrings
C. Adductors
D. Triceps surae
E. Plantar flexors

23. 29 A patient presents with extreme pain due to arterial insufficiency in the posterior femoral compartment. This compartment of the thigh receives its blood supply mainly from the perforating arteries. An arteriogram confirms partial occlusion of the artery that gives rise to these perforating arteries. What artery is occluded in the arteriogram?

A. Femoral artery
B. Profunda femoris artery
C. Obturator artery
D. Popliteal artery
E. Medial femoral circumflex artery

24. A 25-year-old man suffers a gunshot wound to the calf that severs the posterior tibial artery at its origin. Which vessel will not receive blood flow immediately following the injury?

A. Anterior tibial artery
B. Inferior medial genicular artery
C. Dorsalis pedis artery
D. Popliteal artery
E. Fibular (peroneal) artery

25. A 65-year-old man with a history of heavy smoking visits his physician complaining of intermittent pain in his feet, accompanied by pallor and coldness of his feet. The physician suspects vascular insufficiency and takes a pulse of the dorsalis pedis artery. That pulse is best palpated at which of the following locations?

A. *Immediately anterior to the medial malleolus*
B. *Immediately anterior to the lateral malleolus*
C. *Between tendons of extensor hallucis longus and extensor digitorum longus muscles*
D. *Between tendons of extensor digitorum longus and fibularis (peroneus) tertius muscles*
E. *Immediately lateral to the tendon of the fibularis (peroneus) tertius muscle*

26. An elderly man falls on an icy sidewalk outside his home and cannot get up. He tells the attending paramedics that he has a lot of pain in his right hip. Coronal MRI reveals a nondisplaced fracture of the right femoral neck. Branches of which of the following arteries are most likely to be damaged in this injury?

A. *Femoral artery*
B. *Obturator artery*
C. *Lateral circumflex femoral artery*
D. *Medial circumflex femoral artery*
E. *Inferior gluteal artery*

27. Due to torsioning of the lower limb and merging of separate premuscle masses during development, certain adult lower limb muscles are supplied by two separate nerves. These interneural fusions are termed "hybrid muscles". Which of the following is a hybrid muscle?

A. *Adductor magnus*
B. *Gastrocnemius*
C. *Rectus femoris*
D. *Semimembranosus*
E. *Tibialis anterior*

28. A 47-year-old woman walks with difficulty into the ER and presents with pain, inflammation, and tenderness on the outside of her right foot. She reports she sprained her ankle, an inversion injury, while stepping off a sidewalk wearing 3-in. high heels. The X-ray reveals an avulsion fracture on her lateral foot (lateral side of 5th metatarsal). What muscle is most likely injured, given the site of the Fracture?

A. **Extensor digitorum longus**
B. **Peroneus brevis**
C. **Peroneus longus**
D. **Peroneus tertius**
E. **Flexor digiti minimi brevis**

29. As part of a physical examination to evaluate lower limb function, a physician places her hands on the dorsum of the patient's foot and asks the patient to dorsiflex the ankle joint against resistance, as shown. What nerve is the doctor testing?

A. Tibial nerve
B. Deep peroneal nerve
C. Superficial peroneal nerve
D. Medial plantar nerve
E. Lateral plantar nerve

30. A 35-year-old male prisoner received a right gluteal intramuscular (IM) injection during a visit to the infirmary. Following the injection, the man experienced a painful, swollen right leg. Within a month, he complained that his right leg started to shrink. Examination revealed muscle wasting with fasciculations in the L4-S1 distribution and marked weakness in dorsiflexion, inversion, and eversion at the ankle joint. He also exhibited a typical high-steppage gait indicating right foot drop. What nerve was most likely damaged during the gluteal IM injection?

A. Superior gluteal nerve
B. Common fibular nerve
C. Tibial nerve
D. Inferior gluteal nerve
E. Sciatic nerve

31. A 16-year-old boy was fishing barefoot in a muddy river when the plantar surface of his foot was cut by unseen debris. He suffers a large transverse cut, penetrating the first two layers of his plantar musculature, in the area of the first cuneiform bone. In the emergency room, his physician notes a complete inability to flex and abduct the big toe and numbness on the plantar aspect of the three medial toes. Which of these nerves is most likely damaged?

A. Medial plantar nerve
B. Lateral plantar nerve
C. Sural nerve
D. Deep fibular nerve
E. Superficial fibular nerve

32. As part of a physical examination to evaluate lower limb function, a physician asks a patient to abduct her second through fifth toes. What specific nerve is the doctor testing?

A. Sural nerve
B. Deep fibular nerve
C. Superficial fibular nerve
D. Medial plantar nerve
E. Lateral plantar nerve

33. A tall 17-year-old man is crammed into the front passenger seat of an automobile when the speeding car slides off a wet road and slams its front bumper into a road guardrail. The passenger's left shin slams against the dashboard with an impact just below the knee. He reports to the emergency room with considerable knee pain, tenderness, and a pronounced limp during walking. With the patient lying supine, his hips flexed at 45 degrees, knees flexed at 90 degrees, and feet flat on the table, the physician notes a widened space or sag, in the sulcus between the tibia and the femur. When the physician pushes the left tibia posteriorly, , a pronounced laxity is noted in the left knee when compared to the right. What structure is most likely damaged?

A. *Anterior cruciate ligament (ACL)*
B. *Posterior cruciate ligament (PCL)*
C. *Tibial (medial) collateral ligament (TCL)*
D. *Fibular (lateral) collateral ligament (FCL)*
E. *Patellar ligament*

34. An overweight woman participates in her first rugby match without proper training and conditioning. Upon catching the opening kickoff, she awkwardly twists her right knee, screams in pain, and falls to the ground. The team manager notes her patella is dislocated, residing on the lateral side of her knee. After straightening the woman's knee, the patellar dislocation is reduced (goes back into place). To prevent future dislocation of the patella, what specific muscle should be targeted during rehabilitation?

A. *Vastus intermedius*
B. *Vastus lateralis*
C. *Vastus medialis*
D. *Rectus femoris*
E. *Tibialis anterior*

35. A 32-year-old mixed martial arts fighter could not continue his fight after receiving a side leg kick to the neck of his left fibula. The fighter reported paresthesia and numbness on the entire dorsum of his left foot. During his physical examination, the patient often stumbled with his left toes dragging on the floor during the swing phase of his gait. Asymmetry in his normal foot position was also noted by the physician (see photo) as well as weakness in eversion of the foot at the ankle joint. What nerve was damaged?

A. *Tibial nerve*
B. *Deep peroneal nerve*
C. *Superficial peroneal nerve*
D. *Common peroneal nerve*
E. *Sciatic nerve*

36. Following surgery to repair a broken right tibia, a 22-year-oldd patient is placed in a short leg cast. Several hours later, she complains of extreme pain, numbness with a "pins and needles sensation," inflammation, and abnormal pressure on the anterior and lateral aspects of the affected lower leg. The cast is removed, and the physician notes weakness in dorsiflexion of the foot and toes, a weak dorsalis pedis arterial pulse, and sensory loss between the first and second toes. What nerve is most likely damaged?

A. Tibial nerve
B. Deep peroneal nerve
C. Superficial peroneal nerve
D. Medial plantar nerve
E. Lateral plantar nerve

37. As part of a physical examination to evaluate lower limb function, a physician asks her patient to stand on his tiptoes What nerve is the doctor testing?

A. Tibial nerve
B. Deep peroneal nerve
C. Superficial peroneal nerve
D. Sural nerve
E. Saphenous nerve

38. Paralysis of muscles on the plantar aspect of the medial side of the foot. Which of the following nerves is most likely damaged?

A. Common peroneal
B. Tibial
C. Superficial peroneal
D. Deep peroneal
E. Sural

39. A patient with a deep knife wound in the buttock walks with a gait that is characterized by the pelvis falling toward one side at each step. Which of the following nerves is damaged?

A. Obturator nerve
B. Nerve to obturator internus
C. Superior gluteal nerve
D. Inferior gluteal nerve
E. Femoral nerve

40. A patient is unable to prevent anterior displacement of femur on tibia when knee is flexed. Which ligament is most likely damaged?

A. Anterior cruciate
B. Fibular collateral
C. Patellar
D. Posterior cruciate
E. Tibial collateral

41. A 41-year-old man felt weakness in extending knee joint. On examination, he was diagnosed with a lesion of the femoral nerve. Which of the following symptoms would be a result of this nerve damage?

A. *Paralysis of the psoas major muscle*
B. *Loss of skin sensation on the lateral side of the foot*
C. *Loss of skin sensation over the greater trochanter*
D. *Paralysis of the vastus lateralis muscle*
E. *Paralysis of the tensor fasciae latae*

42. A 47-year-old woman is unable to invert her foot after she stumbled on her driveway. Which of the following nerves are most likely injured?

A. *Superficial and deep peroneal*
B. *Deep peroneal and tibial*
C. *Superficial peroneal and tibial*
D. *Medial and lateral plantar*
E. *Obturator and tibial*

43. A 22-year-old patient is unable to "unlock" the knee joint to permit flexion of the leg. Which of the following muscles is most likely damaged?

A. *Rectus femoris*
B. *Semimembranosus*
C. *Popliteus*
D. *Gastrocnemius*
E. *Biceps femoris*

44. A patient presents with sensory loss on adjacent sides of the great and second toes and impaired dorsiflexion of the foot. These signs probably indicate damage to which of the following nerves?

A. *Superficial peroneal*
B. *Lateral plantar*
C. *Deep peroneal*
D. *Sural*
E. *Tibial*

45. A motorcyclist falls from his bike in an accident and gets a deep gash that severs the superficial peroneal nerve near its origin. Which of the following muscles is paralyzed?

A. *Peroneus longus*
B. *Extensor hallucis longus*
C. *Extensor digitorum longus*
D. *Peroneus tertius*
E. *Extensor digitorum brevis*

46. A 67-year-old patient has been given a course of antibiotics by gluteal intramuscular injections after a major abdominal surgery. To avoid damaging the sciatic nerve during an injection, the needle should be inserted into which of the following areas?

A. *Over the sacrospinous ligament*
B. *Midway between the ischial tuberosity and the lesser trochanter*
C. *Midpoint of the gemelli muscles*
D. *Upper lateral quadrant of the gluteal region*
E. *Lower medial quadrant of the gluteal region*

47. A 21-year-old man was involved in a motorcycle accident, resulting in destruction of the groove in the lower surface of the cuboid bone. Which of the following muscle tendons is most likely damaged?

A. *Flexor hallucis longus*
B. *Peroneus brevis*
C. *Peroneus longus*
D. *Tibialis anterior*
E. *Tibialis posterior*

48. A thoracic surgeon is going to collect a portion of the great saphenous vein for coronary bypass surgery. He has observed that this vein runs:

A. *Posterior to the medial malleolus*
B. *Into the popliteal vein*
C. *Anterior to the medial condyles of the tibia and femur*
D. *Superficial to the fascia lata of the thigh*
E. *Along with the femoral artery*

49. A patient slipped and fell and now is unable to extend her leg at the knee joint. Which of the following muscles was paralyzed as a result of this accident?

A. *Semitendinosus*
B. *Sartorius*
C. *Gracilis*
D. *Quadriceps femoris*
E. *Biceps femoris*

50. A patient experiences weakness in dorsiflexing and inverting the foot. Which of the following muscles is damaged?

A. *Peroneus longus*
B. *Peroneus brevis*
C. *Tibialis anterior*
D. *Extensor digitorum longus*
E. *Peroneus tertius*

51. Fracture of neck of femur results in avascular necrosis of femoral head, probably resulting from lack of blood supply from .....

A. Obturator
B. Superior gluteal
C. Inferior gluteal
D. Medial circumflex femoral
E. Lateral femoral circumflex

52. A woman experiences weakness when abducting and medially rotating the thigh after an accident. Which muscle is most likely damaged?

A. Piriformis
B. Obturator internus
C. Quadratus femoris
D. Gluteus maximus
E. Gluteus minimus

53. A patient is unable to prevent posterior displacement of the femur on the tibia. Which of the following ligaments is most likely damaged?

A. Anterior cruciate
B. Fibular collateral
C. Patellar
D. Posterior cruciate
E. Tibial collateral

54. A patient has avulsion of the skin over the anterolateral leg and ankle. Which structure is most likely destroyed with this type of injury?

A. Deep peroneal nerve
B. Extensor digitorium longus muscle tendon
C. Doralis pedis artery
D. Great saphenous vein
E. Superficial peroneal nerve

55. A knife wound penetrates the superficial vein that terminates in the popliteal vein. Bleeding occurs from which of the following vessels?

A. Posterior tibial vein
B. Anterior tibial vein
C. Peroneal vein
D. Great saphenous vein
E. Lesser saphenous vein

56. A ten-year-old boy falls from a tree house caused a fracture of head of talus. Which of the following structures is unable to function normally?

A. Transverse arch
B. Medial longitundinal arch
C. Lateral longitundinal arch
D. Tendon of the peroneus longus
E. Long plantar ligament

57. A 24-year-old woman complains of weakness when she extends her thigh and rotates it laterally. Which of the following muscles is paralyzed?

A. Obturator externus
B. Sartorius
C. Tensor fasciae latae
D. Gluteus maximus
E. Semitendinosus

58. An arteriogram reveals a blood clot in popliteal artery at its proximal end. Which of the following arteries will allow blood to reach the foot?

A. Anterior tibial
B. Posterior tibial
C. Peroneal
D. Lateral circumflex femoral
E. Superior medial genicular

59. Following surgery, an infection was found in the adductor canal, damaging the enclosed structures. Which structure remains intact?

A. Femoral artery
B. Femoral vein
C. Saphenous nerve
D. Great saphenous vein
E. Nerve to the vastus medialis

60. Ischemia to Which of the following arteries cause damage to extensor muscles of the leg?

A. Popliteal
B. Deep femoral
C. Anterior tibial
D. Posterior tibial
E. Peroneal

61. An elderly woman fell at home and fractured greater trochanter of her femur. Which muscles would continue to function normally?

A. Piriformis
B. Obturator internus
C. Gluteus medius
D. Gluteus maximus
E. Gluteus minmus

62. Radiographic examination reveals a fracture of the head and neck of the fibula. Which of the following nerves is damaged?

A. Sciatic
B. Tibial
C. Common peroneal
D. Deep peroneal
E. Superficial peroneal

63. Radiographic examination reveals a fracture of the head and neck of the fibula. After injury to the common peroneal nerve, which of the following muscles could be paralyzed?

A. Gastrocnemius
B. Popliteus
C. Extensor hallucis longus
D. Flexor digitorium longus
E. Tibialis posterior

64. Radiographic examination reveals a fracture of head and neck of the fibula. Which of the following arteries could also be damaged by this fracture?

A. Popliteal
B. Posterior tibial
C. Anterior tibial
D. Peroneal
E. Medial inferior genicular

65. A construction worker is hit on the leg with a concrete block and is subsequently unable to plantar flex and invert his foot. Which of the following muscles is most likely damaged?

A. Extensor digitorum longus
B. Tibialis anterior
C. Tibialis posterior
D. Peroneus longus
E. Peroneus brevis

66. The obturator nerve and the sciatic (tibial portion) nerve of a 15-year-old boy are transected as a result of a motorcycle accident. This injury would leads to complete paralysis of which of the following muscles?

A. Rectus femoris
B. Biceps femoris short head
C. Pectineus
D. Adductor magnus
E. Sartorius

67. A 24-year-old woman presents to her physician with weakness in flexing the hip joint and extending the knee joint. What muscle is most likely involved in this scenario?

A. Sartorius
B. Gacilis
C. Rectus femoris
D. Vastus medialis
E. Semimembranosus

68. A 17-year-old boy was stabbed resulting in transection of the obturator nerve. Which of the following muscles is completely paralyzed?

A. Pectineus
B. Adductor magnus
C. Adductor longus
D. Biceps femoris
E. Semimembranosus

69. A man fell from the roof. The lateral longitudinal arch was flattened from fracture of the keystone for the arch. Which one is damaged?

A. Calcaneus
B. Cuboid bone
C. Head of talus
D. Medial cuneiform
E. Navicular bone

70. A patient has weakness when flexing both her thigh and leg. Which of the following muscles is most likely injured?

A. Rectus femoris
B. Semitendinosus
C. Bicep femoris
D. Sartorius
E. Adductor longus

71. Difficulty in dorsiflexing the foot. Which of the following muscles is most likely damaged?

A. Tibialis posterior
B. Flexor digitorum longus
C. Tibialis anterior
D. Peroneus longus
E. Peroneus brevis

72. An injury to the leg of a golfer results in loss of ability to invert the foot. Which of the following muscles is most likely paralyzed?

A. Tibialis posterior
B. Peroneus longus
C. Peroneus brevis
D. Peroneus tertius
E. Extensor digitorum longus

73. A 25-year-old gladiator sustains a penetrating injury that severs the superficial peroneal nerve. This will most likely cause paralysis of which of the following muscles?

A. Peroneus tertius
B. Peroneus brevis
C. Flexor hallucis longus
D. Tibalis anterior
E. Tibalis posterior

74. A patient presents with a thrombosis in popliteal vein. This thrombosis most likely causes reduction of blood flow in which of the following veins?

A. Greater saphenous
B. Lesser saphenous
C. Femoral
D. Posterior tibial
E. Anterior tibial

75. The muscle responsible for flexing the leg at the knee joint and plantar flexing the foot is severely weakened. Which of the following muscles involved in both movements was most likely damaged?

A. Tibialis posterior
B. Gastrocnemius
C. Soleus
D. Peroneus longus
E. Flexor digitorium longus

76. A 28-year-old basketball player has pain and weakness when extending his thigh and flexing his leg. Which muscle involved in both movements is most likely injured?

A. Short head of biceps femoris
B. Adductor magnus
C. Semitendinosus
D. Sartorius
E. Gracilis

77. The medial meniscus is injured much more frequently than the lateral meniscus because it is

A. more mobile
B. thinner
C. Attached to the tibial collateral ligament
D. Attached to popliteus

78. Your patient has sustained an external force to the knee. Which of the following ligaments prevented posterior displacement of the tibia on the femur

A. Oblique popliteal
B. Anterior cruciate
C. Posterior cruciate
D. Lateral collateral
E. Medial collateral

79. During an abdominal hysterectomy for a cancerous uterus, the obturator nerve wa accidentally severed. This resulted in the patient losing which of the following actions

A. Extension of the leg at the knee
B. Extension of the thigh at the hip
C. Adduction of the thigh at the hip
D. Flexion of the leg at the knee
E. Dorsiflexion of the foot at the ankle

80. A 32-year-old woman is brought into the emergency department, because she is unable t evert her foot at the ankle. Which of the following nerves is injuried

A. Femoral nerve
B. Obturator nerve
C. Tibial nerve
D. Deep fibular nerve
E. Superficial fibular nerve

81. A 42-year-old diabetic woman complains of soreness of the left leg. She is moderately obes and has been recovering from surgical removal of her gallbladder (cholecystectomy, performed 2 weeks ago. On examination, she has obvious swelling in the left lower leg an some tenderness of the calf that increases when the calf is gently squeezed. There is n redness of the leg, and she is afebrile (without fever). Which are the chief deep veins of th leg that are of concern for DVT

A. Small saphenous vein
B. Great saphenous vein
C. Deep femoral vein
D. Anterior and posterior tibial veins
E. Obturator vein

82. As an orthopedic surgeon is operating in the posterior compartment of the thigh, care is taken to preserve the arterial blood supply to the muscles in that region. These are branches of which of the following arteries

A. Profunda femoris artery
B. Femoral artery
C. Superior gluteal artery
D. Inferior gluteal artery
E. Obturator artery

83. A patient has sustained lower limb trauma that has damaged the posterior tibial artery. Therefore, you will be concerned about the blood supply to which of the following

A. Posterior thigh only
B. Lateral compartment of the leg only
C. Posterior compartment of the leg only
D. Sole of the foot only
E. Posterior compartment of the leg and the sole of the foot

84. ***A soccer player injures his left knee when he twists the flexed knee while trying to avoid another player. While performing a knee examination, his physician pulls the flexed knee toward his body. This clinical test is a check for the integrity of which ligament***

A. *Tibial (medial) collateral*
B. *Fibular (lateral) collateral*
C. *Anterior cruciate*
D. *Posterior cruciate*
E. *Pateller ligament*

85. ***A 42-year-old man is admitted to the emergency department in shock and requires a saphenous cut-down to receive an infusion. To isolate the great saphenous vein in the ankle region, you would most likely determine its location***

A. *Anterior to the lateral malleolus*
B. *Anterior to the medial malleolus*
C. *Posterior to the lateral malleolus*
D. *Posterior to the medial malleolus*
E. *Deep to tendocalcenous*

86. ***A 17-year-old boy is admitted to the emergency department after being involved in a motorcycle accident. He has a compound fracture in his right leg, and a thin bone is protruding out of the lateral aspect of his leg. Which of the following bones is most likely seen protruding through the skin of this boy's leg?***

A. *Calcaneus*
B. *Femur*
C. *Fibula*
D. *Tibia*
E. *Navicular*

87. ***When administering an intramuscular gluteal injection in the superior–lateral quadrant, the healthcare provider would most likely avoid injury to which of the following nerves?***

A. *Femoral nerve*
B. *Genitofemoral nerve*
C. *Inguinal nerve*
D. *Obturator nerve*
E. *Sciatic nerve*

88. ***A 17-year-old football player complains of severe knee pain after being tackled from the side. When the knee is flexed, the tibia can be moved anteriorly. Rupture or tearing of which of the following ligaments would most likely account for this observation?***

A. *Anterior cruciate ligament*
B. *Fibular collateral ligament*
C. *Lateral meniscus*
D. *Medical meniscus*
E. *Posterior cruciate ligament*

89. **You have examined a patient and find there is weakness in the ability to flex the knee. Th indicates a problem with which of the following nerves?**

A. Femoral nerve
B. Tibial nerve
C. Common fibular nerve
D. Deep fibular nerve
E. Superficial fibular nerve

90. **A 28-year-old man sees his healthcare provider because he is having difficulty wi dorsiflexion and has a diminished dorsalis pedis pulse. These symptoms are most likel attributable to swelling in which compartment of the leg?**

A. Anterior compartment of the leg
B. Dorsal surface of the foot
C. Lateral compartment of the leg
D. Plantar surface of the foot
E. Posterior compartment of the leg

91. **A 17-year-old boy is admitted to the emergency department with a leg fracture. He fell o his motorcycle and tore the interosseous membrane and fractured the proximal fibula. O examination, the patient is found to have decreased cutaneous sensation over the dista lateral aspect of his right leg and over the dorsal aspect of his right foot, with sparing of th space between his first and second digits. The primary motor abnormality you are mos likely to observe would be decreased**

A. dorsal flexion
B. eversion of the foot
C. inversion of the foot
D. knee flexion
E. knee extension

92. **A 20-year-old woman stepped on a nail and it penetrated the plantar surface of her bar foot, injuring the lateral plantar nerve. Which of the following muscles would most likely b rendered nonfunctional?**

A. Abductor hallucis muscle
B. Dorsal interossei muscles
C. First lumbrical muscle
D. Flexor digitorum brevis muscle
E. Flexor hallucis brevis muscle

93. **A 23-year-old female postpartum day 1 with right foot weakness, numbness, and foot drop after a difficult vaginal delivery. What is the most likely diagnosis?**

A. Femoral nerve
B. Obturator nerve
C. Common peroneal portion of the sciatic nerve
D. Tibial portion of the sciatic nerve
E. Saphenous nerve

94. A man working in a junkyard trips and falls into a pile of scrap metal, suffering a deep cut immediately posterior to the lateral malleolus. Which is most likely to be injured

A. Saphenous nerve
B. Tendon of the fibularis (peroneus) tertius
C. Tendon of the fibularis (peroneus) longus
D. Posterior tibial artery
E. Great saphenous vein

95. A patient with the hip dislocation is also exhibiting weakness of extension of the thigh at the hip. This would indicate possible damage to which of the following

A. Femoral nerve
B. Obturator nerve
C. Common fibular portion of the sciatic nerve
D. Tibial portion of the sciatic nerve
E. Saphenous nerve

96. A patient presents with extreme pain due to arterial insufficiency in the posterior femoral compartment. This compartment of the thigh receives its blood supply mainly from the perforating arteries. An arteriogram confirms partial occlusion of the artery that gives rise to these perforating arteries. What artery is occluded in the arteriogram

A. Femoral artery
B. Profunda femoris artery
C. Obturator artery
D. Popliteal artery
E. Medial femoral circumflex artery

97. 30 A 25-year-old man suffers a gunshot wound to the calf that severs the posterior tibial artery at its origin. Which of the following vessels will not receive blood flow immediately following the injury

A. Anterior tibial artery
B. Inferior medial genicular artery
C. Dorsalis pedis artery
D. Popliteal artery
E. Fibular (peroneal) artery

98. A 65-year-old man with a history of heavy smoking visits his physician complaining of intermittent pain in his feet accompanied by pallor and coldness of his feet. The physician suspects vascular insufficiency and takes a pulse of the dorsalis pedis artery. That pulse is best palpated at which of the following locations?

A. Immediately anterior to the medial malleolus
B. Immediately anterior to the lateral malleolus
C. Between tendons of extensor hallucis longus and extensor digitorum longus muscles
D. Between tendons of extensor digitorum longus and fibularis (peroneus) tertius muscles
E. Immediately lateral to the tendon of the fibularis (peroneus) tertius muscle

99. As part of a physical examination to evaluate lower limb function, a physician places h hands on the dorsum of the patient's foot and asks the patient to dorsiflex the ankle joi against resistance, as shown. What nerve is the doctor testing?

A. Tibial nerve
B. Deep fibular nerve
C. Superficial fibular nerve
D. Medial plantar nerve
E. Lateral plantar nerve

ANSWERS

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

MCQ

100. Tensor fasciae lata is supplied by:

A. Anterior division of femoral nerve
B. Superior gluteal nerve
C. Nerve to vastus lateralis
D. Inferior gluteal nerve
E. Lateral femoral cutaneous nerve

101. Which statement best describes the posterior compartment of the thigh?

A. Common origin for hamstrings muscles is the ischial tuberosity.
B. Adductor magnus is a muscle of the posterior compartment.
C. All the hamstring muscles are innervated by the obturator nerve.
D. Both heads of biceps femoris take origin from the pelvis.

102. The articularis genu muscle, mark the correct statement:

A. Is the deep fibers of the vastus medialis muscle.
B. Is fixed to the upper border of the synovial membrane of knee..
C. Is supplied by the obturator nerve.
D. Arises from the upper half of the medial surface of the femur.
E. The deep fibers of the vastus lateralis muscle.

103. The head of the quadriceps muscle which acts on the hip joint:

A. Vastus lateralis muscle.
B. Rectus femoris.
C. Vastus intermedius.
D. Vastus medialis
E. Ligamentum patellae.

104. Regarding quadriceps femoris muscle, mark ONE true statement:

A. Extends the knee joint.
B. Flexes the knee joint.
C. Extends the hip joint.
D. Abducts the hip joint

105. The rectus femoris muscle:

A. Is an extensor of the hip joint
B. Is supplied by the obturator
C. Arises by two heads
D. Inserts into the midshaft of femur
E. Is a flexor of knee joint

106. The sartorius muscle:

A. Flexes the knee joint and extends the hip joint.
B. Flexes the hip and knee
C. Arises from the anterior inferior iliac spine.
D. Supplied by obturator nerve

107. One of the following statements describe the sartorius muscle:

A. It is innervated by the femoral nerve.
B. It arises from the anterior inferior iliac spine.
C. It inserts on the lateral surface of the fibula.
D. It forms the roof of the femoral triangle.
E. Its contraction produces extension, abduction and lateral rotation of hip joint.

108. Breaking of anterior superior iliac spine would damage the origin of the:

A. Biceps femoris muscle.
B. Pectineus muscle.
C. Rectus femoris muscle.
D. Tensor fasciae latae muscle.
E. Sartorius.

109. The quadriceps femoris muscle is NOT characterized by one of the following

A. Arises entirely from the femur
B. Is the main extensor of the knee joint
C. Is supplied by the femoral nerve
D. Gives fibrous expansions to reinforce capsule of knee joint
E. Is inserted via the ligamentum patelle into the upper epiphysis of the tibia

110. The femoral nerve originates from which of the following roots?

A. T12, LI, L2.
B. LI, L2, L3.
C. L2, L3, L4.
D. L3, L4, L5.
E. L2, L3.

111. The femoral nerve:

A. Comes from the dorsal divisions of the L2, 3 & 4.
B. Ends four inches below the inguinal ligament.
C. Supply all the muscles of the floor of the femoral triangle except the pectineus.
D. Passes to the thigh through the lateral compartment of the femoral sheath.

112. Femoral nerve:

A. Arises from the upper sacral nerves
B. Leaves pelvis via femoral ring
C. Supplies the main flexor muscle of the hip joint
D. Gives a cutaneous branch to leg and foot

113. One of the following is correct concerning the femoral nerve:

A. Enters the thigh lateral to the femoral sheath.
B. Supplies motor nerves to most of muscles of the posterior compartment of the thigh.
C. Lies medial to the femoral artery in the femoral triangle.
D. Has motor branches below the knee.
E. Supplies cutaneous branches to the lateral surface of the leg.

114. The femoral nerve supplies one of the following muscles:

A. Semitendinosus.
B. Iliacus.
C. Gracilis.
D. Biceps femoris.
E. Tensor fascia lata.

115. The saphenous nerve:

A. Is a branch of the obturator
B. Gives a branch to the scrotum
C. Is closely related to the great saphenous vein in the upper thigh
D. Is cutaneous to the medial side of the foot
E. Is motor to adductor magnus

116. One of the following muscles is supplied by the obturator nerve:

A. Semitendinosus.
B. Pectinous.
C. Gracilis.
D. Biceps femoris.
E. Ischeal head of Adductor magnus

117. The obturator nerve:

A. Supplies the hip joint.
B. Supplies the knee joint
C. Gives a cutaneous branch to the medial side of the thigh.
D. All the above is true.
E. Non of the above is true.

118. The obturator nerve; mark the most suitable answer:

A. Is formed of the ventral divisions of L2, 3 & 4 nerves.
B. Is completely motor.
C. Supplies all the adductor muscles.
D. A & c are true.
E. B & c are true.

119. Regarding the obturator nerve which is true:

A. Is formed by dorsal divisions of 2, 3 & 4 lumbar
B. Supplies hip joint.
C. Leaves the pelvis through greater sciatic notch.
D. Supplies the ankle joint

120. The obturator nerve is characterized by one of the following:

A. Enters the thigh by piercing the lacunar ligament
B. Is cutaneous to lateral side of thigh
C. Supplies the biceps femoris muscle
D. Gives branches to both hip and knee joints
E. Originates from the dorsal rami of L2, L3, L4 nerves

121. Damage to the obturator nerve on the lateral wall of the pelvis would affect the function of one of the following muscles:

A. Sartorius.
B. Tensor fascia lata
C. Adductor longus.
D. Iliopsoas.
E. Biceps femoris.

122. Which statement best describes the medial compartment of the thigh?

A. Adductor magnus, longus and brevis insert onto the linea aspera.
B. All muscles of the medial compartment are innervated by the obturator nerve.
C. Obturator nerve splits into anterior and posterior divisions by adductor longus.
D. All the muscles of the medial compartment insert onto the femur.

123. One of the following muscles produce abduction of hip joint:

A. Gluteus medius.
B. Pectineus.
C. Gracilis.
D. Adductor magnus.

124. Muscle pair inserted into iliotibial tract:

A. Gluteus maximus and gluteus medius
B. Gluteus medius and gluteus minimus
C. Quadratus femoris and gluteus maximus
D. Tensor fasciae latae and quadratus femoris
E. Tensor fasciae latae and gluteus maximus

125. Regarding the iliotibial tract; which is true:

A. It is attached between iliac crest & lateral condyle of the tibia.
B. It receives the insertion of gluteus medius & tensor fascia lata.
C. It belongs to the investing layer of the superficial fascia of the thigh.
D. It is connected to linea aspra by the lateral intermuscular septum.
E. It helps to support the flexed knee joint in the sitting position.

126. The most powerful extensor of the hip joint is:

A. Semimemhranosus.
B. Gluteus maximus.
C. Sacrospinalis.
D. Gluteus medius.
E. Obturator externus

127. The powerful extension of the thigh, (standing from a sitting position), is a function of:

A. Gluteus maximus muscle.
B. Psoas major muscle.
C. Iliacus muscle.
D. Obturator externus muscle.
E. Piriformis muscle.

128. In walking, the hip bone of the suspended leg is raised by which of the following muscles acting on the supported side of the body:

A. Gluteus maximus.
B. Obturator internus.
C. Gluteus medius.
D. Obturator externus.
E. Quadratus femoris.

129. One of the following statement is true for the tensor fascia lata muscle,:

A. Attached to the anterior inferior iliac spine.
B. Inserted into the iliotibial tract.
C. Innervated by the inferior gluteal nerve.
D. Lies deep to the gluteus medius muscle.
E. It produce flexion of hip

130. The iliotibial tract receives muscle attachment from:

A. Tensor fasciae lata muscle.
B. Gluteus medius muscle.
C. Iliacus.
D. Gluteus minimus.
E. Sartorius.

131. Regarding the gluteus maximus, one of the following is CORRECT

A. Flexes the hip joint:
B. Is attached to sacrospinous ligament.
C. Inserts entirely into gluteal ridge
D. Stabilizes weight bearing on extended knee joint
E. Is supplied by the superior gluteal nerve

132. Paralysis of the gluteus medius and minimus will result in the:

A. Inability to extend the thigh at the hip joint.
B. Inability to adduct the thigh at the hip joint.
C. Sinking of pelvis on the normal side when the foot is off ground.
D. Waddling gait in case of unilateral paralysis of the muscles

133. Regarding the action of the glutei muscles:

A. Gluteus maximus is medial rotator of the thigh.
B. Gluteus medius is adductor of the hip joint.
C. Gluteus minimus is flexor of the hip joint.
D. Both glutei maximus and medius are extensors of the hip joint.
E. Both glutei medius and minimus are powerful abductor of the hip joint.

134. Which of the following muscle prevent tilting of the pelvis to opposite side:

A. Gluteus maximus.
B. Obturator internus.
C. Glueus medius.
D. Obturator externus.

135. Which of the following best describes the anatomy of the gluteal muscles?

A. Gluteus maximus is supplied by the superior gluteal artery.
B. Gluteus maximus inserts into the greater trochanter.
C. Gluteus medius is a lateral rotator at the hip joint.
D. They all take origin from the ilium.
E. Gluteus minimus is innervated by the inferior gluteal nerve.

136. Flexion of the hip joint is done by which of the following muscle,:

A. Vastus medialis muscle.
B. Sartorius muscle.
C. Semimembranosus muscle.
D. Biceps femoris muscle.
E. Gluteus medius.

137. Which of the following muscles is a powerful flexor of the thigh:

A. Superior gamellus.
B. Adductor longus.
C. Gracilis.
D. Psoas major.
E. Obturator internus.

138. Flexion of the hip joint is carried out by:

A. Iliopsoas
B. Vastus intermedius
C. Semimembranosus
D. Gluteus maximus
E. Quadratus femoris

139. One of the following muscle produce Lateral rotation of the thigh:

A. Gluteus midius.
B. Rectus femoris.
C. Gluteus minimus.
D. Piriformis.

140. One of The following muscle is a lateral rotator of the thigh:

A. The iliopsoas.
B. The rectus femoris.
C. The gluteus medius.
D. The biceps femoris.
E. The obturator internus.

141. One of the Following muscles produce lateral rotation of hip joint:

A. Gluteus medius.
B. Semitendonisus.
C. Superior gemellus.
D. Rectus femoris.
E. Biceps femoris.

142. Muscles which flex hip and knee:

A. Rectus femoris
B. Semitendinosus
C. Biceps femoris.
D. Sartorius

143. The sciatic nerve supply one of the following muscles:

A. Biceps femoris
B. Sartorius
C. Rectus femoris
D. Gluteus maximus
E. Adductor magnus

144. Which of the following muscles, is supplied by The sciatic nerve :

A. Obturator externus.
B. Adductor magnus.
C. Obturator internus.
D. Quadratus femoris.
E. Semitendnosus.

145. The sciatic nerve:

A. Is formed entirely by sacral spinal nerves
B. Its two components pass through greater and lesser sciatic foramina respectively
C. Passes midway between the greater trochanter and the ischial tuberosity
D. Rests on adductor longus

146. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants?

A. Upper outer quadrant.
B. Lower outer quadrant.
C. Upper inner quadrant.
D. Lower inner quadrant.

147. One of Following statements regarding hamstring muscles (Posterior compartment of thigh) is true:

A. All are supplied by femoral nerve.
B. They can extends the knee.
C. They extend the hip.
D. Biceps femoris produces medial rotation of knee.

148. Regarding the hamstring muscles one of the following is CORRECT

A. Arise from ischeal tuberosity
B. Insert into linea aspera
C. Are innervated entirely by the femoral nerve
D. Flex the hip joint

149. Tibialis anterior:

A. Is supplied by the tibial nerve
B. Inserts into the second metatarsal bone
C. Is pierced by the posterior tibial artery
D. Tendon deep to the superior extensor retinaculum
E. Does not arise from the interosseous membrane

150. Regarding the adductor compartment:

A. Adductor magnus lies between anterior and posterior divisions of obturator nerve
B. Adductor longus inserts into medial supracondylar line of femur
C. Hamstring part of adductor magnus is supplied by the tibial part of the sciatic nerve
D. Medial intermuscular septum separates adductors from posterior compartment
E. Obturator externus medially rotates the hip

151. Which is the odd one out?

A. Sciatic nerve
B. Nerve to obturator internus
C. Superior gluteal nerve
D. Pudendal nerve
E. Posterior femoral cutaneous nerve

152. Regarding the hamstring compartment:

A. Cutaneous nerve supply is from the posterior circumflex femoral nerve
B. Semitendinosus lies superficial to semimembranosus
C. The oblique popliteal ligament is an expansion of biceps femoris
D. Short head of biceps arises from the lateral facet of the ischial tuberosity

153. Regarding nerve supply of the lower limb:

A. Superficial peroneal nerve supplies the muscles in anterior compartment of leg
B. The cruciate ligaments are supplied by the tibial nerve
C. The obturator nerve supplies obturator internus muscle
D. The sciatic nerve does not make contact with bone
E. Tibial part of sciatic nerve is the sole supply to hamstring muscles

154. The cutaneous nerves of thigh are derived in part form second lumbar nerve Except:

A. Ilioinguinal
B. Medial femoral cutaneous nerve
C. Obturator nerve
D. Lateral femoral cutaneous nerve
E. Genitofemoral nerve

155. The iliotibial tract:

A. Lies anterior to tensor fascia latae
B. Inserts onto the head of the fibula
C. Is the origin of 60% of gluteus maximus
D. Is a weak flexor of the knee via tensor fascia latae
E. Is attached superiorly to the iliac crest

156. All the following are branches of the femoral nerve Except:

A. Medial femoral cutaneous nerve
B. Saphenous nerve
C. Nerve to vastus medialis
D. Lateral femoral cutaneous nerve
E. Nerve to Sartorius

157. With respect to the posterior compartment of the thigh:

A. Blood supply is mainly from the femoral artery
B. The sciatic nerve lies lateral to the long head of biceps
C. The long head of biceps is supplied by the common peroneal nerve
D. The hamstrings form the apex of the popliteal fossa
E. Semimembranosus arises in common with the long head of biceps

158. The most medial structure passing under the inferior extensor retinaculum of the foot is:

A. Deep peroneal nerve
B. Tibialis anterior
C. Extensor hallucis longus
D. Anterior tibial artery
E. Peroneus brevis

159. Cutaneous nerve supply of thigh involves all but which of the following:

A. The intermediate femoral cutaneous nerve
B. The obturator nerve
C. The genital branch of the genitofemoral nerve
D. The ilioinguinal nerve
E. The posterior cutaneous nerves of the thigh

160. The inferior gluteal nerve supplies:

A. Gluteus maximus
B. Gluteus medius
C. Gluteus minimus
D. All of the above
E. None of the above

161. With respect to the ligaments around the knee joint:

A. Fibular collateral ligament blends with the capsule and is attached to lateral meniscus
B. Tibial collateral ligament blends with the capsule and is attached to medial meniscus
C. The oblique popliteal ligament is an expansion from the tendon of semitendinosus
D. The posterior cruciate ligament runs from anterior tibial plateau to the posteromedial aspect of the lateral femoral condyle
E. The transverse ligament runs posteriorly between menisci

162. With respect to the posterior compartment of the leg, which is FALSE?

A. Plantaris arises from the lower part of the posterior surface of femur
B. The medial head of gastrocnemius is larger than the lateral
C. The small saphenous vein drains the medial side of the foot
D. Soleus muscle contains a rich plexus of small veins → the soleal pump
E. The nerve of this compartment is the tibial nerve

163. The surface markings of the sciatic nerve are from:

A. The ischial tuberosity to adductor tubercle of the medial femoral condyle
B. The posterior superior iliac spine to the apex of the popliteal fossa
C. The midpoint of a line between the ischial tuberosity and the greater trochanter to the adductor tubercle of the medial femoral condyle
D. The ischial tuberosity to the apex of the popliteal fossa
E. The midpoint of a line between ischial tuberosity and greater trochanter to apex of the popliteal fossa

164. Which of the following structures lies within the knee joint?

A. Patellar ligament
B. Tibial collateral ligament
C. Fibular collateral ligament
D. Tendon of popliteus

165. 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

166. With respect to peroneus longus:

A. It inserts into the base of the 5th metacarpal
B. It is supplied by the superficial peroneal nerve
C. It has a broad tendon that lies between the lateral malleolus and the tendon of peroneus brevis
D. It arises from the upper two thirds of the tibia
E. It is mainly supplied by L4 and L5 segments

167. The stability of the weightbearing flexed knee is maintained by:

A. Anterior cruciate ligament
B. Iliotibial tract
C. Posterior cruciate ligament
D. Popliteus and posterior cruciate ligament
E. Arcuate popliteal ligament and anterior cruciate ligament

168. Inversion of the foot is performed by which pair of muscles?

A. Peroneus longus and peroneus brevis
B. Peroneus longus and tibialis posterior
C. Tibialis anterior and tibialis posterior
D. Peroneus brevis and plantaris

169. Which of the following does NOT apply to the popliteus muscle?

A. It inserts into the fascia covering it
B. It is innervated by the tibial nerve
C. It acts to extend the knee joint
D. It attach into the lateral condyle of the femur
E. It acts to medially rotate the tibia

170. A man is unable to plantar flex his foot. The cause is damage to:

A. The superficial peroneal nerve
B. Deep peroneal nerve
C. The tibial nerve
D. Soleus
E. Gastrocnemius

171. 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

172. The psoas muscle:

A. Passes across the front of the capsule of the hip joint
B. Is a powerful lateral rotator of the femur
C. Inserts into the greater trochanter
D. Is supplied by L4 and L5 nerve roots
E. Arises from the iliac crest and sacroiliac joint

173. The femoral nerve:

A. Is formed from anterior divisions of the anterior primary rami of L2-4
B. Is formed from the same spinal segments as the obturator nerve
C. Divides after passing through the femoral triangle
D. Has no cutaneous branches other than the saphenous nerve
E. Enters the thigh in the femoral sheath

174. The peroneus longus muscle:

A. Passes superficial to the superior peroneal retinaculum
B. Inserts into the styloid process of the fifth metatarsal bone
C. Is supplied by the common peroneal nerve
D. Assists in the maintenance of the lateral longitudinal arch
E. Has no origin from the fibula

175. Regarding the hip joint all of the following statements are true EXCEPT:

A. The anterior fibres of the gluteus medius and minimus act as medial rotator
B. The gluteus maximus is the most powerful lateral rotator of the hip joint
C. Gluteus medius and minimus are supplied by the inferior gluteal nerve (L5, S1, S2)
D. The inferior gluteal nerve emerges below piriformis
E. The iliofemoral ligament limits extension at the hip joint

176. Regarding the foot, all of the following statements are true EXCEPT:

A. The tibialis posterior muscle inverts the forefoot
B. The tibialis posterior muscle plantarflex the ankle joint
C. The tibialis anterior muscle dorsiflex the ankle and inverts the foot
D. All interossei muscles are supplied by the lateral plantar nerve
E. Calcaneal branches of deep peroneal nerve supply the skin of the heel

177. The obturator nerve supply:

A. Adductor magnus
B. Obturator internus
C. Quadratus femoris
D. Sartorius
E. Inferior gemellus

178. Which of the following is correctly paired?

A. Adductor brevis – femoral nerve
B. Adductor longus – sciatic nerve
C. Adductor magnus – saphenous nerve
D. Adductor longus – obturator nerve
E. Adductor magnus – femoral nerve

179. In the popliteal fossa, the deepest of these structures is:

A. Popliteal vein
B. Popliteal artery
C. Tibial nerve
D. Sural nerve
E. Plantaris muscle

180. The iliotibial tract is conjoined aponeurosis of tensor fasciae lata and:

A. Gluteus minimus
B. Gluteus medius
C. Gluteus maximus
D. Camper's fascia
E. Scarpa's fascia

181. The main function of gluteus maximus is which of the following:

A. A site for injections
B. A cushion for sitting
C. A flexor of the hip
D. A lateral rotator of the hip

182. The superior gluteal nerve supplies:

A. Gluteus medius
B. Gluteus minimus
C. Tensor fascia latae
D. All of the above
E. None of the above

183. The hamstring muscles originate from:

A. Body of the ischium
B. Ramus of the pubis
C. Iliac crest
D. Ischial tuberosity
E. Symphysis pubis

184. Which of the following is found in the popliteal fossa?

A. Sciatic nerve
B. Femoral vein
C. Common peroneal nerve
D. Femoral artery
E. Saphenous nerve

185. The deep peroneal nerve supplies:

A. Skin between the first and second toes
B. Skin between the second and third toes
C. Skin on the medial side of the shin
D. Skin on the dorsolateral side of the foot
E. The great toe only

186. The obturator nerve is derived from the anterior rami of:

A. T12, L1 and L2
B. L1, L2 and L3
C. L2, L3 and L4
D. L3, L4 and S1
E. None of the above

187. Peroneus tertius:

A. Acts only to evert the foot
B. Arises from the lower anterior part of the tibia
C. Insert into the fifth metatarsal
D. Passes superficial to the extensor retinaculum
E. Is innervated by the superficial peroneal nerve

188. Features of the fibula include which of the following?

A. It is on the medial side of the tibia
B. Its medial surface is grooved for the origin of tibialis posterior
C. It does not provide origin for flexor digitorum longus
D. Its lower third is rough for the origin of soleus

189. Which of the following is true of the saphenous nerve?

A. Is predominantly from L2
B. Supplies adductor magnus
C. Pierces the deep fascia in the femoral triangle
D. Is cutaneous only
E. Terminates just below the knee

190. The chief dorsiflexor of the ankle joint:

A. Peroneus tertius
B. Tibialis anterior
C. Extensor longus hallucis
D. Extensor longus digitorum
E. None of the above

191. Iliopsoas:

A. Supplied by obturator nerve
B. Main flexor of hip
C. Synergist of quadriceps femoris
D. Main extensor of hip
E. None of the above

192. The cutaneous nerve supplying the medial aspect of the calf is:

A. Anterior femoral cutaneous
B. Sural
C. Superficial peroneal
D. Saphenous
E. Posterior femoral cutaneous

193. The nerve supply to the knee joint comes from:

A. Sciatic
B. Femoral
C. Obturator
D. All of these
E. None of these

194. The most powerful extensor of the hip is:

A. Gluteus maximus
B. Psoas major
C. Iliacus
D. Obturator externus
E. Piriformis

195. Which of the following is not an action of gracilis?

A. Adduction of thigh
B. Flexion of knee
C. Extension of thigh
D. Medial rotation of knee

196. Obturator externus:

A. Is pierced by femoral circumflex artery
B. External rotator of hip
C. Internal rotator of hip
D. Hip flexor
E. Supplied by S.I.

197. The intermediate cutaneous nerve of the thigh:

A. Arises from the sacral plexus
B. Is a branch of the obturator nerve
C. Arise from femoral nerve
D. Extends beneath the knee
E. Arises independently of the medial cutaneous nerve of the thigh

198. The lateral aspect of thigh has a cutaneous nerve supply derived from:

A. L2 and 3
B. L3 and 4
C. L5, S1 and S2
D. L4, L5 and S1
E. S1 and S2

199. Flexor longus digitorum:

A. Crosses superficial to flexor longus hallucis in sole
B. Is an evertor of the foot
C. Supplied by musculocutaneous nerve
D. Supplied by L5 nerve root

200. At the ankle, the posterior tibial nerve:

A. Has no further motor branches
B. Has no further cutaneous branches
C. Lies anterior to the artery
D. Lies anterior to flexor longus hallucis
E. None of the above

201. Common peroneal nerve:

A. Supplies the knee joint
B. Supplies semitendinosus
C. Supplies skin on sole
D. All of the above
E. None of the above

202. On the front of the ankle joint, the tendon of extensor hallucis longus:

A. Is medial to tibialis anterior
B. Is medial to deep peroneal nerve
C. Is lateral to extensor digitorum longus
D. Possesses no synovial sheath
E. Is lateral to extensor hallucis brevis

203. Iliofemoral ligament:

A. Limits hip flexion
B. Limits hip extension
C. Limits hip adduction
D. Limits hip internal rotation
E. None of the above

204. The femoral nerve:

A. Continues as a cutaneous branch which runs along lateral border of the foot
B. Supplies iliacus muscle
C. Supplies psoas muscle
D. Supplies obturator externus muscle
E. Lies within the femoral sheath

205. Rectus femoris muscle:

A. Occupies an intermediate plane in the quadriceps muscle mass
B. Arises from the anterior superior iliac spine
C. Has two heads of origin
D. Supplied by ilioinguinal nerve
E. None of the above

206. Biceps femoris muscles:

A. Has a common origin with semitendinosus from the ischial tuberosity
B. Has a short head attached to femur medial to attachment of adductor magnus
C. Is entirely innervated by common peroneal nerve
D. Is deep to the common peroneal nerve
E. Is a medial rotator of leg on the thigh when the leg is fully extended at the knee joint

207. If the common peroneal nerve is divided the following are lost:

A. Plantar flexion of toes
B. Inversion of foot
C. Dorsiflexion of foot
D. Plantar flexion of foot
E. There is no loss of cutaneous sensation

208. Flexor hallucis longus muscle:

A. Is attached to the tibia
B. Has a tendon which in the sole, is superficial to that of flexor longus digitorum
C. Is attached to the proximal phalanx of the great toe
D. None of the above

209. The flexor compartment of the thigh contains which of the following muscles?

A. Gluteus maximus
B. Adductor magnus
C. Garacilis
D. Semimembranosus
E. Rectus femoris

210. Regarding the dorsum of the foot:

A. Cutaneous innervation is primarily from the sural nerve
B. Extensor digitorum brevis gives off four tendons to the lateral four toes
C. Superficial peroneal nerve divides into superficial and deep branches below the ankle
D. The inferior extensor retinaculum joins medial and lateral malleoli
E. Dorsalis pedis artery runs to the base of the first intermetatarsal space

211. Which is supplied by the medial plantar nerve?

A. Adductor hallucis
B. Abductor digiti minimi
C. Flexor hallucis longus
D. Flexor accessories
E. First lumbrical

212. Piriformis:

A. Is a lateral rotator of the hip
B. Passes through the lesser sciatic foramen
C. Is the preferred site of intramuscular gluteal injection
D. Passes anterior to the femoral neck
E. Lies deep to the sciatic nerve

213. **Popliteus:**

A. Attaches to the medial femoral condyle
B. "locks" the knee in extension
C. Supplied by a branch of the femoral nerve
D. Lies immediately deep to the popliteal artery
E. May attach to the medial meniscus

214. The third layers of muscles of the sole of the foot include:

A. Four lumbricals and quadratus plantae
B. Plantar and dorsal interossei
C. Extensor hallucis longus and extensor digitorum longus
D. Flexor digiti minimi brevis, adductor hallucis and flexor hallucis brevis
E. Abductor hallucis, abductor digiti minimi and flexor digitorum brevis

215. Peroneus longus inserts into:

A. Medial cuneiform and first metatarsal
B. Base of 5th metatarsals
C. 4th and 5th metatarsal
D. Navicular tuberosity
E. Cuboid tuberosity

216. The transverse arch of the foot is formed by:

A. Calcaneus, talus, navicular, cuneiforms and first three metatarsals
B. Cuneiforms, cuboid, all five metatarsals
C. Calcaneus, cuboid, lateral two metatarsals
D. Calcaneus, navicular, lateral two metatarsals

217. Which one of the following muscles has a double nerve supply?

A. Rectus femoris
B. Sartorius
C. Adductor brevis
D. Adductor longus

218. Inversion and eversion of the foot take place MAINLY at the:

A. Ankle joint
B. Joints between the talus and cuboid
C. Joint between talus, calcaneus and navicular bone
D. Inferior tibiofibular joint

219. Which one of the following has a tendon that is intracapsular?

A. Plantaris
B. Popliteas
C. Rectus femoris
D. Psoas major
E. Peroneal longus

220. The deltoid ligament belongs to the:

A. Ankle joint
B. Hip joint
C. Knee joint
D. Talocalcaneonavicular joint
E. Calcaneocuboid joint

221. Regarding the femoral nerve, all of the following are true EXCEPT

A. It is formed from the anterior divisions of the anterior rami of L2/3/4
B. It supplies the muscles of the anterior compartment
C. It does not lie within the femoral sheath
D. It supplies iliacus but not psoas
E. Branches include the medial and intermediate femoral cutaneous nerves

222. Regarding the obturator nerve, all of the following are true EXCEPT

A. It is formed from the anterior divisions of the anterior rami of L2/3/4
B. Its anterior division supplies adductor longus, brevis and gracilis
C. Its posterior division supplies all of adductor magnus
D. It gives a cutaneous branch which supplies the medial thigh
E. It gives articular branches to the hip and knee joints

223. Gluteus maximus

A. Arises from the gluteal fossa of ileum between the middle and superior gluteal lines
B. Is supplied by the superior gluteal nerve
C. Extends and medially rotates the hip
D. Mostly inserts into the iliotibial tract
E. Paralysis results in a waddling gait

224. All of the following are lateral rotators of the hip EXCEPT

A. Gluteus maximus
B. Gluteus medius
C. Gamellus superior
D. Quadratus femoris
E. Piriformis

225. Ligamentous stability for the hip joint is provided chiefly by the

A. Ligamentum teres
B. Ischiofemoral ligament
C. Pubofemoral ligament
D. Iliofemoral ligament
E. Transverse ligament

226. Contents of the popliteal fossa include all of the following EXCEPT

A. Sural nerve
B. Superior medial genicular artery
C. Sural communicating nerve
D. Inferior medial genicular artery
E. Anterior tibial artery

227. Regarding the menisci of the knee

A. They are attached to the femoral condyles
B. They have a rich blood supply
C. The medial meniscus is firmly attached to the capsule of the joint
D. The medial meniscus gives origin to the meniscofemoral ligaments

228. Which of the following does not pass deep to extensor retinaculum

A. Tibialis anterior
B. Extensor hallucis longus
C. Flexor hallucis longus
D. Anterior tibial artery
E. Peroneus tertius

229. The femoral nerve

A. Has superficial branches, one of which supplies the hip joint
B. Supplies psoas major
C. Lies within the femoral sheath
D. Emerges from the medial side of psoas major
E. Is formed from the posterior divisions of the ventral rami of L2,3,4

230. The muscles supplied by the femoral nerve include all except

A. Sartorius
B. Iliacus
C. Psoas major
D. Pectineus
E. Rectus femoris

231. Concerning iliacus

A. It inserts into the greater trochanter of the femur
B. Nerve supply is femoral nerve
C. It acts to extend and laterally rotate the hip
D. It has the femoral vein as its immediate anterior relation

232. The medial compartment of thigh contains all of the following except

A. The obturator nerve
B. Obturator artery
C. Gracilis muscle
D. Obturator internus
E. Obturator externus

233. The ankle joint is

A. Dorsiflexed by tibialis posterior and peroneus tertius
B. Fixed in its own axis of rotation
C. Crossed by anterior tibial artery lateral to extensor hallucis longus tendon
D. Supported by the lateral deltoid ligamanet
E. Innervated by the sural and superficial peroneal nerves

234. Which 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

235. Concerning the innervation of the foot

A. The medial plantar nerve supplies the first 3 lumbricals
B. The skin of the first cleft is supplied by the superficial peroneal nerve
C. The plantar digital nerves supply the nail bed
D. All interossei are supplied by the medial plantar nerve
E. Medial and lateral plantar nerves are branches of common peroneal nerves

236. The lumbrical muscles of the foot

A. Pass forward on the lateral sides of the metatarsophalangeal joints
B. Arise from the tendons of flexor digitorum longus
C. Are all supplied by the lateral plantar nerve
D. Have no real function in walking or running
E. Do not insert into the extensor expansions

237. Under the extensor retinaculum of the foot the most lateral structure is

A. Sural nerve
B. Dorsalis pedis artery
C. Peroneus tertius
D. Extensor digitorum longus
E. Extensor hallucis longus

238. With regard to the cutaneous innervation of the lower limb

A. Superficial peroneal nerve supplies the first inter-digital cleft
B. Sural nerve supplies the medial malleolus
C. Deep peroneal nerve supplies the third inter-digital cleft
D. The medial plantar nerve supplies a greater area than the lateral
E. Branches of the tibial nerve supply much of the dorsum of the foot

239. All the following pass deep to superior extensor retinaculum at the ankle except

A. Extensor digitorum longus
B. Deep peroneal nerve
C. Anterior tibial artery
D. Superficial peroneal nerve
E. Peroneus tertius

240. With regard to the stability of the knee joint

A. Posterior cruciate ligament prevents the femur from slipping posteriorly on the tibia
B. The lateral collateral ligament is more prone to damage than the medial
C. The medial meniscus is more prone to damage than the lateral
D. Anterior cruciate ligament is most important when walking down stairs

241. The cruciate ligaments would be anaesthetized by injury to

A. Femoral nerve
B. Common peroneal nerve
C. Tibial nerve
D. Obturator nerve
E. None of the above

242. The great saphenous vein:

A. Joins the femoral vein above the inguinal ligament
B. Begins as upward continuation of lateral marginal vein of foot
C. Travels with the saphenous nerve along its course
D. Runs behind the medial malleolus
E. Enters the femoral vein on its anteromedial side

243. Regarding the femoral artery:

A. Adductor magnus lies between it and profunda femoris artery
B. Lies lateral to femoral nerve
C. Profunda femoris artery arises from its anterior surface
D. Profunda femoris artery arises from its posterior surface
E. The femoral vein is always on its medial side

244. Regarding the popliteal fossa:

A. the common peroneal nerve passes through the lateral part of the fossa
B. it contains no lymph nodes
C. it has a roof pierced by the tibial nerve
D. popliteal artery lies superficial to the popliteal vein throughout the fossa
E. small saphenous vein joins popliteal vein before its entry into the fossa

245. Regarding the popliteal fossa, which of the following statements is true?

A. common peroneal nerve slopes downwards lateral to the biceps tendon

B. the sural nerve is a cutaneous branch of the common peroneal nerve

C. middle genicular artery of the popliteal artery supply cruciate ligaments

D. popliteus muscle is supplied by a branch of the common peroneal nerve

E. the recurrent genicular nerve is a branch of the tibial nerve

246. In the popliteal fossa, the deepest of these structures is:

A. popliteal vein

B. popliteal artery

C. tibial nerve

D. sural nerve

E. plantaris muscle

247. Which of the following is found in the popliteal fossa?

A. sciatic nerve

B. femoral vein

C. common peroneal nerve

D. femoral artery

E. saphenous nerve

248. In the upper part of the popliteal fossa the following are found from medial to lateral:

A. popliteal artery, popliteal vein, sciatic vein

B. popliteal vein, popliteal artery, sciatic nerve

C. sciatic nerve, popliteal artery, popliteal vein

D. sciatic nerve, popliteal vein, popliteal artery

E. popliteal artery, sciatic nerve, popliteal vein

249. Contents of the popliteal fossa include all of the following EXCEPT

A. Sural nerve

B. Superior medial genicular artery

C. Sural communicating nerve

D. Inferior medial genicular artery

E. Anterior tibial artery

250. In the popliteal fossa

A. The sural nerve branches from the common peroneal nerve

B. The roof is formed by biceps femoris

C. The popliteal vein lies between the popliteal artery and tibial nerve

D. The inferomedial border is soleus

E. The politeal artery runs vertically

251. The following are branches of the femoral artery except:

A. Superficial circumflex iliac artery
B. Superficial epigastric artery
C. Superficial external pudendal artery
D. Deep external pudendal artery
E. Middle genicular artery

252. Regarding the great saphenous vein, Which is INCORRECT?

A. It is the longest vein in the body
B. It passes behind the medial malleolus
C. At knee, it lies a hand's breadth behind the medial border of the patella
D. Saphenous opening lies about 3cm below and lateral to the pubic tubercle
E. Deep external pudendal artery runs medially behind saphenous vein

253. Which of the following is not found within the femoral sheath?

A. Femoral artery
B. Femoral canal
C. Femoral hernia
D. Femoral nerve
E. Lymph node of Cloquet

254. The profunda femoris artery does not:

A. Normally supply all the thigh muscles
B. Arise from the lateral side of the femoral artery, 3-4cm distal to the inguinal ligament
C. Give off the deep external pudendal artery
D. Lie behind the profunda vein
E. Lie directly anterior to adductor brevis and magnus

255. The great saphenous vein:

A. Begins at the medial end of the dorsal venous arch
B. Passes behind the medial malleolus
C. Is accompanied by the saphenous nerve throughout its course
D. Passes under the inguinal ligament and enters the femoral vein
E. Drains medial side of the leg between the tibia and the tendocalcaneus

256. The anterior tibial artery:

A. Supplies the lateral compartment of the leg
B. Lies lateral to the deep peroneal nerve
C. Lies lateral to tibialis anterior
D. Gives the nutrient artery to the tibia

257. Regarding the femoral artery:

A. It enters the thigh directly beneath the deep inguinal ring
B. It lies lateral to the femoral nerve in the femoral sheath
C. It gives rise to profunda femoris artery from its anterior surface
D. Does not contribute to the trochanteric anastomosis
E. It gives superficial epigastric artery and the deep external pudendal artery

258. The dorsalis pedis artery:

A. Lies medial to the tendon of extensor hallucis longus
B. Lies lateral to the detail branch of the deep peroneal nerve
C. Crosses superficial to the tendon of extensor hallucis brevis
D. Terminates at the arcuate artery
E. Joins the lateral plantar artery to form the plantar arch

259. The short saphenous vein:

A. Lies anterior to the lateral malleolus
B. Is accompanied by the saphenous nerve
C. Drains into the great saphenous vein
D. Drains the lateral margin of the foot
E. Lies deep to the deep fascia of the calf

260. The popliteal artery:

A. Is superficial to the tibial nerve
B. Extends from the hiatus in adductor longus
C. Enters the popliteal fossa on lateral aspect of the femur
D. Has four genicular branches in fossa
E. Supplies the cruciate ligaments

261. The femoral vein lies ..... To the femoral artery in the femoral sheath:

A. Lateral
B. Medial
C. Anterior
D. Posterior
E. Femoral vein is not in the femoral sheath

262. The dorsalis pedis artery is:

A. Lateral to extensor hallucis longus at the ankle
B. Medial to extensor hallucis longus at the ankle
C. Medial to tibialis anterior at the ankle
D. Found perforating first metatarsal space and join the medial plantar artery
E. Lateral to the digital branch of the deep peroneal nerve

263. The superficial epigastric and deep external pudendal arteries are all branches of:

A. Profunda femoris
B. Popliteal
C. Internal iliac
D. External iliac
E. None of the above

264. Which of the following is NOT a branch of the profunda femoris artery?

A. Medial femoral circumflex
B. Lateral femoral circumflex
C. Popliteal
D. Perforating

265. The long saphenous vein:

A. Passes anterior to the inguinal ligament
B. Passes posteriorly to the medial malleolus
C. Ascends the lateral side of the leg
D. Receives tributaries from the perineum
E. Is in close relation with saphenous nerve throughout the length of its course

266. The dorsalis pedis artery is a continuation of:

A. Anterior perforating branch of posterior tibial
B. Anterior tibial
C. Popliteal
D. Femoral
E. Peroneal

267. Posterior tibial artery:

A. Arises at the upper border of popliteus
B. Has no accompanying sympathetic nerve plexus
C. Lies posterior to flexor digitorum longus under flexor retinaculum
D. Lies on peroneus brevis for part of its course
E. All of the above

268. Long saphenous vein:

A. Is deep to the deep fascia for most of its course
B. Drains the lateral side of the leg
C. Arises in the femoral triangle
D. The superficial circumflex iliac vein is a tributary

269. Which of the following is true of the great saphenous vein?

A. It passes posterior to the medial malleolus
B. It runs behind the lateral border of the tibia
C. It passes through the cribriform fascia covering the saphenous opening
D. It joins the popliteal vein from the anterolateral side
E. It has no tributaries

270. Regarding the femoral artery, all of the following are true EXCEPT

A. The artery enters the femoral triangle at the mid-inguinal point
B. Passes anterior to the profunda femoris branch
C. Supplies muscles of the adductor compartment
D. Ceases at the mid point of the popliteal fossa
E. Lies medial to the femoral nerve

271. The great saphenous vein

A. Is a continuation of the lateral marginal vein of the foot
B. Runs between the 2 heads of gastrocnemius
C. Pierces the cribriform fascia in the upper thigh
D. Can be found immediately below and lateral to the pubic tubercle
E. Does not communicate with varicosities in the superficial veins

272. The femoral artery

A. Is separated from the hip joint capsule by fat only
B. Is crossed by the femoral vein from medial to lateral as it descends
C. Is found at the mid-inguinal point
D. Gives off the medial circumflex femoral artery as its major branch

273. Dorsalis pedis artery

A. Lies medial to the tendon of extensor hallucis longus
B. Lies lateral to the digital branch of the deep peroneal nerve
C. Crosses superficial to the tendon of extensor hallucis brevis
D. Terminates as the arcuate artery
E. Joins the lateral plantar artery to form the plantar arch

274. Posterior tibial artery

A. Divides superior to the flexor retinaculum
B. Divides into the medial and lateral plantar arteries
C. Lateral plantar branch supplies the big toe
D. Divides inferior to the flexor retinaculum

275. The short saphenous vein

A. Lies anterior to the lateral malleolus
B. Is accompanied by the saphenous nerve
C. Drains into the great saphenous vein
D. Drains into popliteal vein
E. Lies deep to the deep fascia of the calf

276. One of the Following statements regarding femoral artery is true

A. It lies medial to femoral vein
B. Its uppermost part is enclosed within fascia lata
C. It enters the thigh at midpoint of inguinal ligament point
D. It lies behind of adductor brevis in the adductor canal
E. It passes through opening in adductor magnus and continues as popliteal A

277. Regarding the profunda femoris artery; tick the accepted answer

A. Arises from femoral artery about two finger breadth above inguinal ligament
B. It leaves the adductor canal by passing in adductor hiatus
C. Shares in cruciate anastomosis
D. Its perforating branches supply the gluteus maximus muscle and the hip joint
E. terminal part is the fourth perforating artery which pierces adductor longus

278. One of the following is true about the profunda femoris artery

A. Generally arises from the popliteal artery
B. Is distributed to the quadriceps muscles
C. Has 4 perforating branches
D. is easily palpable in the femoral triangle

279. **Which statement best describes the femoral artery**

A. Commences at the midpoint of the inguinal ligament
B. Gives the profunda femoris branch just below inguinal ligament
C. Commences at the mid-inguinal point
D. Becomes the popliteal artery as it leaves the femoral triangle

280. **The superficial external pudendal artery is a branch of**

A. Femoral artery
B. External iliac artery
C. Internal iliac artery
D. Aorta
E. Obturator artery

281. **The popliteal artery**

A. Ends at the level of the medial epicondyle of the femur
B. Is deeper than the popliteal vein
C. Gives no articular branches in the popliteal fossa
D. Accompanies the lateral popliteal nerve in the popliteal fossa
E. formed by union of anterior tibial & posterior tibial artery

282. **Which deformity result from Paralysis of the common peroneal nerve**

A. Ankle drop
B. Inability to invert the foot
C. Loss of sensation on the sole
D. Loss of sensation on the medial malleolus
E. loss of planter flexion of foot

283. **Femoral vessels enter popliteal fossa through hiatus of**

A. Adductor longus
B. Adductor magnus
C. Gracilis
D. Vastus medialis

284. **One of the Following statements regarding popliteal artery is correct**

A. It begins at the opening in the adductor magnus (Adductor hiatus)
B. It ends at the upper border of the popliteus muscle
C. It gives two genicular branches
D. It course through the popliteal fossa from superior to lateral angle
E. It course through the popliteal fossa from superior to medial angle

285. **The popliteal artery one of statements is true**

A. Gives four genicular branches
B. Lies superficial to popliteal vein
C. Is crossed anteriorly by the tibial nerve
D. Terminates by dividing into anterior and posterior tibial arteries
E. Ends at the upper border of popliteus muscle

286. The nerve commonly injured in fractured neck of the fibula is the

A. Sciatic nerve
B. Superficial peroneal nerve
C. Deep peroneal nerve
D. Tibial nerve
E. Common peroneal nerve

287. Effects of common peroneal nerve injury include one of the following

A. Foot drop and inversion of the foot
B. Foot drop and eversion of the foot
C. Dorsi flexion and eversion of the foot
D. Dorsi flexion and inversion of the foot
E. Loss of sensation on the medial side of the leg

288. The common peroneal nerve

A. Supplies the long head of biceps femoris
B. Forms the lateral plantar nerve
C. Passes between tibia and fibula
D. Is a branch of the sciatic nerve
E. Passes around the neck of the femur

289. Injury of the common peroneal nerve is indicated by

A. Inability to dorsiflex the ankle
B. Inability to plantarflex the ankle
C. Anaesthesia of the medial border of the foot
D. Anaesthesia of the sole
E. The foot is everted

290. As the deep peroneal nerve descends through the leg, it is joined by ..... artery

A. Popliteal
B. Sural
C. Posterior tibial
D. Middle genicular
E. Anterior tibial

291. Which one of the following muscles is supplied by the deep peroneal nerve

A. Tibialis anterior
B. Tibialis posterior
C. Flexor digitorum longus
D. Peroneus brevis
E. Peroneus longus

292. One The following facts concerning the dorsalis pedis artery is correct

A. It is a continuation of the posterior tibial artery
B. It enters the sole by passing between the two heads of second dorsal interosseous
C. It can be palpated on the dorsum of the foot
D. It joins the medial plantar artery

293. The dorsalis pedis artery terminated by

A. Joining the plantar arch
B. Forming a dorsal arterial arch
C. Dividing into medial and lateral plantar arteries
D. Supplying, the ankle joint

294. Extensor digitorum brevis is characterized by

A. Inserted into the lateral four toes
B. Supplied by the superficial peroneal nerve
C. An important support for the medial longitudinal arch of the foot
D. Crossed superficially by the tendons of extensor digitorum longus

295. One of the Following not present in the anterior compartment of the leg

A. Peroneus tertius
B. Peroneus brevis
C. Tibialis anterior
D. Extensor hallucis longus
E. Extensor digitorum longus

296. Which statement correctly describes the anterior compartment of the leg

A. All the muscles of the compartment are innervated by the deep peroneal nerve
B. The anterior tibial artery arises in the anterior compartment
C. It contains extensor digitorum brevis
D. Tibialis anterior assists in eversion of the foot

297. One of the Following structures does not pass behind the medial malleolus

A. Tibialis anterior
B. Flexor digitorum longus
C. Posterior tibial vessels
D. Posterior tibial nerve
E. Flexor hallucis longus

298. The tibialis anterior

A. Arises from the medial surface of tibia
B. Main invertor of foot
C. Passes beneath the flexor retinacula of the ankle
D. Supplied by tibial nerve
E. It everts the foot

299. Which of the following muscles would be susceptible to paralysis following a crushing injury to the lateral aspect of the head and neck of the fibula

A. Extensor digitorum longus
B. Tibialis anterior
C. Peroneus longus
D. All of the above
E. None of the above

300. The muscles supplied by the superficial peroneal nerve

A. Evert the foot
B. Invert the foot
C. Peroneus brevis and tertius
D. Dorsiflex the foot
E. Peroneus longus & tertius

301. Superficial peroneal nerve supplies

A. Peroneus tertius
B. Peroneus longus
C. Tibialis anterior
D. Flexor digitorum longus
E. Extensor digitorum longus

302. Consider the lateral compartment of the leg. Which statement is correct

A. All muscles of lateral compartment innervated by superficial peroneal nerve
B. It contains the peroneal artery
C. It contains peroneus longus, brevis and tertius
D. The peroneus longus tendon grooves the lateral malleolus
E. The muscles of the lateral compartment principally invert the foot

303. The superficial calf muscles; select the correct statement

A. Plantar flex the ankle joint
B. Invert the foot
C. Enters the foot by passing deep to the flexor retinaculum
D. Are five in number
E. supplied by lateral popliteal nerve

304. One of the following structures pass deep to the extensor retinaculum

A. Tibialis posterior tendon
B. Gastrocnemius tendon
C. Flexor hallucis longus tendon
D. Posterior tibial vessels
E. Extensor digitorum longus

305. One of the following statements is true for flexor hallucis longus muscle

A. An important factor in maintaining the transverse arch of the foot
B. Lies deep to the extensor retinaculum
C. Extension of the ankle joint
D. Supplied by tibial nerve in popliteal fossa
E. Supplied by tibial nerve in leg

306. One of these structures is located in the anterior compartment of the leg

A. Posterior tibial artery
B. Soleus
C. Extensor digitorum longus
D. Tibial nerve

307. Ligation of the anterior tibial artery would affect which of this arteries

A. Dorsalis pedis artery
B. Lateral plantar artery
C. Planter arch
D. Peroneal artery

308. The peroneal artery is a branch of which artery

A. Anterior tibial artery
B. Popliteal artery
C. Posterior tibial artery
D. Arculate artery
E. Lateral planter artery

309. Regarding clinical findings of posterior tibial nerve injury One is correct

A. There is loss of planter flexion of the ankle
B. There is loss of sensations of the dorsum of the foot
C. Muscles of lateral compartment of the leg are paralyzed
D. Muscles of the sole of the foot are paralyzed
E. Eversion of foot is lost

310. One of the following muscles lies in the second layer of the sole

A. Abductor hallucis brevis
B. Flexor digitorum brevis
C. Flexor digitorum accessorius
D. Abductor digiti minimi

311. One of the following muscles lies in the second layer of the sole

A. Flexor hallucis brevis
B. Lumbrical muscles
C. Flexor digiti minimi
D. Adductor hallucis

312. Damage to lateral plantar nerve would affect one of the following muscles

A. Flexor digiti minimi
B. Abductor hallucis
C. Flexor digitorum brevis
D. Flexor hallucis brevis
E. 1st lumbrical

313. The plantar arterial arch is formed by the lateral plantar artery and the

A. Plantar metatarsal artery
B. Anterior tibial artery
C. Posterior tibial artery
D. Peroneal artery
E. Dorsalis pedis artery

314. Regarding the lateral planter nerve one is true

A. Its gives digital branches to medial 3 1/2 toes
B. It arises from the tibial nerve deep to the extensor retinaculum
C. It supplies abductor hallucis muscle
D. It supplies flexor digitorum brevis muscle
E. It supplies medial two planter interossei muscles

315. Structure closest to the skin of the sole

A. Flexor digitorum brevis
B. Quadratus plantae
C. Plantar aponeurosis
D. Long plantar ligament
E. Short plantar ligament

316. The strongest ligament of the hip joint is

A. Ligamentum teres
B. Iliofemoral ligament
C. Pubofemoral ligament
D. The transverse acetabular ligament

317. Hyperextension of the hip joint is limited by

A. Iliofemoral ligament
B. Ischiofemoral ligament
C. Pubofemoral ligament
D. Ligament of the head of the femur
E. Shape of the acetabular fossa

318. Regarding the hip joints one of the following statements is correct

A. It is a synovial joint of ball and socket variety
B. Its flexion is performed by gluteus maximus muscle
C. Its main flexor is the quadriceps femoris muscle
D. The presence of deep acetabulum makes it unstable

319. Which ligament prevents dislocation of femur backwards at the knee joint

A. Posterior cruciate ligament
B. Anterior cruciate ligament
C. Medial collateral ligament
D. Lateral collateral ligument
E. Transverse ligament

320. One of The following statements about the knee joint is true

A. The popliteus muscle unlock the knee joint at the beginning of extension
B. The lateral meniscus is more liable to injury than the medial meniscus
C. Locking of the joint occurs at the end of flexion
D. Unlocking occur at early stage of flexion
E. It allows adduction and abduction

321. Which nerve innervates at least one muscle that acts on both hip and knee joints

A. *Ilioinguinal nerve*
B. *Femoral nerve*
C. *Saphenous nerve*
D. *Common peroneal nerve*
E. *Superficial peroneal nerve*

322. Unlocking of the knee joint to permit flexion is caused by action of

A. *Vastus medialis*
B. *Articularisgenu*
C. *Gastrocnemius*
D. *Biceps femoris*
E. *Popliteus*

323. The Muscles that does not flex leg include one of the following muscles

A. *Biceps femoris*
B. *Rectus femoris*
C. *Semitendinosus*
D. *Gracilis*
E. *Semimembranosus*

324. The structure closest to the posterior ligament of the knee joint

A. *Popliteal artery*
B. *Popliteal vein*
C. *Tibial nerve*
D. *Common peroneal nerve*
E. *Sural nerve*

325. Eversion and inversion of the foot occurs at

A. *Ankle joint*
B. *Subtalar joints*
C. *Inferior tibiofibuiar joint*
D. *First tarsometatarsal joint*
E. *tarsometatarsal joints*

326. Weak inversion of the foot would result from damage to which of the following

A. *Flexor hallucis brevis*
B. *Flexor digitorum brevis*
C. *Tibialis anterior*
D. *Peroneus longus*
E. *Extensor digitorum brevis*

327. Which of the following muscles planter flex the foot at the ankle joint

A. *Peroneus tertius*
B. *Tibialis posterior*
C. *Extensor hallucis brevis*
D. *Tibialis anterior*

328. The transverse arch of the foot is supported by

A. Tibialis posterior
B. Peroneus longus
C. The tibial collateral ligament
D. Extensor digitorum longus

329. Regarding arches of foot, one is true statements

A. The cuboid is the "keystone" in the center of the medial longitudinal arch
B. Flat foot is produced by the depression of the arches
C. The navicular is the "keystone" in the center of the lateral longitudinal arch
D. Peroneus tertius maintains transverse arch

330. Regarding veins of lower limb, one of the following statements is correct

A. The great saphenous vein passes behind the lateral malleolus
B. The small saphenous vein passes behind the medial malleoius
C. Perforating veins connect the great and small saphenous veins
D. Perforating veins have valves, which direct the blood flow from deep to superficial
E. Incompetent valves of the perforating veins produce varicosity of superficial veins

331. Regarding veins of lower limb, one of the following statements is correct

A. They are devoid of valves
B. Small saphenous vein drains into femoral vein
C. Great saphenous vein pierces cribriform fascia to enter external iliac vein
D. Dilatation and venous stagnation in superficial veins may lead to varicose

332. A tributary of the long saphenous vein

A. Short saphenous
B. Sural
C. Superficial epigastric
D. Femoral
E. Popliteal

333. Regarding great saphenous vein, following statements is true

A. It starts at lateral end of dorsal venous arch
B. It passes behind medial malleolus
C. It empties into femoral vein
D. It has not any valves
E. It runs most of its course laterally in the superficial fascia

334. Concerning short (small) saphenous vein; mark the most suitable answer

A. Pass in front of lateral malleolus
B. Descends over the back of the calf
C. Ends in the popliteal vein
D. Run with small saphenous nerve
E. Pierce cribriform fascia

335. Concerning the great (long) saphenous vein; tick the most suitable answer

A. Begins at lateral end of the dorsal venous plexus on the dorsum of the foot
B. Ascends immediately behind the lateral malleolus
C. Ascends along the lateral side of the leg to the knee
D. It receive superficial epigastric vein

336. places where the arterial pulsation in the lower limb could be felt include

A. Femoral artery just below and lateral to the pubic tubercle
B. Posterior tibial artery below and behind the lateral malleolus
C. Anterior tibial artery just below the tibial tuberosity
D. Dorsalis pedis artery on the dorsum of the foot

337. Concerning nerves of the lower limb, which is true

A. Sciatic nerve supplies gluteus maximus muscle
B. Obturator nerve supplies adductors
C. Deep peroneal nerve supplies peronei longus and brevis
D. Superficial peroneal nerve supplies tibialis anterior muscle

338. Regarding arteries of lower limb, one of the following statements is true

A. Profunda femoris artery gives four perforating branches
B. Posterior tibial artery enters the sole behind the lateral malleolus
C. Dorsalis pedis artery is continuation of posterior tibial artery
D. Plantar arch is mainly formed by the medial plantar artery

339. Tthe muscles responsible for dorsiflexion and eversion of the foot is innervated by .....

A. Tibial nerve
B. Deep peroneal (fibular) nerve
C. Common peroneal
D. Superficial peroneal

340. Structures passing through the adductor hiatus include

A. Medial popliteal nerve
B. Lateral popliteal nerve
C. Femoral vein
D. Sural nerve

341. Which statement about the arches of the foot is not correct

A. The lateral arch contains the lateral two metatarsals as bony elements
B. Flexor hallucis longus is important in maintaining stability of the lateral arch
C. Fibularis longus helps to maintain the lateral arch
D. Fibularis longus helps to maintain the transverse arch

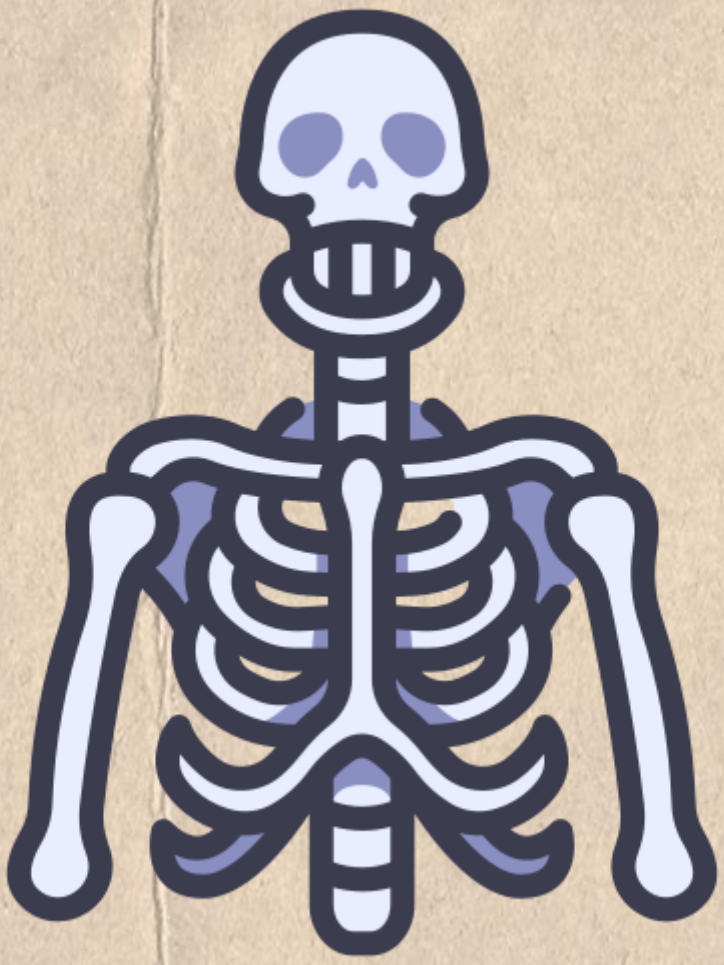
342. Concerning short (small) saphenous vein; mark the most suitable answer

A. Drain the medial side of foot
B. Run with sural nerve
C. Run with small saphenous nerve
D. Pierce cribriform fascia

ANSWERS

100.	B	142	D	184	C	226	E	268	D
101.	A	143	A	185	A	227	C	269	C
102.	B	144	E	186	C	228	C	270	D
103.	B	145	C	187	C	229	E	271	C
104.	A	146	A	188	C	230	C	272	C
105.	C	147	C	189	D	231	B	273	E
106.	B	148	A	190	B	232	D	274	B
107.	A	149	D	191	B	233	C	275	D
108.	E	150	C	192	D	234	B	276	E
109.	A	151	C	193	D	235	C	277	C
110.	C	152	B	194	A	236	B	278	C
111.	A	153	B	195	C	237	C	279	C
112.	D	154	A	196	B	238	D	280	A
113.	A	155	E	197	C	239	D	281	B
114.	B	156	D	198	A	240	C	282	A
115.	D	157	D	199	A	241	C	283	B
116.	C	158	B	200	D	242	E	284	A
117.	D	159	C	201	A	243	D	285	D
118.	A	160	A	202	B	244	A	286	E
119.	B	161	B	203	B	245	C	287	A
120.	D	162	C	204	B	246	B	288	D
121.	C	163	E	205	C	247	C	289	A
122.	A	164	D	206	A	248	A	290	E
123.	A	165	A	207	C	249	E	291	A
124.	E	166	B	208	D	250	C	292	C
125.	A	167	C	209	D	251	E	293	A
126.	B	168	C	210	E	252	B	294	D
127.	A	169	C	211	E	253	D	295	B
128.	C	170	C	212	A	254	C	296	A
129.	B	171	B	213	D	255	A	297	A
130.	A	172	A	214	D	256	C	298	B
131.	B	173	B	215	A	257	E	299	D
132.	C	174	D	216	B	258	E	300	A
133.	E	175	C	217	C	259	D	301	B
134.	C	176	E	218	C	260	E	302	A
135.	D	177	A	219	B	261	B	303	A
136.	B	178	D	220	A	262	A	304	E
137.	D	179	B	221	A	263	E	305	E
138.	A	180	C	222	C	264	C	306	C
139.	D	181	D	223	D	265	D	307	A
140.	E	182	D	224	B	266	B	308	C
141.	C	183	D	225	D	267	C	309	D

2024



LOWER LIMB

MCQ

DR:
HOSSAM SELIM

MCQ ON LOWER LIMB

1) The nerve which innervates a muscle that acts on both the hip and knee joints is:

a. Ilioinguinal nerve

b. Femoral nerve

Saphenous nerve

Common peroneal nerve

e. Superficial peroneal nerve

2) During walking, the pelvis is stabilized by which of the following muscles:

a. Gluteus maximus

b. Obturator internus

c. Gluteus medius

Obturator externus

e. Quadratus femoris

3) Which of the following muscles is the main flexor of the thigh?

a. Superior gemellus

b. Adductor longus

c. Gracilis

d. Psoas

e. Obturator internus

4) Which of the following muscles dorsiflexes the foot at the ankle joint?

a. Peroneus longus

b. Extensor digitorum brevis

c. Tibialis posterior

d. Extensor hallucis brevis

e. Tibialis anterior

5) In the femoral canal, the neck of the femoral hernia lies:

a. Below and lateral to the pubic tubercle.

b. Above and medial to the pubic tubercle.

C. At the saphenous opening.

d. In the obturator canal.

E. Lateral to the iliacus muscle.

6) The peroneal artery is a branch of the:

a. Anterior tibial artery.

b. Popliteal artery.

c. Posterior tibial artery.

d. Arcuate artery.

e. Lateral plantar artery.

7) Locking of the knee joint at the end stage of extension is caused by the action of the:

a. Vastus medialis muscle.

b. Articularis genu muscle.

Gastrocnemius muscle.

d. Biceps femoris muscle.

e. Popliteus muscle.

8) Unlocking of the knee joint to permit flexion is caused by the action of the:

a. Vastus medialis muscle.

b. Articularis genu muscle.

c. Gastrocnemius muscle.

d.Biceps femoris muscle.

e. Popliteus muscle.

9) In the adult, the chief arterial supply to the head of the femur is from the:

a. Superior circumflex iliac artery.

b. Obturator artery.

c. Branches of the medial and lateral circumflex femoral arteries.

d. Deep external pudendal artery.

e. Inferior gluteal artery.

10) The lymph drainage of the skin covering the ball of the big toe is into the:

a. Vertical group of superficial inguinal nodes.

b. Horizontal group of superficial inguinal nodes.

c. Popliteal nodes.

d. Axillary nodes.

e. Internal iliac nodes.

11) The lymph drainage of the skin covering the medial side of the knee joint is into the:

a. Popliteal nodes.

b. Internal iliac nodes.

C. Vertical group of superficial inguinal nodes.

d. Horizontal group of superficial inguinal nodes.

e. Obturator nodes.

12) The lymph drainage of the skin of the buttock (gluteal region) is into the:

a. Axillary nodes.

b. Superior gluteal nodes.

c. Vertical group of superficial inguinal nodes.

d. Horizontal group of superficial inguinal nodes.

e. Internal iliac nodes.

13) The lymph drainage of the skin of the calf (back of the leg) is into the:

a.Vertical group of superficial inguinal nodes.

b.Internal iliac nodes.

c. Horizontal group of superficial inguinal nodes.

d. Popliteal lymph nodes.

e. Obturator lymph nodes.

14) Hyperabduction of the hip joint is prevented by the:

ส.Pubofemoral ligament.

b. Iliofemoral ligament.

c. Ischiofemoral ligament.

d. Iliotibial tract.

e. Ligamentum teres.

15) Hyperextension of the hip joint is prevented by the:

a. Obturator internus tendon.

b. lliofemoral ligament.

c. Tensor fascia lata muscle.

d. Iliotibial tract. e.

e. Ligamentum teres.

16) The ..... prevents dislocation of the femur backward at the knee joint:

a. posterior cruciate ligament

b. anterior cruciate ligament

c. medial collateral ligament

d. lateral collateral ligament

e. tendon of the popliteus muscle

17) The..... prevents abduction of the tibia at the knee joint.

a. posterior cruciate ligament

b. anterior cruciate ligament

c. lateral (fibular) collateral ligament

d. lateral meniscus

e. medial (tibial) collateral ligament

18) The .....is attached to the head of the fibula (styloid process):

a. lateral meniscus

b. lateral collateral ligament

c. anterior cruciate ligament

d. posterior cruciate ligament

e. medial meniscus

19) The calcaneus participates in the formation of which arch(es) of the foot?

a. Medial longitudinal arch only

b. Medial and lateral longitudinal arches

c. Transverse arch only

d. Medial longitudinal and transverse arches

e. Lateral longitudinal and transverse arches

20) The talus participates in the formation of which arch(es) of the foot?

a. Transverse arch only

b. Lateral longitudinal arch only

c. Medial longitudinal arch only

d. Medial and lateral longitudinal arches

e. Transverse and medial longitudinal arches

21) The 3 cuneiform bones participate in the formation of which arches) of the foot?

a. Medial longitudinal arch only

b. Lateral longitudinal arch only

c. Transverse arch only

d. Medial longitudinal and transverse arches

e. Lateral longitudinal and transverse arches

22) The cuboid bone participates in the formation of which arches) of the foot?

a. Medial longitudinal arch only

b. Lateral longitudinal arch only

c. Transverse arch only

d. Medial longitudinal and transverse arches

e. Lateral longitudinal and transverse arches

23) The sesamoid bones below the head of the " metatarsal bone participate in the:

a. Lateral longitudinal arch only

b. Medial longitudinal arch only

c. Medial longitudinal and transverse arches

d. Transverse arch only

e. Lateral longitudinal and transverse arches

24) Regarding the dorsalis pedis artery, one is incorrect:

a. It is a continuation of the anterior tibial artery.

b. It enters the sole of the foot by passing through the 1st interosseous space.

c. It can be palpated between tibialis anterior & extensor hallucis longus tendons.

d. It ends by joining the lateral plantar artery (plantar arch).

e. It lies on the medial side of the deep peroneal nerve.

25) Which of the following structures does not bound the popliteal fossa?

a. The semimembranosus muscle

b. The plantaris

c. The biceps femoris muscle

d. The medial head of the gastrocnemius muscle

e. The soleus

26) Which of the following structures does not pass through the greater sciatic foramen?

a. The superior gluteal artery

b. The sciatic nerve

c. The obturator internus tendon

d. The pudendal nerve

e. The inferior gluteal vein

27) Which of the following structures does not bound the femoral ring?

a. The femoral vein

b. The lacunar ligament

c. The superior ramus of the pubis

d. The femoral artery

e. The inguinal ligament

28) One of the following doesn't pass through the subsartorial (adductor) canal:

a. The descending genicular artery.

b. The nerve to vastus lateralis

c. The femoral artery

d. The saphenous nerve

e. The femoral vein

29) Which of the following muscles is not present in the floor of the femoral triangle?

a. The pectineus

b. The adductor longus

c. The iliacus

d.The psoas

e. The adductor brevis

30) Which of the following statements is incorrect regarding the ankle joint?

a. It is strengthened by the deltoid (medial) ligament.

b. It is a synovial joint.

c. It is a hinge joint.

d. It is formed by the articulation of the talus, lower ends of the tibia and fibula.

e. It is most stable in the fully plantar-flexed position.

31) The foot is everted by the following muscle:

a. The tibialis anterior

b. The extensor hallucis longus

c. The extensor digitorum longus

d. The peroneus longus

e. The tibialis posterior

32) Which group of muscles below is supplied by the obturator nerve?

a. the chief flexors of the thigh

b. the chief extensors of the thigh

c. the chief adductors of the thigh

d. the chief abductors of the thigh

e. the chief lateral rotators of the thigh

33) Following a car accident and some healing time, a patient is not able to rise from a sitting position. This could be due to a lesion of which of the following nerves?

a. Femoral nerve

b. Obturator nerve

c. Nerve to iliopsoas

d. Superior gluteal nerve

e. Inferior gluteal nerve

34) Loss of pain sensation from the skin between the big toe and 2nd toe indicates damage of which of the following nerves?

a. Sural

b. Saphenous

c. Superficial peroneal

d. Deep peroneal

e. Lateral plantar

35) A man was hit in the leg by a bat producing a fracture of the head and neck of the fibula and damaging a nerve to the leg. Physical finding that would be found is:

a. Inability to plantar flex his foot

b. Inability to dorsiflex his foot (foot drop)

c. The foot would be everted

d. Flexion of the leg is lost

e. Extension of the leg is lost

36) A misplaced intramuscular injection into the gluteal region infiltrated the sciatic nerve causing temporary paralysis of the muscles supplied by that nerve. Which of the following muscles spare the paralysis?

a. Tibialis anterior

b. Soleus

C. Biceps femoris

d. Gracilis

37) When you stand on one foot, the opposite side of the pelvis has a tendeney to drop. Which of the following prevents this from happening?

a. Hamstring muscles

b. Piriformis

c. Iliacus

d. Gluteus maximus

e. Gluteus medius

38) The nerve that is responsible for the above is the:

a. femoral

b. obturator

c. sciatic

d. superior gluteal

e. inferior gluteal

39) The superior and inferior gluteal arteries arise from the:

a. common iliac artery

b. external iliac artery

c. internal iliac artery

d. femoral artery

e. median sacral artery

40) The femoral hernia descends:

a. in the medial compartment of the femoral sheath.

b. in the middle compartment of the femoral sheath

c. in the lateral compartment of the femoral sheath

d. lateral to the femoral vein. anterior to the inguinal ligament.

41) Paralysis of the quadriceps femoris results mainly in loss of:

a. flexion of the thigh

b. extension of the thigh

c. flexion of the leg

d. extension of the leg

e. lateral rotation of the leg

42) If a patient lost sensations over his heel, which nerve is not functioning?

a.Femoral nerve

b. Medial plantar nerve

c. Lateral plantar nerve

d. Deep peroneal nerve

e. Tibial nerve

43) Which one of the following is the principal invertor of the foot?

a. Tibialis anterior

b. Peroneus longus

c. Popliteus

d. Soleus e.

e. Gastrocnemius

44) The medial border of the femoral triangle is formed by the:

a. sartorius muscle

b. adductor longus muscle

c. gracilis muscle

d. inguinal ligament

e. pectineus muscle

45) At the ankle joint, the tibia and fibula articulate with the:

a. Calcaneus

b. Cuboid .

c. Cuneiform

d. Talus

e. Navicular

46) The abductor digiti minimi muscle is located in which layer of the sole of the foot?

a. First

b.Second

c.Third

d. Fourth

e. Fifth

47) Anterior displacement of the tibia at the knee is prevented by :

A . Tibial (medial) collateral ligament

b. Fibular (lateral) collateral ligament

c.Anterior cruciate ligament

d. Posterior cruciate ligament

e. Transverse ligament

48) The following is found superficially immediately anterior to the medial malleolus?

a. Dorsalis pedis artery

b. Arcuate artery

c. Anterior tibial artery

d. Small saphenous vein

e. Greater saphenous vein

49) The dorsalis pedis artery is usually a direct continuation of which artery?

a. Femoral

b. Popliteal

c. Peroneal

d. Anterior tibial

e. Posterior tibial

50) The safest place to administer an intramuscular injection in the gluteal region is the:

a. Upper medial quadrant

b. Lower medial quadrant

c. Upper lateral quadrant

d. Lower lateral quadrant

e. None of the above

51) The medial plantar nerve is a branch of the:

a. Femoral nerve

b. Deep peroneal nerve

c. Common peroneal nerve

d. Tibial nerve

e. Saphenous nerve

52) The ligament which prevents anterior displacement of the femur at the knee joint is:

a. Anterior cruciate ligament

b. Posterior cruciate ligament

c. Transverse ligament

d. Tibial collateral ligament

e. Popliteal ligament

53) The most powerful (the main) extensor of the thigh is the:

a. Gluteus maximus

b.Gluteus Medius

c. Psoas major

d. Obturator externus

54) If the foot is permanently dorsiflexed and everted, which nerve is NOT functioning?

a. Femoral nerve

b. Tibial nerve

c. Deep peroneal nerve

d. Common peroneal nerve

e. Superficial peroneal nerve

55) Nerve that can be compressed against the head and neck of the fibula is the:

a. Saphenous nerve

b. tibial nerve

c. Common peroneal nerve

d.Obturator nerve

e. Sural nerve

56) Which of the following is NOT a lateral rotator of the hip?

a. Piriformis

b. Gluteus medius

c. Obturator internus

d.Obturator externus

e. Quadrates femoris

57) Which muscle is NOT a flexor of the thigh?

a. Pectineus

b. Rectus femoris

c. iliopsoas

d.Sartorius

e. Adductor magnus

58) The greater sciatic foramen is bounded by which of the following ligaments?

a. Sacroiliac

b. Sacrotuberous

c. Inguinal

d. Uterosacral

e. None of the above

59) In the following list what is the main invertor of the foot?

a. Peroneus brevis

b.Tibialis posterior

c. Flexor hallucis longus

d. Flexor digitorum longus

e. Peroneus longus

60) The nerve supply of the muscles inserted into the iliotibial tract is:

a. Superior gluteal and sciatic nerves

b. Inferior gluteal and sciatic nerves

c. Superior and inferior gluteal nerves

d. Sciatic and obturator nerves Obturator and femoral nerves

61) The Sciatic nerve:

a. Is one of the branches of lumbar plexus

b. Enters the gluteal region by passing through lesser sciatic foramen

c. Lies superficial to gluteus maximus muscle

d. Divides into deep and superficial peroneal nerves

e. Supplies ischial part of adductor magnus muscle

62) One of the following muscles is NOT inserted in the greater trochanter:

a. Piriformis

b. Obturator internus

C.Obturator externus

d. Gluteus medius

e. Inferior gemellus

63) Which one of the following passes through both greater and lesser sciatic framina?

a. Nerve to quadrates femoris

b. Pudendal nerve

c. Tendon of obturator internus

d. Sciatic nerve

e. Inferior gluteal artery

64) Nerve to obturator internus supplies:

a. Superior gemellus

b. Inferior gemellus

c. Obturator externus

d. Quadratus femoris

e. Tensor fascia lata

65) The small (Short) saphenous vein terminates into:

ส.Femoral vein

b. Popliteal vein

c. Great saphenous vein

d. Dorsal venous arch

e. Vena commitants of posterior tibial artery

66) 66. The nerve supply of the muscles forming tendocaleaneus is:

a. Deep peroneal nerve

b. Anterior tibial nerve

c. Superficial peroneal nerve

d. Common peroneal nerve e.

e. Tibial nerve

67) The plantar arch is formed mainly by:

a. Dorsalis pedis artery

b. Medial plantar artery Lateral plantar artery

d. Arcuate artery

e. 1st plantar metatarsal artery

68) Pain from medial side of the dorsum of the foot is carried by the:

a. Saphenous nerve

b. Sural nerve

c. Medial plantar nerve

d. Lateral plantar nerve

e. Posterior tibial nerve

69) Pain from lateral side of the dorsum of the foot is carried by the:

a. Saphenous nerve

b. Sural nerve

c. Superficial peroneal nerve

d. Deep peroneal nerve

e. Lateral plantar nerve

70) The spring ligament connects the following 2 bones:

a. Calcaneus and cuboid

b. Calcaneus and talus

c. Calcaneus and navicular

d. Cuboid and navicular

e. Metatarsal bones

71) After a football injury, a physician noticed that the tibia could be moved anteriorly, especially when the knee was flexed. This disability should be diagnosed as a torn:

Lateral collateral ligament

b. Medial collateral ligament

c. Anterior cruciate ligament

d. Posterior cruciate ligament

e. Oblique popliteal ligament

72) The muscle which flexes the hip joint and extends the knee joint is the:

a. Quadratus femoris.

b. Rectus femoris.

c. Biceps femoris.

d. Psoas major.

e. Sartorius.

73) The muscle which extends the hip joint and flexes the knee joint is the:

a. Gluteus maximus.

b. Psoas major.

c. Rectus femoris.

d. Biceps femoris.

e. Sartorius.

74) The dermatome of the upper part of the front of the thigh (inguinal region) is:

a. L1

b. L3.

c. L4.

d. L5.

e. S1.

75) The dermatome of the big toe is:

a. LI.

b. L3.

c. L4.

d. L5.

e. S1.

76) The dermatome of the little toe is:

a. LI.

b. L3.

c. L4.

d. L5.

e. S1.

77) The dermatome of the lower part of the front of the thigh (patellar region) is:

a. L1.

b. L3.

c. L4.

d. L5.

e. S1.

78) Which one of the following joints is NOT a synovial joint?

A .Hip joint

b. Knee joint

c. Superior tibiofibular joint

d. Inferior tibiofibular joint

e. Ankle joint

ANSWERS

1	B	21	D	41	D	61	E
2	C	22	E	42	E	62	E
3	D	23	B	43	A	63	B
4	E	24	C	44	B	64	A
5	A	25	E	45	D	65	B
6	C	26	C	46	A	66	E
7	D	27	D	47	C	67	C
8	E	28	B	48	E	68	A
9	C	29	E	49	D	69	B
10	A	30	E	50	C	70	C
11	C	31	D	51	D	71	C
12	D	32	C	52	B	72	B
13	D	33	E	53	A	73	D
14	A	34	D	54	B	74	A
15	B	35	B	55	C	75	D
16	B	36	D	56	B	76	E
17	E	37	E	57	E	77	B
18	B	38	D	58	B	78	D
19	B	39	C	59	B	--	--
20	C	40	A	60	C	--	--

GOOD LUCK !!

1) The femoral nerve originates from which of the following roots?

A. T12, LI, L2.

B. LI, L2, L3.

C. L2, L3, L4.

D. L3, L4, L5.

E. L2, L3.

2) The femoral nerve:

A. Comes from the dorsal divisions of the L2, 3 & 4.

B. Ends four inches below the inguinal ligament.

C. Supply all the muscles of the floor of the femoral triangle except the pectineus.

D. Passes to the thigh through the lateral compartment of the femoral sheath.

E. supply iliacus muscle in the thigh

3) Femoral nerve:

A. Arises from the upper sacral nerves

B. Leaves pelvis via femoral ring

C. Supplies the main flexor muscle of the knee joint

D. Gives a cutaneous branch to leg and foot

E. Has no articular branch

4) The femoral nerve supplies one of the following muscles:

A. Semitendinosus.

B. Iliacus.

C. Gracilis.

D. biceps femoris.

E. Tensor fascia lata.

5) The saphenous nerve:

A. Is a branch of the obturator

B. Gives a branch to the scrotum

C. Is closely related to the great saphenous vein in the upper thigh

D. Is cutaneous to the medial side of the foot

E. Is motor to adductor magnus

6) The obturator nerve:

A. Supplies the hip joint.

B. Supplies the knee joint

C. Gives a cutaneous branch to the middle medial side of the thigh.

D. All the above is true.

E. none of the above is true.

7) The obturator nerve; mark the most suitable answer:

A. Is formed of the ventral divisions of L2, 3 & 4 nerves.

B. Is completely motor.

C. Supplies all the muscles of medial compartment.

D. a & c are true.

E. b & c are true.

8) Regarding the obturator nerve which is true:

A. Is formed by dorsal divisions of 2, 3 & 4 lumbar

B. Supplies hip joint.

C. Crosses the external iliac artery.

D. Leaves the pelvis through greater sciatic notch.

E. Supplies the ankle joint

9) The obturator nerve is characterized by one of the following:

A. Enters the thigh by piercing the lacunar ligament

B. Is cutaneous to lateral side of thigh

C. Supplies the biceps femoris muscle

D. Gives branches to both hip and knee joints

E. Originates from the dorsal rami of L2, L3, L4 nerves

10) The sciatic nerve supply one of the following muscles:

A. Biceps femoris

B. Sartorius

C. rectus femoris

D. Gluteus maximus

E. Adductor magnus

11) Which of the following muscles, is supplied by The sciatic nerve :

A. obturator externus.

B. adductor magnus.

C. obturator internus.

D. Quadratus femoris.

E. Semitendnosus.

12) The sciatic nerve:

A. Is formed entirely by sacral spinal nerves

B. Consists of two components, which pass through the greater and lesser sciatic foramina respectively

C. Passes midway between the greater trochanter and the ischial tuberosity

D. Rests on adductor longus

E. Terminates by dividing into superficial and deep peroneal nerves

13) The nerve commonly injured in fractured neck of the fibula is the:

A. Sciatic nerve.

B. Superficial peroneal nerve.

C. Deep peroneal nerve.

D. Tibial nerve.

E. Common peroneal nerve.

14) Effects of common peroneal nerve injury include one of the following:

A. Foot drop and inversion of the foot

B. Foot drop and eversion of the foot.

C. Dorsi flexion and eversion of the foot.

D. Dorsi flexion and inversion of the foot.

E. Loss of sensation on the medial side of the leg.

15) The common peroneal nerve:

A. Supplies the long head of biceps femoris

B. Forms the lateral plantar nerve

C. Passes between tibia and fibula

D. Is a branch of the sciatic nerve

E. Passes around the neck of the femur

16) Injury of the common peroneal nerve is indicated by

A. Inability to dorsiflex the ankle

B. Inability to plantarflex the ankle

C. Anaesthesia of the medial border of the foot

D. Anaesthesia of the sole

E. The foot is everted

17) Which one of the following muscles is supplied by the deep peroneal nerve:

A. Tibialis anterior.

B. Tibialis posterior.

C. Flexor digitorum longus.

D. Peroneus brevis.

E. Peroneus longus.

18) The muscles supplied by the superficial peroneal nerve; mark the most appropriate answer:

A. Evert the foot.

B. Invert the foot.

C. Plantarflex the foot.

D. Dorsiflex the foot.

E. Peroneus longus & tertious

19) Superficial peroneal nerve supplies:

A. Peroneus tertius.

B. Peroneus longus.

C. Tibialis anterior.

D. Flexor digitorum longus.

E. Extensor digitorum longus.

20) Damage to lateral plantar nerve would affect one of the following muscles:

A. Flexor digiti minimi.

B. Abductor hallucis.

C. Flexor digitorum brevis.

D. Flexor hallucis brevis.

E. 1st lumbrical.

21) Regarding the lateral planter nerve one is true:

A. Its gives digital branches to medial 3 1/2 toes.

B. It arises from the anterior tibial nerve deep to the flexor retinaculum.

C. It supplies abductor hallucis muscle.

D. It supplies flexor digitorum brevis muscle.

E. It supplies planter interossei muscles.

22) The planter nerves and vessels lie between:

A. Plantar aponeurosis and the first muscle layer

B. First and second muscle layers

C. Second and third muscle layers

D. Third and fourth muscle layers

E. Plantar aponeurosjs and skin

23)You have examined a patient and find there is weakness in the ability to flex the knee. This indicates a problem with which of the following nerves?

A. Femoral nerve

B. Tibial nerve

C. Common fibular nerve

D. Deep fibular nerve

E. Superficial fibular nerve

24) Which of the following actions would you most likely expect to be the weakest if your patient has a lesion of the tibial nerve in the popliteal fossa?

A. Dorsiflexion of the ankle

B. Extension of the hip

C. Extension of the digits

D. extension of the knee

E. Flexion of the digits

25) A patient with the hip dislocation is also exhibiting weakness of extension of the thigh at the hip. This would indicate possible damage to which of following?

A. Femoral nerve

B. Obturator nerve

C. Common fibular portion of the sciatic nerve

D. Tibial portion of the sciatic nerve

E. Saphenous nerve

26) A 23-year-old female postpartum day 1 with right foot weakness, numbness, and foot drop after a difficult vaginal delivery. What is the most likely diagnosis?

A. Femoral nerve

B. Obturator nerve

C. Common peroneal portion of the sciatic nerve

D. Tibial portion of the sciatic nerve

E. Saphenous nerve

27)A patient comes to you complaining of his inability to stand on his tiptoes. Which of the following nerve injuries is most likely to be involved?

A. Femoral nerve

B. Tibial nerve

C. Common fibular nerve

D. Deep fibular nerve

E. Superficial fibular nerve

28) The Sciatic nerve:

A. Is one of the branches of lumbar plexus.

B. Enters the gluteal region by passing through lesser sciatic foramen.

C. Lies superficial to gluteus maximus muscle.

D. Divides into deep and superficial peroneal nerves.

E. Supplies ischeal part of adductor magnus muscle.

ANSWERS

1	C	15	D
2	A	16	A
3	D	17	A
4	B	18	E
5	D	19	B
6	D	20	A
7	A	21	E
8	B	22	B
9	D	23	B
10	A	24	E
11	E	25	D
12	C	26	C
13	E	27	B
14	A	28	E

LOWER LIMB MCQ

1. In the floor of the femoral triangle one of the following muscles is seen: a- Adductor magnus. b- Iliacus. c- Vastus medialis. d- Tensor fascialata.	**B**
2. The boundaries of the femoral triangle is by the following: **a-** Adductor longus, pectineus and sartorius. **b-** Inguinal ligament, sartorius and adductor longus. c- Inguinal ligament, sartorius and adductor brevis. **d-** Inguinal ligament, sartorius and adductor magnus.	**B**
3. The cribriform fascia is pierced by: a- Great saphenous vein. b- Superior epigastric artery. c- Deep circumflex iliac artery. d- Obturator.	**A**
4. The femoral sheath: a- Its medial compartment is occupied by the femorai artery. b- Its lateral compartment is occupied by the femoral nerve. c- The intermediate compartment is occupied by the femoral vein. d- The anterior wall is formed by fascia iliaca.	**C**
5. The femoral ring is bounded medially by: a- Lacunar ligament. b- Inguinal ligament. c- Pubic ramus. d- Femoral artery.	**A**

6. In the femoral triangle one of the following branches arise from femoral artery: a- Superior epigastric. b- Obturator artery. c- Superficial circumflex iliac. d- Deep circumflex iliac.	C
7. One of the following structures is in the adductor canal: a- Femoral artery. b- Femoral lymph node. c- Profunda femoris artery. d- Great saphenous vein.	A
8. The blood supply of the head of the femur is: a- Only from the trochanteric anastomosis. b- Only from the obturator artery. c- From the gluteal, circumflex femoral and the obturator arteries. d- Mainly from the obturator artery and partially from trochanteric anastomosis.	C
9. Regarding the knee joint: a- *The tendon of popliteus muscle is intracapsular, intrasynovial.* b- The popliteus muscle lock the knee joint at the beginning of flexion. c- The lateral meniscus is more liable to injury than the medial meniscus. d- Locking of the joint occurs at the end of extension.	D
10. The popliteal artery, choose the correct answer: a- Ends at the level of the medial epicondyle of the femur. 6- Is deeper than the popliteal vein. c- Gives no articular branches in the popliteal fossa. d- Accompanies the lateral popliteal nerve in the popliteal fossa.	B

11. The following is inside the knee joint: a- Tendon of biceps femoris muscle. b- Cruciate ligaments. c- Semimembranosus bursa. d- Collateral ligaments.	B
12. The muscles supplied by the superficial peroneal nerve; mark the correct answer: a- Evert the foot. b- Invert the foot. c- Passes in front of the lateral malleolus. d- Dorsiflex the foot.	A
13. Eversion and inversion of the foot occurs at; mark the suitable answer: a- Ankle joint. b- Subtalar joints. c- Inferior tibiofibular joint. d- First tarsometatarsal joint.	B
14. The superficial calf muscles; select the correct statement: a- Plantar flex the ankle joint. b- Invert the foot. c- Enters the foot by passing deep to the flexor retinaculum. d- Are five in number.	A
15. Inversion of the foot is done by; mark the correct answer: a- Tibialis anterior and tibialis posterior muscles. b- Extensor digitorum longus. c- Peroneus longus. d- Peroneus tetieus.	A

16. The following structure attaches to the calcaneus: aa Tibialis posterior tendon. b- Gastrocnemius tendon. c- Flexor hallucis longus tendon. d- Popliteus muscle.	**B**
17. Concerning the muscles of the first layer of the sole, choose the correct statement: a- Abductor hallucis lies on the lateral side. b- Flexor digitorum brevis lies on the medial side. c- Flexor digitorum accessorius lies in this layer. d- Abductor digiti minimi lies on the lateral side.	**D**
18. Concerning the third layer of the sole, choose the correct statement: a- Flexor hallucis brevis lies on the lateral side. b- Lumbrical muscles lie in this layer. c- Flexor digiti minimi lies on the medial side. d- Adductor hallucis has two heads.	**D**
19. Concerning the flexor hallucis longus muscle, choose the correct answer: *a- Grooves the lower surface of the calcaneus.* b- An important factor in maintaining the transverse arch of the foot. c- Lies superficial to the flexor retinaculum. d- Is supplied by posterior tibial nerve.	**D**
20. The deltoid ligament; mark the correct answer: a- Lies on the lateral aspect of the ankle joint. b- Attached inferiorly to the spring ligament. c- Is rather a week ligament. d- Is quadrilateral in shape.	**B**

21. Reduced blood supply to the lateral compartment of the leg results primarily from damage to the: a- Anterior tibial artery. b- Lateral malleolar artery . c- Circumflex fibular artery. d- Peroneal artery.	**D**
22. The tibial collateral ligament (medial collateral ligament) of the knee extends from the medial epicondyle of the femur to the: a- Lateral condyle of the tibia. b- Medial condyle of the tibia. c- Articular capsule. d- Neck of the fibula.	**B**
23. The muscles of the posterior compartment of the thigh receive blood supply primarily by branches of the: a- Popliteal artery. b- Profunda femoris artery. c- Superior gluteal artery. d- Femoral artery.	**B**
24. Concerning the short (small) saphenous vein; mark the most suitable answer: a- Passes in front the lateral malleolus. b- Ascends over the back of the calf. c- Ends in the long saphenous vein. d- -connected directly with femoral vein.	**B**
25. Concerning the great (long) saphenous vein; tick the most suitable answer: a- Begins at the lateral end of the dorsal venous plexus on the dorsum of foot. b- Ascends immediately behind the lateral malleoulus. c- Ascends along the lateral side of the leg to the knee. d- Ends in the femoral vein.	**D**

26. The quadratus femoris is inserted into, choose the correct answer: a- Greater trochanter of the femur, b- Lesser trochanter of the femur. c- Middle of trochanteric line. d- Quadrate tubercle.	**D**
27. Concerning the femoral sheath, choose the correct answer: a- It encloses the proximal portions of the popliteal artery and vein. b- Posteriorly it is formed by the fascia transversalis. c- The femoral nerve is medial to the femoral sheath. d- The inguinal ligament is anterior to the femoral sheath.	**D**
28. Weak inversion of the foot would result from damage to which of the following muscles: a- Flexor hallucis brevis. b- Flexor digitorum brevis. c- Tibialis anterior. d- Peroneus longus.	**D**
29. The superficial muscles of the posterior compartment of the leg insert on which of the following bones: a- Talus. b- Navicular. c- Calcaneus. d- Tibia.	**C**
30. Which of the following muscles dorsiflexes the foot at the ankle joint: a- Peroneus longus. b- Extensor digitorum brevis. c- Tibialis posterior. d- Tibialis anterior.	**D**

31. The base of the femoral triangle is formed by the: a- Sartorius muscle. b- Adductor longus muscle. c- Inguinal ligament. d- Pubic tubercle.	C
32. The following muscle evert the foot: a- Tibialis anterior. b- Extensor hallucis longus. c- Flexsor hallucis longus. d- Peroneus tertius.	D
33. Concerning the dorsalis pedis artery, choose the correct answer: a- It is a continuation of the anterior tibial artery. b- It enters the sole of the foot by passing between the two heads of second dorsal interosseouus muscle. c- It can be palpated on the dorsum of the foot between the tendons of tibialis anterior and the extensor hallucis brevis muscles. d- It joins the medial plantar artery.	A
34. The structure contribute to the above and lateral boundary of popliteal fossa: a- Semimembranosus muscle. b- Plantaris. *c- Biceps femoris.* d- Medial head of the gastrocnemius muscle.	C
35. The following structure pass through the lesser sciatic foramen: a- Superior gluteal artery. b- Sciatic nerve. c- Obturator internus tendon. d- Pudendal nerve.	C

36. The femoral ring is bounded anteriorly by: a- Femoral vein. b- Lacunar ligament. c- Obturator artery. d- Inguinal ligament.	**D**
37. A femoral hernia descends through the femoral canal, and the neck of the hernial sac lies: a- At the saphenous opening. b- Above and medial to the pubic tubercle. c- At the femoral ring. d- In the obturator canal.	**C**
38. The following structures pass through othe subsartorial canal from upper to lower end is: a- Posterior division of the obturator nerve. b- Saphenous nerve. c- Femoral artery. d- Nerve to the vastus intermedius.	**C**
39. The floor of the femoral triangle is bounded medially by: a- *Pectineus.* b- Adductor longus. c- Iliacus. d- Psoas major.	**B**
40. The peroneal Artery is a branch of which artery: a- Anterior tibial artery. b- Popliteal artery. c- Posterior tibial artery. d- Arcutate artery.	**C**

41. Which statement is true regarding the ankle joint: a- It is strengthened laterally by the deltoid ligament. b- It is a condylar joint. c- It is formed by the articulation of talus and the distal ends of tibia and fibula. d- It is most stable in the fully planter-flexed position.	**C**
42. Unlocking of the knee joint to permit flexion Is caused by the action of which muscle: a- Vastus medialis. b- Articularis genu. c- Biceps femoris. d- Popliteus.	**D**
43. In the adult, the chief arterial supply of the head of femur is from: a- Obturator artery. b- Inferior gluteal artery. c- Deep external pudendal artery. d- Branches from medial and lateral circumflex femoral arteries.	**D**
44. Damage to the posterior tibial nerve would affect the following muscle: a- Flexor digitorum longus. b- Abductor hallucis. c- F1exor digitorum brevis. d- Flexor hallucis brevis.	**A**
45. The movements of inversion and eversion take place at: a- First tarsometatarsal joint. b- Ankle joint. c- Talo-calcaneo-navicular joint. d- Inferior tibio-fibular joint.	**C**
46. The following muscle lies in the lateral compartment of the leg: a- Peroneus tertius. b- Peroneus brevis. c- Tibialis anterior. d- Extensor haHucis longus.	**B**

47. Regarding muscle actions in lower limb, the following is correct statement: a- Quadriceps femoris flexes the knee joint. b- Abduction and adductkln of the toes by the interossei take place from middle of the second toe. c- Muscles inserted in tendo calcaneus are dorsi flexors. d- Gluteus maximus is a powerful flexor of hip joint.	**B**
48. Regarding popliteal artery: a- It begins at the opening in the adductor canal. b- It ends at the lower border of the adductor longus muscle. c- Its pulsation can be felt while the knee is extended. d- It gives five genicular branches.	**D**
49. The nerve commonly injured in fractured neck of the fibula is the: a- Sciatic nerve. b- Superficial peroneal nerve. c- Deep peroneal nerve. d- Common peroneal nerve.	**D**
50. Following structure passes deep to the extensor retinaculum: a- Tibialis anterior. b- Flexor digitorum longus. c- Posterior tibial vessels. d- Posterior tibial nerve.	**A**
51. Movements of flexion and extension of the foot occur in the following joint: a- Subtalar joint. b- Talocalcaneonavicular joint. c- Mid tarsal joint. d- Ankle joint.	**D**
52. Following muscle everts the foot: a- Tibialus anterior. b- Tibialis posterior. c- Extensor hallucis longus. d- Peroneus brevis.	**D**

53. The following statement regarding the clinical findings of superficial peroneal nerve injury is correct: a- There is loss of planter flexion of the ankle. b- There is loss of sensations of the sole of the foot. c- Muscles of lateral compartment of the leg are paralyzed. d- Muscles of the sole of the foot are paralyzed.	C
54. Effects of common peroneal nerve injury include one of the following: a- Foot drop and inversion of the foot. b- Foot drop and eversion of the foot. c- Dorsi flexion and eversion of the foot. d- Dorsi flexion and inversion of the foot.	A
55. The following is important factor in maintaining arches of the foot: a- Lateral longitudinal arch is supported by tibialis posterior. b- Abductor digiti minimi supports the medial longitudinal arch. c- Tendon of peroneus longus supports the transverse arch. d- Tendon of flexor hellucis longus supports the arch.	C
56. Regarding adductor canal, the following statement is correct: a- It ends at the adductor hiatus. b- It transmits the femoral nerve. c- Its posterior wall is formed by the adductor brevis muscle only. d- Its lateral wall is formed by the vastus lateralis.	A
57. Regarding the knee joint, the following is true: a- Its lateral meniscus is damaged more frequently than the medial. b- Its lateral meniscus is attached to the lateral collateral ligament. c- Rupture of its anterior cruciate ligament results in excessive backward movement of tibia on femur. d- Stability of the joint depends largely on tone of quadriceps femoris muscle.	D

58. Regarding the femoral sheath and femoral hernia, the following statement is true: a- Femoral sheath is a prolongation of facial lining from the abdominal walls, along the upper part of femoral vessels. b- Femoral canal is the lateral compartment of the femoral sheath. c- Femoral hernia is more common in men than in women. d- Neck of the femoral hernia lies below and medial to the pubic tubercle.	A
59. Superficial peroneal nerve supplies one of the following muscles: a- Peroneus tertius. b- Peroneus longus. c- Tibialis anterior. d- Flexor digitorum longus.	B
60. One of the following muscles is supplied by the deep peroneal nerve: a- Tibialis anterior. b- Tibialis posterior. c- F1exor digitorum longus. d- Peroneus brevis.	A
61. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	A
62. Femoral canal contains: a- Femoral artery. b- Femoral vein. c- Femoral nerve. d- Lymphatic vessels.	D

63. Regarding great saphenous vein, following statements are true: a- It starts at lateral end of dorsal venous arch. b- It passes behind medial malleolus. c- It empties into femoral vein. d- It has no valves.	C
64. Regarding the ankle joint, the following is correct: a- Sprains of the ankle are usually caused by excessive inversion of the foot. b- The medial or deltoid ligament is stronger than the lateral one. c- Its fracture dislocations is caused by forced external rotation and over eversion of the foot. d- Movements of inversion and eversion take place at the ankle joint.	C
65. Regarding the arches of the foot, the following is correct statement: a- The head of talus is the .. keystone .. in the center of the lateral longitudinal arch. b- The short and long plantar ligaments support medial longitudinal arch. c- Flat foot is produced by the depression of the arches. d- The cuboid is the center of the medial longitudinal arch.	C
66. Regarding the adductor (subsartorial) canal and its contents, mark one correct statement: a- Its anteromedial wall is formed by the vastus medialis. b- Its lateral wall is formed by the vastus lateralis. c- Its posterior wall is formed by the adductor longus and magnus. d- The femoral artery has no branches in the canal.	C
67. Regarding the fascia of the thigh, mark the correct statements: a- The fascia lata of thigh is thickened medially to form iliotibial tract. b- The saphenous opening is a gap in the fascia lata. c- The saphenous opening is 6 em below and lateral to pubic tubercle. d- Two facial septa pass from fascia lata to the femur.	B

68. Regarding the popliteal artery, select correct statement: a- Lies superficial to popliteal vein. b- *Is crossed anteriorly by the tibial nerve.* c- Terminates by dividing into anterior and posterior tibial arteries. d- Ends at the upper border of popliteus muscle.	C
69. Following are important factors in maintaining arches of the foot: a- The medial longitudinal arch is supported by long plantar ligament. b- The lateral longitudinal arch is supported by tibialis posterior. c- Tendon of tibialis anterior suspends the lateral longitudinal arch. d- Tendon of peroneus longus acts as a tie beam for the transverse arch.	D
70. Regarding the medial planter nerve, select the correct answer: a- It arises from the anterior tibial nerve deep to the flexor retinaculum. b- It supplies adductor hallucis muscle. c- It supplies flexor digitorum brevis muscle. d- It supplies medial two planter interossei muscles.	D
71. Regarding tibialis posterior muscle, indicate the correct statement: a- It arises from tibia, fibula and interosseous membrane. b- *Its tendon passes superficial to that of flexor digitorum longus.* c- It produces inversion of the foot by acting at the ankle joint. d- It helps in suspending the lateral longitudinal arch of the foot.	A
72. The bone which fracture in over doing the movement of eversion is: a- The lateral malleolus. b- The calcaneum. c- The medial malleolus. d- The inferior margin of lower end of tibia.	A

73. If a surgeon wants to take bone chips for grafting, the most suitable place in the leg and foot is: a- Medial malleolus. b- Anteromedial surface of the tibia. c- The first metarsal bone. d- The fibula.	**D**
74. Regarding the fracture of the neck of the femur, select true statement: a- Is common in young age. b- Produces necrosis of the greater trochanter. c- Is easy to heal in old age. d- The limb rotates laterally after this fracture.	**D**
75. In a "locked knee" which of the following ligaments become a- Fibular collateral. b- Tibial collateral. c- Anterior cruciate. d- Posterior cruciate.	**C**
76. The common type of football injuries in the knee joint is rupture of choose the correct answer: a- Fibular collateral ligament. b- Posterior cruciate ligament. c- Plantar aponeurosis. d- Medial meniscus.	**D**
77. The muscle which act as plantar flexors of the foot include: a- Extensor hallucis longus. b- Extensor digitorum longus. c- Tibialis anterior. d- Soleus.	**D**

LOWER LIMB CASES

1. **A 42-year-old man is admitted to the emergency department after his automobile hit a tree. He is treated for a pelvic fracture and several deep lacerations. Physical examination reveals that dorsiflexion and inversion of the left foot and extension of the big toe are very weak. Sensation from the dorsum of the foot, skin of the sole, and the lateral aspect of the foot has been lost and the patellar reflex is normal. The foot is everted and plantar flexed. Which of the following structures is most likely injured?** a. The lumbosacral trunk at the linea terminalis b. L5 and S1 spinal nerves torn at the intervertebral foramen c. Fibular (peroneal) division of the sciatic nerve at the neck of the fibula d. Sciatic nerve injury at greater sciatic foramen ("doorway to gluteal region") e. Tibial nerve in the popliteal fossa	**A**
2. **A 23-year-old man is admitted to the emergency department with a deep, bleeding stab wound of the pelvis. After the bleeding has been arrested, a magnetic resonance imaging (MRI) examination gives evidence that the right ventral primary ramus of L4 has been transected. Which of the following problems will most likely be seen during physical examination?** a. Reduction or loss of sensation from the medial aspect of the leg b. Loss of the Achilles tendon reflex c. Weakness of abduction of the thigh at the hip joint d. Inability to evert the foot	**A**
3. **A 45-year-old man is treated at the hospital after he fell from his bicycle. Radiologic examination reveals fractures both of the tibia and the fibula. On physical examination the patient has a foot drop, but normal eversion. Which of the following nerves is most likely injured?** a. Tibial b. Common fibular (peroneal) c. Superficial fibular (peroneal) d. Saphenous e. Deep fibular (peroneal)	**E**

4. **A 49-year-old male construction worker is admitted to the emergency department with a painful lump on the proximal medial aspect of his thigh. Radiologic and physical examinations reveal that the patient has a herniation of abdominal viscera beneath the inguinal ligament into the thigh. Through which of the following openings will a hernia of this type initially pass to extend from the abdomen into the thigh?** **A**

a. Femoral ring
b. Superficial inguinal ring
c. Deep inguinal ring
d. Fossa ovalis
e. Obturator canal

5. **A 37-year-old man is admitted to the hospital after an injury to his foot while playing flag football with friends on a Saturday morning. A series of radiographs demonstrates a fracture involving the talocrural (tibiotalar, ankle) joint. Which movements are the major ones to be affected by this injury?** **A**

a. Plantar flexion and dorsiflexion
b. Inversion and eversion
c. Plantar flexion, dorsiflexion, inversion, and eversion
d. Plantar flexion and inversion
e. Dorsiflexion and eversion

6. **A 45-year-old man presents at the local emergency clinic with the complaint of a painful knee and difficulty in walking. A computed tomography (CT) scan examination reveals a very large cyst in the popliteal fossa compressing the tibial nerve. Which movement will most likely be affected?** **E**

a. Dorsiflexion of the foot
b. Flexion of the thigh
c. Extension of the digits
d. Extension of the leg
e. Plantar flexion of the foot

7. **A 19-year-old football player was hit on the lateral side of his knee just as he put that foot on the ground. Unable to walk without assistance, he is taken to the hospital. An MRI examination reveals a torn medial collateral ligament. Which structure would most likely also be injured due to its attachment to this ligament?** a. Medial meniscus b. Anterior cruciate ligament c. Lateral meniscus d. Posterior cruciate ligament e. Tendon of the semitendinosus	**A**
8. **A 49-year-old man underwent a coronary bypass graft procedure using the great saphenous vein. Postoperatively, the patient complains of pain and general lack of normal sensation on the medial surface of the leg and foot on the limb from which the graft was harvested. Which nerve was most likely injured during surgery?** a. Common fibular (peroneal) b. Superficial fibular (peroneal) c. Lateral sural d. Saphenous e. Tibial	**D**
9. **A 72-year-old woman is admitted to the hospital with a painful right foot. A CT scan examination reveals a thrombotic occlusion of the femoral artery in the proximal part of the adductor canal. Which artery will most likely provide blood supply to the leg through the genicular anastomosis?** a. Medial circumflex femoral b. Descending branch of the lateral circumflex femoral c. First perforating branch of the deep femoral d. Inferior gluteal e. Descending genicular branch of femoral	**B**

10. **A 75-year-old woman is admitted to the hospital after falling in her bathroom. Radiologic examination reveals an extracapsular fracture of the femoral neck. Which artery is most likely at risk for injury?** a. Inferior gluteal b. First perforating branch of deep femoral c. Medial circumflex femoral d. Obturator e. Superior gluteal	C
11. **Upon removal of a knee-high leg cast, a 15-yearold boy complains of numbness of the dorsum of his right foot and inability to dorsiflex and evert his foot. Which is the most probable site of the nerve compression that resulted in these symptoms?** a. Popliteal fossa b. Neck of the fibula c. Lateral compartment of the leg d. Anterior compartment of the leg	B
12. **During the preparation of an evening meal a female medical student dropped a sharp, slender kitchen knife. The blade pierced the first web space of her foot, resulting in numbness along adjacent sides of the first and second toes. Which nerve was most likely injured?** a. Saphenous b. Deep fibular (peroneal) c. Superficial fibular (peroneal) d. Sural e. Common fibular (peroneal)	B
13. **The news reported that the 58-year-old ambassador received a slashing wound to the medial thigh and died from exsanguination in less than 2 minutes. What was the most likely nature of his injury?** a. The femoral artery was cut at the inguinal ligament b. A vessel or vessels were injured at the apex of the femoral triangle c. The femoral vein was transected at its junction with the saphenous vein d. The medial circumflex femoral was severed at its origin	B

14. **Following an injury suffered in a soccer match, a 32-year-old woman is examined in a seated position in the orthopedic clinic. Holding the right tibia with both hands, the clinician can press the tibia backward under the distal part of her femur. The left tibia cannot be displaced in this way. Which structure was most likely damaged in the right knee?** a. Anterior cruciate ligament b. Lateral collateral ligament c. Medial collateral ligament d. Medial meniscus e. Posterior cruciate ligament	**E**
15. **A 72-year-old woman suffered a hip dislocation when she fell down the steps to her garage. Which of the following is most significant in resisting hyperextension of the hip joint?** a. *Pubofemoral ligament* b. Ischiofemoral ligament c. Iliofemoral ligament d. Negative pressure in the acetabular fossa e. Gluteus maximus muscle	**C**
16. **A 75-year-old man is transported to the emergency department with severe pain of his right hip and thigh. A radiologic examination reveals avascular necrosis of the femoral head. Which of the following conditions most likely occurred to produce avascular necrosis in this patient?** a. Dislocation of the hip with tearing of the ligament of the head of the femur b. Intertrochanteric fracture of the femur c. Intracapsular femoral neck fracture d. Thrombosis of the obturator artery e. Comminuted fracture of the extracapsular femoral neck	**C**

17. A 58-year-old male farmer was accidentally struck with a scythe (a long, curved cutting blade) by another worker while they were cutting wheat. He was admitted to the county hospital with severe bleeding. During physical examination the doctor noted that the patient had a foot drop; sensation was present over the dorsum of the foot and the skin of the posterior calf. Which of the following nerves was injured? A. Femoral nerve B. Sciatic nerve C. Superficial fibular (peroneal) nerve D. Deep fibular (peroneal) nerve E. Common fibular (peroneal) nerve	**D**
18. A 46-year-old woman stepped on a broken wine bottle on the sidewalk and the sharp glass entered the posterior part of her foot. The patient was admitted to the hospital, and a physical examination concluded that her lateral plantar nerve had been transected (cut through). Which of the following conditions will most likely be confirmed by further physical examination? A. Loss of sensation over the plantar surface of the third toe B. Paralysis of the abductor hallucis C. Paralysis of the interossei and adductor hallucis D. Flexor hallucis brevis paralysis E. Flexor digitorum brevis paralysis	**C**
19. A 22-year-old male martial arts competitor was examined by the clinician because of pain and serious disability suffered from a kick to the side of his knee. Physical examination revealed a dark bruise just distal to the head of the fibula. Which of the following muscles will most likely be paralyzed? A. Tibialis anterior and extensor digitorum longus B. Tibialis posterior C. Soleus and gastrocnemius D. Plantaris and popliteus E. Flexor digitorum longus and flexor hallucis Longus	**A**

20. In an accid... Achilles ten...

20. **In an accident during cleanup of an old residential area of the city, the Achilles tendon of a 32-year-old worker was cut through by the blade of a brush cutter. The patient is admitted to the hospital and a laceration of the Achilles tendon is diagnosed. Which of the following bones serves as an insertion for the Achilles tendon?** a. Calcaneus b. Fibula c. Cuboid d. Talus E. Navicular	A
21. **During a football game a 21-year-old wide receiver was illegally blocked by a linebacker, who threw himself against the posterolateral aspect of the runner's left knee. As he lay on the ground, the wide receiver grasped his knee in obvious pain. Which of the following structures is frequently subject to injury from this type of force against the knee?** A. Fibular collateral ligament B. Anterior cruciate ligament C. Lateral meniscus and posterior cruciate ligament D. Fibular collateral and posterior cruciate ligament E. All the ligaments of the knee will be affected	B
22. **Lower limb angiography of an 82-year-old woman reveals a possible cause for her limb pain during her workout routines in the health spa. The artery that was occluded is one that should have been demonstrable passing between the proximal part of the space between the tibia and fibula. Which of the following arteries is most likely affected?** A. Deep femoral B. Popliteal C. Posterior tibial D. Fibular (peroneal) E. Anterior tibial	E

23. A 34-year-old male power lifter visits the outpatient clinic because he has difficulty walking. During physical examination it is observed that the patient has a problem unlocking the knee joint to permit flexion of the leg. Which of the following muscles is most likely damaged? A. Biceps femoris B. Gastrocnemius C. Popliteus D. Semimembranosus E. Rectus femoris	**C**
24. A popliteal arterial aneurysm can be very fragile, bursting with great loss of blood and the potential loss of the leg if it is not dealt with safely and effectively. In the 18th century, Dr. John Hunter (1728-1793) discovered that if a primary artery of the thigh is temporarily compressed, blood flow in the popliteal artery can be reduced long enough to treat the aneurysm in the popliteal fossa surgically, with safety. What structure is indicated in Fig. 5-3 that is related to his surgical procedure? A. Sartorius B. Femoral vein C. Femoral artery D. Gracilis E. Adductor brevis	**A**
25. A 49-year-old male worker fell from a ladder, with his weight impacting on the heels of his feet. Radiologic examination reveals comminuted calcaneal fractures. After the injury the contraction of which one of the following muscles could most likely increase the pain in the injured foot? A. Flexor digitorum profundus B. Gastrocnemius C. Tibialis posterior D. Tibialis anterior E. Fibularis (peroneus) longus	**B**

26. **A 24-year-old woman received a small-caliber bullet wound to the popliteal fossa from a drive-by assailant. The patient was admitted to the emergency department, where the surgeons recognized that the bullet had severed the tibial nerve. Such an injury would most likely result in?** A. Inability to extend the leg at the knee B. Foot drop C. A dorsiflexed and everted foot D. A plantar flexed and inverted foot	C
27. **An 82-year-old grandmother slipped on the polished floor in her front hall and was transported to the emergency department and admitted for examination with a complaint of great pain in her right lower limb. During physical examination it is observed by the resident that the right lower limb is laterally rotated and noticeably shorter than her left limb. Radiologic examination reveals an intracapsular fracture of the femoral neck. Which of the following arteries supplies the head of the femur in early childhood but no longer in a patient of this age?** A. Superior gluteal B. Lateral circumflex femoral C. A branch of the obturator artery D. Inferior gluteal	C
28. **The swollen and painful left foot of a 23-year-old female long distance runner is examined in university orthopedic clinic. She states that she stepped on unseen sharp object while running through the park several days earlier. Emergency surgery is ordered to deal with her tarsal tunnel syndrome. The tarsal tunnel is occupied normally by tendons, vessels, and nerves that pass beneath a very strong band of tissue (flexor retinaculum) on medial side of ankle. What is the most anterior of structures that pass through this tunnel?** A. Flexor hallucis longus tendon B. Plantaris tendon C. Tibialis anterior tendon D. Tibialis posterior tendon	D

29. A 22-year-old man is admitted to the emergency department after falling from his bicycle. Radiologic examination reveals a fracture of the tibia above the ankle. MRI and physical examination reveal that the tibial nerve is severed on the posterior aspect of the tibia. Which of the following signs will most likely be present during physical examination? **B**

A. Sensory loss of the dorsum of the foot
B. Sensory loss on the sole of the foot
C. Foot drop
D. Paralysis of the extensor digitorum brevi
E. Sensory loss of the entire foot

30. A 24-year-old man is admitted to the emergency department after a car collision. Radiologic examination reveals a fracture at the junction of the middle and lower thirds of the femur. An MRI examination provides evidence that the popliteal vessels were injured when the distal fragment of the fracture was pulled posteriorly. Which of the following muscles is most likely to displace the distal fracture fragment? **B**

A. Soleus
B. Gastrocnemius
C. Semitendinosus
D. Gracilis

31. A 65-year-old man is admitted to the hospital after falling from his roof while cleaning leaves and pine needles from the gutters. Among other injuries suffered in his fall, radiologic examination reveals a fracture of the talus bone in one foot. Much of the blood supply of this bone can be lost in such an injury and can result in osteonecrosis. From what artery does this bone receive its primary vascular supply? **E**

A. Medial plantar
B. Lateral plantar
C. Dorsalis pedis
D. Anterior tibial
E. Posterior tibial

32. A 34-year-old male long-distance runner complained to the team physician of swelling and pain of his shin. Skin testing in a physical examination showed normal cutaneous sensation of the leg. Muscular strength tests showed marked weakness of dorsiflexion and impaired inversion of the foot. Which nerve serves the muscles involved in the painful swelling? A. Common fibular (peroneal) B. Deep fibular (peroneal) C. Sciatic D. Superficial fibular (peroneal) E. Tibial	B
33. A 7-year-old girl accidentally stepped on a sharp snail shell while walking to the beach. She was admitted to the hospital, where she received a tetanus shot, and the wound was cleaned thoroughly and sutured. One week later, during a return visit to her physician, it is seen that she has great difficulty in flexing her big toe, even though there is no inflammation present in the sole of the foot. Which nerve was most likely damaged by the piercing of the shell? A. Lateral plantar nerve B. Medial plantar nerve C. Sural nerve D. Superficial fibular (peroneal) nerve	B
34. A 49-year-old man is admitted to the emergency department with a cold and pale foot. Physical examination reveals that the patient suffers from *peripheral vascular disease; duplex ultrasound studies indicate possible* occlusion of his popliteal artery, and the pulse of the posterior tibial artery is absent. What is the most common location for palpation of the pulse of the posterior tibial artery? A. Lateral to the muscular belly of the abductor hallucis B. Posteroinferior to the medial femoral condyle C. Groove midway between the lateral malleolus and the calcaneus D. Groove midway between the medial malleolus and the calcaneus E. Medially, between the two heads of the gastrocnemius	D

35. Young parentswere concerned thattheir 14-monthold daughter had not yet begun walking. Their pediatrician reassured them, saying that one of the muscles of the leg, the fibularis (peroneus) tertius, had to complete its central neurologic development before the child could lift the outer corner of the foot and walk without stumbling over her toes. What is the most common nerve supply of this muscle? A. Sural B. Lateral plantar C. Deep fibular (peroneal) D. Superficial fibular (peroneal) E. Tibial	**C**
36. A 55-year-old man is admitted to the hospital for an iliofemoral bypass. The operation is performed successfully and the blood flow between the iliac and femoral arteries is restored. During rehabilitation which of the following arteries should be palpated to monitor good circulation of the lower limb? A. Anterior tibial B. Deep fibular (peroneal) C. Deep plantar D. Dorsalis pedis *E. Dorsal metatarsal*	**D**
37. A 55-year-old woman is bitten by a dog in the dorsum of the foot and is admitted to the emergency department. The wound is cleaned thoroughly, during which it is seen that no tendons have been cut, but the dorsalis pedis artery and the accompanying nerve have been injured. Which of the following conditions would be expected during physical examination? A. Clubfoot B. Foot drop C. Inability to extend the big toe D. Numbness between the first and second toes	**D**

A 31-year-old woman presents to the department of surgery with a complaint of facial paralysis (Bell's palsy), which had appeared a year earlier and had resulted in paralysis of muscles of one side of her face. The chief of plastic surgery recommends a nerve graft, taking a cutaneous nerve from the lower limb to replace the defective facial nerve. The surgery is successful. Six months after the procedure, there is restoration of function of previously paralyzed facial muscles. There is an area of skin on the back of the leg laterally and also on the lateral side of the foot that has no sensation. What nerve was used in the grafting procedure? A. Superficial fibular (peroneal) B. Tibial C. Common fibular (peroneal) D. Sural	D
39. A 27-year-old woman had suffered a penetrating injury in the popliteal region by an object thrown from a riding lawnmower. She was admitted to the emergency department for removal of the foreign object. After making a midline incision in the skin of the popliteal fossa, the surgical resident observed a vein of moderate size in the superficial tissues. What vein would be expected at this location? A. Popliteal vein B. Perforating tributary to the deep femoral vein C. Great saphenous vein D. Lesser (short) saphenous vein	D
40. A 58-year-old diabetic patient is admitted to the hospital with a painful foot. Physical examination reveals that the patient suffers from peripheral vascular disease. There is no detectable dorsalis pedis arterial pulse, but the posterior tibial pulse is strong. Which of the following arteries will most likely provide adequate collateral supply from the plantar surface to the toes and dorsum of the foot? A. Anterior tibial B. Fibular (peroneal) C. Arcuate	E

D. Medial plantar E. Lateral plantar	
41. A 45-year-old is admitted to the hospital after his left leg impacted a fence post when he was thrown from a powerful four-wheel all-terrain vehicle. Radiologic examination reveals posterior displacement of the tibia upon the femur. Which of the following structures was most likely injured? A. Anterior cruciate ligament B. Posterior cruciate ligament C. Lateral collateral ligament D. Lateral meniscus ligament E. Patellar ligament	**B**
42. A 55-year-old man visits the outpatient clinic complaining that he cannot walk more than 5 minutes without feeling severe pain in his feet. An image of the feet of this patient is shown in Fig. 5-10. What is the most common cause of this condition? A. Collapse of medial longitudinal arch, with eversion and abduction of the forefoot B. Exaggerated height of the medial longitudinal arch of the foot C. Collapse of long plantar ligament D. Collapse of deltoid ligament E. Collapse of plantar calcaneonavicular ligament	**A**
43. A 32-year-old man is admitted to the emergency department after a car collision. Radiologic examination reveals a distal fracture of the femur. The patient is in severe pain, and a femoral nerve block is administered. What landmark is accurate for localizing the nerve for injection of anesthetics? A. 1.5 cm superolateral to the pubic tubercle B. 1.5 cm medial to the anterior superior iliac spine C. 1.5 cm lateral to the femoral pulse D. 1.5 cm medial to the femoral pulse E. Midway between the anterior superior iliac spine and pubic symphysis	**C**

44. A 48-year-old woman is admitted to the hospital with severe abdominal pain. Several imaging methods reveal that the patient suffers from intestinal ischemia. An abdominopelvic catheterization is ordered for antegrade angiography. A femoral puncture is performed. What is the landmark for femoral artery puncture? A. Halfway between anterior superior iliac spine and pubic symphysis B. 4.5 cm lateral to the pubic tubercle C. Midpoint of the inguinal skin crease D. Medial aspect of femoral head E. Lateral to the fossa ovalis	**D**
45. A 23-year-old man is admitted to the emergency department after injuring his knee while playing football. During physical examination there is pain and swelling of the knee, in addition to locking of the knee in full extension. Radiologic examination reveals a bucket handle meniscal tear (Fig. 5-12). Which of the following ligaments is most likely injured? A. Posterior cruciate B. Medial collateral C. Lateral collateral D. Anterior cruciate E. Coronary	**D**
46. In preparing to isolate the proximal portion of the femoral artery, the vascular surgeon gently separated it from surrounding tissues. Posterior to the femoral sheath, what muscle forms the lateral portion of the floor of the femoral triangle? A. Adductor longus B. Iliopsoas C. Sartorius D. Pectineus E. Rectus femoris	**B**

47. A 50-year-old man is admitted to the emergency department after a car crash. An MRI examination reveals an injured anterior cruciate ligament. Physical examination reveals a positive drawer sign. Which of the following signs is expected to be present during physical examination? A. The tibia can be slightly displaced anteriorly B. The tibia can be slightly displaced posteriorly C. The fibula can be slightly displaced posteriorly D. The fibula can be slightly displaced anteriorly E. The tibia and fibula can be slightly displaced anteriorly	**A**
48. A 23-year-old male basketball player injured hisfoot during training and is admitted to the emergency department. An MRI examination reveals a hematoma around the medial malleolus. Upon physical examination the patient shows excessive eversion of his foot. Which of the following ligaments most likely has a tear? A. Plantar calcaneonavicular (spring) B. Calcaneofibular C. Long plantar D. Short plantar E. Deltoid	**E**
49. A 5-year-old boy is admitted to the emergency department after a car collision. Radiologic examination reveals a fracture of the head of the femur. An MRI examination reveals a large hematoma. Which of the following arteries is most likely injured? A. Deep circumflex iliac B. Acetabular branch of obturator C. Descending branch of lateral circumflex femoral D. Medial circumflex femoral E. Radicular branches of circumflex artery	**B**

50. A 49-year-old man is admitted to the emergency department with a cold and pale foot. Physical examination reveals that the patient suffers from peripheral vascular disease; his popliteal artery is occluded and no pulse is felt upon palpation. What is the landmark to feel the pulse of the femoral artery? A. Adductor canal B. Femoral triangle C. Popliteal fossa D. Inguinal canal E. Pubic symphysis	B
51. A 49-year-old man is admitted to the emergency department complaining that he has difficulties walking. Physical examination reveals that the patient suffers from peripheral vascular disease. An ultrasound examination reveals an occlusion of his femoral artery at the proximal portion of the adductor canal. Which of the following arteries will most likely provide collateral circulation to the thigh? A. Descending branch of the lateral circumflex femoral B. Descending genicular C. Medial circumflex femoral D. First perforating branch of deep femoral E. Obturator artery	A
52. A 34-year-old man is lifting heavy weights while doing squats. Unfortunately, while making a maximal effort, he drops the weight and immediately grabs at his upper thigh, writhing in pain. The man is admitted to the emergency department and during physical examination is diagnosed with a femoral hernia. What reference structure would be found immediately lateral to the herniated structures? A. Femoral vein B. Femoral artery C. Pectineus muscle D. Femoral nerve E. Adductor longus muscle	A

53. A 25-year-old man, an intravenous drug abuser, had been injecting himself with temazepam (a powerful intermediate acting drug in the same group as diazepam (Valium) and heroin for 5 years, leaving much residual scar tissue over points of vascular access. The patient is admitted to the emergency department for a detoxification program requiring an intravenous infusion. The femoral veins in his groin are the only accessible and patent veins for intravenous use. Which of the following landmarks is the most reliable to identify the femoral veins? A. The femoral vein lies medial to the femoral artery. B. The femoral vein lies within the femoral canal. C. The femoral vein lies lateral to the femoral artery. D. The femoral vein lies directly medial to the femoral nerve.	**A**
54. A 22-year-old soccer player collides with one of her teammates. During examination on the field, the posterior drawer test was performed and the tibia moved backward in relation to her femur. Injury to which structure is confirmed by performing this test? A. Anterior cruciate ligament B. Lateral collateral ligament C. Medial collateral ligament D. Medial meniscus E. Posterior cruciate ligament	**E**
55. A 29-year-old man is brought to the physician for removal of a cast from his left leg. He had sustained a fracture of the left lower extremity 6 weeks prior which was immobilized in a cast that extended from just below the knee to the foot. At the time of injury, there was severe pain but normal strength in the extremity. When the cast was removed, physical examination showed a pronounced left foot drop with paresthesia and sensory loss over the dorsum of the left foot and lateral leg. Injury to which nerve is the most likely cause? A. Common fibular (peroneal) B. Superficial fibular (peroneal) C. Deep fibular (peroneal) D. Sciatic	**A**

56. A 16-year-old boy presents to the emergency department with a fracture of the first and second toes of his right foot. He received an anesthetic injection in the first web space of his foot, to permit easy manipulation and correction. Which nerve was blocked by the anesthesia? A. Saphenous B. Cutaneous branch of deep fibular (peroneal) C. Cutaneous branch of superficial fibular (peroneal) D. Sural E. Common fibular (peroneal)	B
57. A lateral blow to the knee during a tackle in a football game injures a 24-year-old woman. Field examination reveals an "anterior drawer sign." An MRI demonstrates injury to several structures of the knee, including her medial meniscus. Which structure might also have been injured by the tackle? A. Medial collateral ligament B. Lateral collateral ligament C. Lateral meniscus D. Posterior cruciate ligament E. Tendon of the semitendinosus	A
58. A 37-year-old unconscious man is rushed to the emergency department after being retrieved from a motor vehicle crash. On physical examination bruising and obvious deformity is seen over his left knee joint. Radiological studies showed a posteriorly dislocated supracondylar fracture with severe compression of the popliteal artery. Which of the following arteries would ensure adequate blood supply to the leg and foot in this patient? A. Medial femoral circumflex B. Lateral femoral circumflex C. Anterior tibial artery D. Posterior tibial artery	B

59. A 60-year-old retired male marathon runner complains to his primary care physician that during his daily morning jog he experiences bouts of numbness and tingling on the medial aspect of his heel. Upon further examination the doctor discovers the patient has trouble tiptoeing and shows a positive Tinel's sign. Which of the following conditions is most characteristic of these symptoms? A. Plantar fasciitis B. Ankle inversion sprain C. Morton's neuroma D. Lateral ligament E. Tarsal tunnel syndrome	**E**
60. A 50-year-old diabetic man presents for a routine wellness checkup. During physical examination it is noted that he has paraesthesia in a classic glove and stocking distribution. The physician decides on a complete peripheral vascular system examination, which includes palpating the pulse of the dorsalis pedis. Where can the dorsalis pedis pulse be palpated? A. Between the tendons of extensor hallucis and extensor digitorum longus on the dorsum of the foot B. Superior to flexor hallucis longus just distal to the tarsal tunnel C. Inferolateral to the pubic symphysis and medial to the deep dorsal vein of the penis D. 2 cm anterior to the medial malleolus	**A**
61. A 22-year-old male professional football player is admitted to the emergency department with acute right knee pain after sustaining a kick injury to an extended leg. A radiograph and a subsequent MRI revealed that the trauma caused anterior displacement of the tibia with respect to her femur. Which of the following ligaments was most likely injured? A. Fibular (lateral) collateral B. Tibial (medial) collateral C. Patellar D. Anterior cruciate E. Posterior cruciate	**D**

62. **A 27-year-old man has had increasing difficulty walking and complained of an area of numbness on the dorsum of his right foot. Examination reveals a hard mass at the anterolateral aspect of his right leg just below the knee. Imaging studies reveal a large bone tumor between the fibula and tibia that is compressing a nerve, accounting for his neurological symptoms. Which of the following is the most likely description of abnormalities on neurological examination?** A. Decreased/absent knee jerk reflex and decreased sensation on the medial aspect of the leg B. Weakness of flexion at the knee and decreased sensation of the plantar aspect of the foot C. Weakness of eversion at the ankle and decreased sensation between the first and second toes D. Weakness of inversion, dorsiflexion at the ankle, and decreased sensation between the first and second toes	**D**
63. **A 56-year-old diabetic man complains of repeated injury and ulcers to his right big toe. He also complains that he finds it difficult maintaining his shoes because the tips of the shoes around the toe area easily wear down. He also complains that for a while now, his first two toes "feel funny." He used to enjoy playing soccer on weekends but has found it difficult to be involved. Which of the following nerves is most likely affected?** A. Superior gluteal nerve injury B. Inferior gluteal nerve injury C. Deep fibular (peroneal) nerve injury D. Superficial fibular (peroneal) nerve injury E. Common fibular (peroneal) nerve injury	**C**

64. After being struck from behind by a motor vehicle, a 55-year-old man presents to the hospital with a swelling of his right knee. Imaging reveals a large hematoma of the popliteal artery compressing his tibial nerve. Upon neurologic examination which movement would likely be diminished in strength?

A. Dorsiflexion of the foot
B. Flexion of the thigh
C. Extension of the digits
D. Extension of the leg
E. Plantar flexion of the foot

E

65. A lateral blow to the knee during a tackle in a football game injures a 24-year-old woman. Field examination reveals an "anterior drawer sign." An MRI demonstrates injury to several structures of the knee, including her medial meniscus. Which structure might also have been injured by the tackle?

A. Medial collateral ligament
B. Lateral collateral ligament
C. Lateral meniscus
D. Posterior cruciate ligament
E. Tendon of the semitendinosus

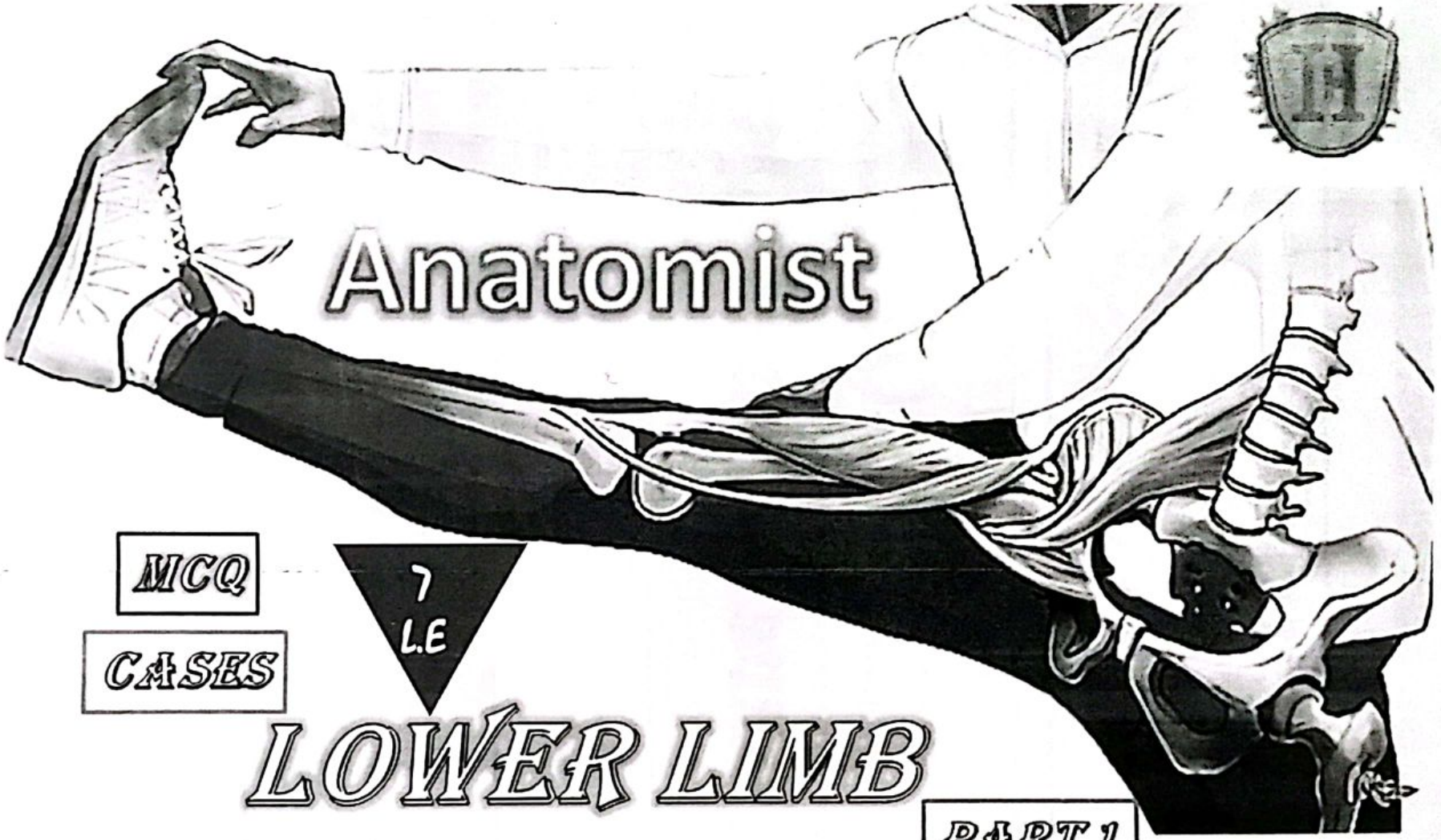
A

66. A 45-year-old man is admitted to the emergency department after a fall and subsequent leg injury. On physical examination the patient has a foot drop but eversion is unaffected. Which nerve is most likely injured?

A. Tibial
B. Common fibular (peroneal)
C. Superficial fibular (peroneal)
D. Saphenous
E. Deep fibular (peroneal)

E

A 32-year-old man is brought to the emergency department with complaints of pain to the left ankle and knee. The patient recalls that during a football game, his left foot landed in a hole as he was running on an uneven dirt field. The ankle was externally rotated and everted while the knee twisted medially. He was unable to bear weight subsequently. During physical examination, the right ankle is swollen and there is exquisite tenderness over the right medial malleolus and the proximal lateral leg. Radiologic examination of the right lower limb reveals a displaced fracture of the neck of right fibula and a comminuted fracture of the tibial plafond and medial malleolus. Which of the following describes the most likely consequences of this injury? A. Weak "push-off" while walking and numbness over the posteromedial leg B. Weak ankle eversion and numbness over the dorsum of the foot C. High stepping gait and numbness over the dorsum and first web space of the foot D. Waddling gait and inability to feel a pin prick over the anterolateral leg E. Swing-out gait and numbness over the medial leg	C



Anatomist

MCQ

CASES

7 L.E

LOWER LIMB

PART 1

Part (1)
Lower Limb MCQs

LOWER LIMB MCQ

1. **One of the following muscles is supplied by the femoral nerve in abdomen:** a- Iliacus. b- Vastus lateralis. c- Sartorius. d- Vastus medialis.	**A**
2. **The femoral nerve:** a- Comes from the dorsal divisions of the L2, 3 & 4. b- Ends four inches below the inguinal ligament. c- Supply all the muscles of the floor of the femoral triangle except pectineus. d- Passes to the thigh through the lateral compartment of the femoral sheath.	**A**
3. **One of the following structures pass deep to the inguinal ligament:** a- Spermatic cord. b- Psoas major muscle. c- Ilioinguinal nerve. d- Great saphenous vein.	**B**
4. **The articularis genu muscle, mark the correct statement:** a- Is the deep fibers of the vastus medialis muscle. b- Is fixed to the upper border of the upper border of synovial membrane. c- Is supplied by the obturator nerve. d- Arises from the upper half of the medial surface of the femur.	**B**
5. **The head of the quadriceps muscle which acts on the hip joint:** a- Vastus lateralis muscle. b- Rectus femoris. c- Vastus intermedius. d- Vastus medialis.	**B**

6. The sartorius muscle: a- Flexes the knee joint and extends the hip joint. b- Is one of the boundaries of the femoral triangle. c- Arises from the anterior inferior iliac spine. d- Is fusiform muscie.	B
7. One of the following muscles is supplied by the obturator nerve: a- Psoas major. b- Sartorius. c- Iliacus. d- Adductor brevis.	D
8. The obturator nerve: a- Supplies the hip joint only b- Supplies the knee and hip joints. c- Gives. a cutaneous branch to the lower medial side of the thigh. d- Arises from lumbar plexus.	B
9. The most powerful extensor of the hip joint is: a- Semimembranosus. b- Gluteus maximus. c.:. Sacrospinalis. d- Gluteus medius.	B
10. The structure which passes through the greater sciatic foramen is: a- Quadratus femoris. b- Sciatic nerve. c- Tendon of obturator externus muscle. d- Nerve to obturator internus.	B

11. The tensor fascia lata, muscle: a- Attached to the posterior part of iliac crest. b- Inserted into the iliotibial tract. c- Innervated by the inferior gluteal nerve. d- Lies deep to the gluteus medius muscle.	**B**
12. The following structure deep lies to the gluteus maximus: a- Iliofemoral ligament. b- Obturator nerve. c- Straight head of rectus femoris muscle. d- Greater trochanter of femur.	**D**
13. Extension of the hip joint is done by the following muscle: a- Iliacus muscle. b- Sartorius muscle. c- Semimembranosus muscle. d- Rectus femoris muscle.	**C**
14. Abductors of the hip joint are: a- Called into action in sitting. b- Their paralysis cause waddling gait. c- Gluteus medius and maximus. d- Supplied by inferior gluteal nerve.	**B**
15. The sciatic nerve supplies one of the following muscles: a- Semimembranosus. b- Vastus medialis. c- Rectus femoris. d- Quadratus femoris.	**A**

16. The obturator nerve; mark the most suitable answer: a- Is formed of the ventral divisions of L2, 3 & 4 nerves. b- Is completely motor. c- Supplies all the adductor and flexor thigh muscles. d- It passes through the adductor canal.	A
17. Paralysis of the saphenous nerve results in the following deformity: a- Inability to invert the foot. b- Loss of sensation on the lateral malleolus. c- Loss of sensation on the medial malleolus. d- Loss of sensation on pocalized area on the dorsum of the foot.	C
18. The powerful extension of the thigh, required when one is standing from a sitting position, is a function of the: a- Gluteus maximus muscle. b- Psoas major muscle. c- Iliacus muscle. d- Obturator externus muscle.	A
19. significant weakness in abduction of the thigh would involve the following muscle: a- Gluteus medius. b- Pectineus. c- Gracilis. d- Adductor magnus.	A
20. The sartorius muscle is : a- It is innervated by the obturator nerve. b- It arises from the anterior superior iliac spin. c- It inserts on the lateral surface of the tibia. d- It forms the medial border of the femoral triangle.	B

21. Medial rotation of the thigh is dcme the following muscle: a- Gluteus maximus. b- Quadratus femoris. c- Gluteus minimus. d- Superior gemellus.	**C**
22. Which of the following structures passes through the lesser sciatic foramen: a- Piriformis muscle. b- Inferior gluteal nerve. c- Tendon of obturator internus muscle. d- Sciatic nerve.	**C**
23. The quadratus femoris is inserted into, choose the correct answer: a- Greater trochanter of the femur, b- Lesser trochanter of the femur. c- Middle of trochanteric line. d- Quadrate tubercle.	**D**
24. Damage to the femoral nerve on the lateral wall of the pelvis would affect the function of the following muscle: a- Sartorius. b- Gracilis. c- Adductor longus. d- Adductor brevis.	**A**
25. The iliotibial tract receives attachment of the following muscle: a- Tensor fasciae lata muscle. b- Gluteus medius muscle. c- Iliacus. d- Gluteus minimus.	**A**

26. A crushing blow that breaks the anterior superior iliac spine would damage the origin of the: a- Biceps femoris muscle. b- Pectineus muscle. c- Rectus femoris muscle. d- Sartorius musde.	D
27. Which of the following nerves innervates at least one muscle that acts on both the hip and the knee joints: a- Ilioinguinal nerve. b- Femoral nerve. c- Saphenous nerve. d- Common peroneal nerve.	B
28. In walking, the hip bone of the suspended leg is raised by which of the following muscles acting on the supported side of the body: a- Gluteus maximus. b- Obturator internus. c- Gluteus medius. d- Obturator externus.	C
29. Which of the following muscles is a flexor of the thigh: a- Superior gamellus. b- Adductor longus. c- Gracilis. d- Psoas major.	D
30. The following structure pass through the lesser sciatic foramen: a- Superior gluteal artery. b- Sciatic nerve. c- Obturator internus tendon. d- Pudendal nerve.	C

31. The femoral nerve originates from which of the following roots? a- T12, LI, L2. b- LI, L2, L3. c- L2, L3, L4. d- L3, L4, L5.	C
32. Loss of extension of the knee would result from damage to the:. a- Femoral nerve. b- Tibial nerve. c- Tibial and common peroneal nerves. d- Obturator and femoral nerves.	A
33. Muscle that extends leg include the following muscle: a- Biceps femoris. b- Rectus femoris. c- Semitendinosus. d- Gradlis.	B
34. Concerning the femoral nerve it: a- Enters the thigh medial to the femoral sheath. b- Supplies motor nerves to most of the muscles of the anterior and medial compartments of the thigh. c- Lies medial to the femoral artery in the femoral triangle. d- Has no motor branches below the knee.	D
35. Regarding the iliotibial tract: a- It is attached between iliac crest and lateral condyle of the tibia. b- It receives the insertion of gluteus medius and tensor fascia lata. c- It belongs to the investing layer of the deep fascia of the thigh. d- It is connected to linea aspra by the medial intermuscular septum.	A

36. Regarding the obturator nerve, mark correct a- Is formed by ventral divisions of 2, 3 and 4' lumbar nerves. b- Supplies ankle joint. c- Crosses the internal iliac artery. d- Leaves the pelvis through femoral sheath.	A
37. Paralysis of the gluteus medius and minimus will result in the: a- Inability to adduct the thigh at the hip joint. b- Inability to stand from sitting position c- Inability to laterally rotate the thigh at the hip joint. d- Waddling gate in case of bilateral paralysis of the muscles.	D
38. One of the following muscles is lateral rotator of the thigh: a- The iliopsoas. b- The rectus femoris. c- The biceps femoris. d- The obturator internus.	D
39. The obturator nerve supplies the following muscle: a- Sartorius. b- Iliacus. c- Gracilis. d- Rectus femoris.	C
40. regarding the hamstring muscles (Posterior compartment of thigh), mark correct statement: a- All are supplied by sciatic nerve. b- They can extend the knee. c- Biceps femoris produces medial rotation of knee. d- Upper half of semimembranosus is membranous.	A

41. Following muscle produce abduction of hip joint: a- Gluteus medius. b- Obturator internus. c:- Superior gemellus. d- Quadratus femoris.	A
42. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	A
43. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants? a- Upper outer quadrant. b- Lower outer quadrant. c- Upper inner quadrant. d- Lower inner quadrant.	A
44. Regarding the action of the glutei muscles, one answer is correct: a- Gluteus maximus is medial rotator of the thigh. b- Glutei.Js medius is adductor of the hip joint. c- Both glutei maximus and medius are extensors of the hip joint. d- Both glutei medius and minimus are powerful abductor of the hip joint.	D
45. Regarding the patella, choose the correct answer: a. It gives attachment to the quadriceps tendon to its upper part and ligamentum patellae to the lower part. b. Its displacement in the medial direction is prevented by the large medial condyle of the femur. c. It is separated from the skin by a fascia which is liable to become inflamed, producing visible swelling. d. It receives lower horizontal fibers of the adductor longus on its medial side forming patellar retineculum.	A

Part (2)
Lower Limb cases

LOWER LIMB CASES

1. **A 30-year-old man suffered a superior gluteal nerve injury in a motorcycle crash in which his right lower limb was caught beneath the bike. He is stabilized in the emergency department. Later he is examined and he exhibits a waddling gait and a positive Trendelenburg sign. Which of the following would be the most likely physical finding in this patient?** a. Difficulty in standing from a sitting position b. The left side of the pelvis droops or sags when he attempts to stand with his weight supported just by the right lower limb c. The right side of the pelvis droops or sags when he attempts to stand with his weight supported just by the left lower limb d. Weakened flexion of the right hip e. Difficulty in sitting from a standing position	**B**
2. **After dividing the overlying superficial tissues and gluteal musculature in a 68-year-old female patient, the orthopedic surgeon carefully identified the underlying structures while performing a total hip arthroplasty. The key landmark in the gluteal region, relied upon in surgical explorations of this area, is provided by which of the following structures?** **A.** Gluteus medius **B.** Obturator internus tendon **C.** Sciatic nerve **D.** Piriformis muscle **E.** Spine of the ischium	**D**
3. **A 56-year-old man with advanced bladder carcinoma suffers from difficulty while walking. Muscle testing reveals weakened adductors of right thigh. Which nerve is most likely compressed by tumor to result in walking difficulty?** A. Femoral **B.** Obturator **C.** Common fibular (peroneal) **D.** Tibial **E.** Sciatic	**B**

4. A 32-year-old patient received a badly placed intramuscular injection to the posterior part of his gluteal region. The needle injured a motor nerve in the area. Later, he had great difficulty rising to a standing position from a seated position. Which muscle was most likely affected by the injury? **A.** Gluteus maximus **B.** Gluteus minimus **C.** Hamstrings **D.** Iliopsoas **E.** Obturator internus	**A**
5. A 22-year-old woman is admitted to the emergency department after another vehicle collided with the passenger side of the convertible in which she was riding. Radiologic examination reveals an avulsion fracture of the greater trochanter. Which of the following muscles would continue to function normally if such an injury was incurred? **A.** Piriformis **B.** Obturator internus **C.** Gluteus medius **D.** Gluteus maximus **E.** Gluteus minimus	**D**
6. A 29-year-old construction worker falls onto some rusty wire mesh and suffers a deep laceration to his right buttock. When the ambulance arrives to transporthim to the emergency department and it is noted that he has difficulty stepping up into the ambulance with his right leg. Which nerve has probably been damaged? A. Superior gluteal B. Tibial C. Common fibular (peroneal) D. Inferior gluteal E. Nerve to piriformis	**D**

7. **A 43-year-old man visits the outpatient clinic with a painful, swollen knee joint. The patient's history reveals chronic gonococcal arthritis. A knee aspiration is ordered for bacterial culture of the synovial fluid. A standard suprapatellar approach is used, and the needle passes from the lateral aspect of the thigh into the region immediately proximal to and deep to the patella. Through which of the following muscles would the needle pass?** A. Adductor magnus B. Short head of biceps femoris C. Rectus femoris D. Sartorius E. Vastus lateralis	**E**
8. **A 23-year-old man is taken to the emergencyDepartment because of anorexia, nausea, vomiting, and Severe abdominal pain in the right lower quadrant. On Examination, he has tenderness in the right lower quadrant with rebound tenderness. The physician suspects Appendicitis. The patient was unable to straighten the patient's flexed thigh. Which of theFollowing muscles most likely caused this symptom?** A. Adductor magnus B. Psoas major C. Biceps femoris D. Obturator internus E. Gluteus Medius	**B**
9. **Three years following a 62-year-old's hip replacement, the man's CT scans indicated that two of his larger hip muscles had been replaced by adipose tissue. The opinion is offered that his superior gluteal nerve could have been injured during the replacement procedure, and the muscles supplied by that nerve had atrophied and been replaced by fat. Which of the following muscles receives its innervation from the superior gluteal nerve?** A. Tensor fasciae latae B. Rectus femoris C. Gluteus maximus D. Piriformis	**A**

10. During a gymnastic session, a 24-year-old woman Suddenly developed pain and swelling on the right Buttock. This happened following a forceful thigh Movement. There is severe weakness of right hip extension and knee flexion. Adduction of the thigh is also Slightly weak. An avulsion fracture of the ischial tuberosity is found on a radiograph. Which of the following Group of muscles has most likely involved in this Process? A. Adductor brevis, adductor longus, adductor magnus, pectineus, and gracilis B. Biceps femoris, semimembranosus, semitendinosus, and adductor magnus C. Iliacus and psoas major D. Gluteus medius and gluteus minimus E. Gluteus maximus and adductor magnus F. Iliacus, psoas major, rectus femoris and sartorius	**B**
11. A 22-year-old woman is admitted with high fever and vaginal discharge. Physical and laboratory examinations reveal gonorrheal infection. A series of intramuscular antibiotic injections are ordered. Into which of the following parts of the gluteal region should the antibiotic be injected to avoid nerve injury? A. Anterior and superior to a line between the posterior superior iliac spine and the greater trochanter B. In the middle of a line between the anterior superior iliac spine and the ischial tuberosity C. Inferolateral to a line between the posterior superior iliac spine and the greater trochanter D. Inferomedial to a line between the posterior superior iliac spine and the greater trochanter E. Halfway between the iliac tuberosity and the greater trochanter	**A**

12. A 45-year-old intoxicated man was struck by a tour bus while walking in the middle of the street. The man was admitted to the emergency department andduring physical examination was diagnosed with "adductor gait," in which an individual crosses one limb in front of the other, due to powerful hip adduction. Which of the following nerves was most likely involved in this condition? A. Tibial B. Obturator C. Inferior gluteal D. Superior gluteal A. Femoral	D
13. A 6-year-old boy with a family history of muscular disease leading to wheelchair dependency in his maternal uncles presents with difficulty in standing from the seated position. He bends forward, uses his hands to help him push up from the floor, and then straightens his knees to stand. Which of the following muscles is most likely involved by this disease process? A. Tibialis posterior and gastrocnemius B. Quadratus femoris C. Gluteus medius and gluteus minimus D. Gluteus maximus E. Hamstrings	D
14. The neurosurgeon had removed a portion of the dense tissue (dura mater) covering the brain of the patient when she removed the tumor that had invaded the skull. To replace this important tissue covering of the brain, she took a band of the aponeurotic tissue of the lateral aspect of the thigh, covering the vastus lateralis muscle. What muscle, supplied by the inferior gluteal nerve, inserts into this band of dense tissue as part of its insertion? A. Gluteus medius B. Gluteus minimus C. Gluteus maximus D. Tensor fasciae latae E. Rectus femoris	C

15. In the radiographs of the knee of a male 28-yearold basketball player, who had apparently suffered a tear in a medial ligament of the knee, the tubercle on the superior aspect of the medial femoral condyle could be seen more clearly than in most individuals. What muscle attaches to this tubercle? A. Semimembranosus B. Gracilis C. Popliteus D. Adductor magnus E. Vastus medialis	D
16. A 51-year-old immigrant with tuberculosis is found to have large flocculent masses over the lateral lumbar spine. There is a similar mass located in the ipsilateral upper medial side of thigh. This pattern of involvement most likely suggests an abscess tracking along which of the following muscles? A. Piriformis B. Psoas major C. Adductor longus D. Gluteus maximus E. Obturator internus	B
17. A 29-year-old woman is involved in a car crash and is taken to the emergency department. Radiographs reveal a fracture of her pelvis. During healing of the pelvic fracture, a nerve becomes entrapped in the bone callus. Musculoskeletal examination reveals an inability to adduct the thigh. Which of the following nerves is most likely affected? A. Obturator B. Femoral C. Inferior gluteal D. Superior gluteal E. . Tibial	A

18. During an interview, a 30-year-old man who is a psychiatric patient suddenly becomes aggressive. In order to calm him down, the patient is given an intramuscular injection in the upper lateral quadrant of thebuttock. The injection is given at this specific locationto prevent damage to which of the following nerves? A. Lateral femoral cutaneous B. Sciatic C. Superior gluteal D. Obturator A. E. Inferior gluteal	**B**
19. A 58-year-old woman presents to the outpatient surgery clinic for removal of varicose veins on the medial aspect of her foot. The operation was successful however, one month later she reports loss of sensationover the medial aspect of her leg and foot. Which of the following nerves was most likely injured during theprocedure? A. Saphenous B. Obturator C. Lateral femoral cutaneous D. Tibial E. Femoral	**A**
20. After a revascularization procedure involving the common iliac artery, a 68-year-old man has difficulty walking. Nerve conduction studies reveal decreased activity in the nerve that innervates the adductors of the thigh. Which nerve is this? A. Femoral B. Obturator C. Common fibular (peroneal) D. Tibial E. Sciatic	**B**

21. A 23-year-old woman was taken to the emergency department after being involved in a head-on collision with a truck. On physical examination a hematoma was seen in the medial thigh. A CT scan revealed a fracture of the femur with a ruptured femoral artery. She was taken to the operating room for repair of the damaged structures. Two days postoperatively during physicalexamination the patient has loss of sensation to the anterior medial thigh and medial side of her leg and foot. Branches of which of the following nerves were most likely injured in the repair of the fracture? A. Femoral B. Saphenous C. Obturator D. Tibial E. Fibular (peroneal)	A
22. A 43-year-old victim of a drunk driving car crash is undergoing reconstructive arm surgery. The surgeon performs an autograft using a weak adductor of the leg located superficially on the medial side of the thigh. Which muscle is most likely being harvested to perform this reconstruction? A. Gracilis B. Sartorius C. Rectus femoris D. Vastus lateralis E. Vastus medialis	A
23. During a 100-meter sprint a 25-year-old male Olympic athlete suddenly pulls up in discomfort and is seen to be clutching the back of his left thigh in agony.Upon further examination the athlete describes the pain as a "tearing" sensation and is unable to flex his knee. Based on these symptoms which of the following actions are affected due to this injury? A. Flexion of the hip and extension of the knee B. Extension of the hip and dorsiflexion C. Medial rotation of the hip D. Lateral rotation of the hip **E.** Hip extension and knee flexion	E

1. Regarding the hip joints one of the following statements is correct: A. It is a synovial joint of ball and socket variety. B. Its flexion is performed by gluteus maximus muscle. C. Its main flexor is the quadriceps femoris muscle. D. The presence of deep acetabulum makes it unstable. E. The iliofemoral ligament limits its hyperflextion.	A
2. Which structure passes through lesser sciatic foramen: a) Piriformis muscle. b) Inferior gluteal nerve. c) Tendon of obturator internus. d) Superior gluteal nerve.	C
3. Which ligament prevents dislocation of femur backwards at the knee joint: a) Posterior cruciate ligament. b) Medial collateral ligament. c) Anterior cruciate Lligament. d) Lateral collateral ligument. e) Transverse ligament	C
4. One of The following muscle is supplied by the obturator nerve: a) Semitendinosus. b) Pectineus. c) Gracilis. d) ischial head of Adductor magnus	C

5. Locking of the knee joint to permit flexion is caused by action of: A. Vastus medialis. B. Articularisgenu C. Gastrocnemius. D. Biceps femoris. E. Popliteus.	D
6. The articularis genu muscle, mark the correct statement: a) Is the deep fibers of the vastus medialis muscle. b) Is fixed to the upper border of the synovial membrane of knee. c) Is supplied by the obturator nerve.	B

d) Arises from the upper half of the medial surface of the femur. e) The deep fibers of the vastus lateralis muscle	
7. One of the following muscle produce Lateral rotation of the thigh: a) Gluteus midius. b) Rectus femoris. c) Gluteus minimus. d) Biceps femoris. e) Piriformis.	E

8. Bony prominence on which one normally kneels: A. Femoral condyles B. Patellae C. Tibial condyles D. Intercondylar eminences of tibia E. Tibial tuberosity	E
9. One of The following structures pass through greater sciatic foramen: a) Femoral nerve. b) sciatic nerve c) Obturator nerve. d) Saphenous nerve. e) 4th perforator.	B
10. Which muscle group are you testing when you instruct your patient to straighten his leg (knee) against resistance? A. Anterior leg (shin) muscles B. Anterior thigh (quadriceps) muscles C. Medial thigh muscles D. Posterior leg (calf) muscles E. Posterior thigh (hamstrings) muscles	B
11. Which of the following muscle prevent tilting of pelvis to opposite side: a) Gluteus maximus. b) Obturator internus. c) Glueus medius. d) Obturator externus. e) Qudratus femoris.	C

12. In a patient who has a posterior dislocation of the hip, which of the following ligamentous structures would be torn? A. Pubofemoral ligament B. Iliofemoral ligament C. Ischiofemoral ligament D. Lacunar ligament E. Sacrotuberous ligament	C
13. Which of the following muscles, is supplied by The sciatic nerve: a) Obturator externus. b) Adductor magnus. c) Obturator internus. d) Quadratus femoris. e) Semitendnosus.	E
14. Femoral nerve supplies one of the following muscles: a) Semitendinosus. b) Iliacus. c) Gracilis. d) biceps femoris. e) Tensor fascia lata.	B

15. Regarding quadriceps femoris muscle, mark ONE true statement; thus it: A. Extends the knee joint. B. Flexes the knee joint. C. Extends the hip joint. D. Abducts the hip joint E. Medially rotates the knee joint.	A
16. Unlocking of the knee joint to permit flexion is caused by action of: a) Vastus medialis. b) Articularisgenu c) Gastrocnemius. d) Biceps femoris. e) Popliteus.	E

17. One of the following statements describe the sartorius muscle: A. It is innervated by the femoral nerve. B. It arises from the anterior inferior iliac spine. C. It inserts on the lateral surface of the fibula. D. It forms the roof of the femoral triangle. E. Its contraction produces extension, abduction and lateral rotation of hip joint.	A
18. Hyperextension of the hip joint is limited by: A. Iliofemoral ligament. B. Ischiofemoral ligament C. Pubofemoral ligament. D. Ligament of the head of the femur. E. Shape of the acetabular fossa.	A
19. The iliotibial tract receives muscle attachment from: a) Tensor fasciae lata muscle. b) Gluteus medius muscle. c) Iliacus. d) Gluteus minimus. e) Sartorius.	A

20. One of The following muscle is a lateral rotator of the thigh: a) The iliopsoas. b) The rectus femoris. c) The gluteus medius. d) The biceps femoris. e) The obturator internus.	E
21. The sciatic nerve supply one of the following muscles: a) Biceps femoris b) Sartorius c) Rectus femoris d) Gluteus maximus e) Adductor magnus	A

22. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants? a) Upper outer quadrant. b) Lower outer quadrant. c) Upper inner quadrant. d) Lower inner quadrant. e) Any one of the above quadrants.	A
23. Which of the following muscles is a powerful flexor of the thigh: A. Superior gamellus. B. Adductor longus. C. Gracilis. D. Psoas major. E. Obturator internus.	D

24. Regarding quadriceps femoris muscle, mark ONE true statement: a) Extends the knee joint. b) Flexes the knee joint. c) Extends the hip joint. d) Abducts the hip joint e) Medially rotates the knee joint.	A
25. Consider the fascia and compartments of thigh, which statement is correct? A. The iliotibial tract lies superficial to the fascia lata. B. The iliotibial tract inserts onto the lateral epicondyle of the femur. C. The femoral vein passes through the fascia lata. D. There are four compartments. E. There are three intermuscular septa in the thigh.	E

26. Consider these statements about the anterior compartment of the thigh, which of them is correct? A. All muscles of anterior compartment are innervated by obturator nerve. B. Sartorius flexes the hip and extends the knee joint. C. The quadriceps tendon inserts directly onto the tibia. D. Quadriceps femoris extends the hip joint.	E

E. Vastus medialis is of importance in preventing lateral dislocation of patella.	
27. Flexion of the hip joint is done by which of the following muscle.: A. Vastus medialis muscle. B. Sartorius muscle. C. Semimembranosus muscle. D. Biceps femoris muscle. E. Gluteus medius.	B
28. Flexion of the hip joint is carried out by: A. Iliopsoas B. Vastus intermedius C. Semimembranosus D. Gluteus maximus E. Quadratus femoris	A

29. Regarding the iliotibial tract; which is true: a) It is attached between iliac crest & lateral condyle of the tibia. b) It receives the insertion of gluteus medius & tensor fascia lata. c) It belongs to the investing layer of the superficial fascia of the thigh. d) It is connected to linea aspra by lateral intermuscular septum. e) It helps to support the flexed knee joint in the sitting position.	A
30. The strongest ligament of the hip joint is: A. Ligamentum teres. B. Iliofemoral ligament C. Pubofemoral ligament. D. The capsular ligament. E. The transverse acetabular ligament.	B
31. The most powerful extensor of the hip joint is: a. Semimemhranosus. b. Gluteus maximus. c. Sacrospinalis. d. Gluteus medius. e. obturator externus	B

32. The powerful extension of the thigh, required when one is standing from a sitting position, is a function of the: a) Gluteus maximus muscle. b) Psoas major muscle. c) Iliacus muscle. d) Obturator externus muscle. e) Piriformis muscle.	A
33. Muscle pair inserted into iliotibial tract: a. Gluteus maximus and gluteus medius b. Gluteus medius and gluteus minimus c. Quadratus femoris and gluteus maximus d. Tensor fasciae latae and quadratus femoris e. Tensor fasciae latae and gluteus maximus	E

34. Regarding the action of the glutei muscles: a) Gluteus maximus is medial rotator of the thigh. b) Gluteus medius is adductor of the hip joint. c) Gluteus minimus is flexor of the hip joint. d) Both glutei maximus and medius are extensors of the hip joint. e) Both glutei medius and minimus are powerful abductor of hip joint	E
35. One of the following statement is true for the tensor fascia lata muscle,: a) Attached to the anterior inferior iliac spine. b) Inserted into the iliotibial tract. c) Innervated by the inferior gluteal nerve. d) Lies deep to the gluteus medius muscle. e) it produce flexion of hip	B
36. One of the Following muscles produce lateral rotation of knee joint: a) Gluteus medius. b) Semitendonisus. c) Superior gemellus. d) Rectus femoris. e) Biceps femoris.	E

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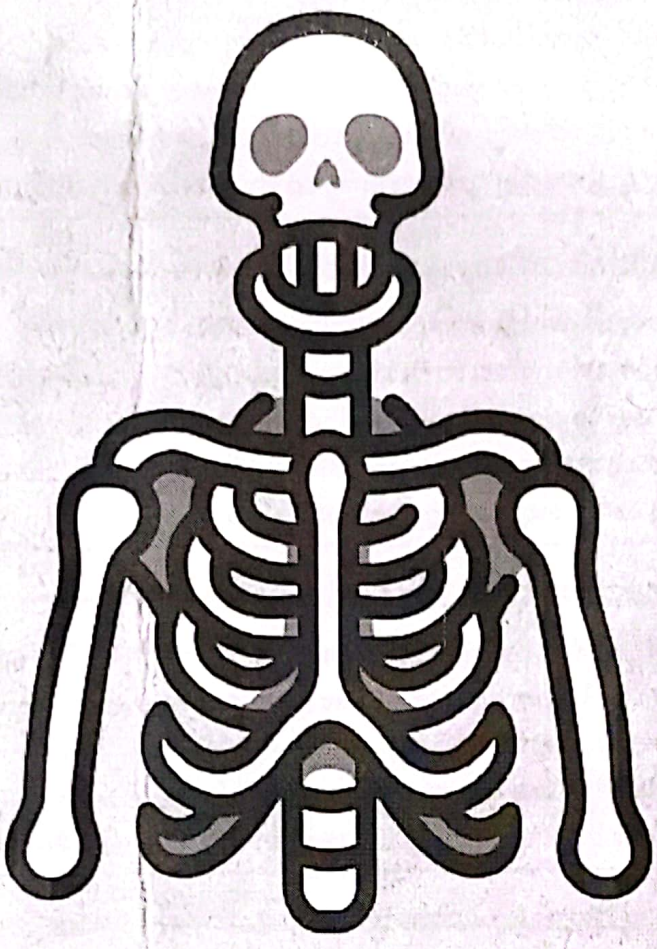

MSK - Lecture 6

3 L.E

MCQ

DR:
HOSSAM SELIM

1. Regarding the axillary artery, all of the following are correct, EXCEPT:
   A. It begins at the outer border of the first rib.
   B. It ends at the lower border of the teres minor muscle.
   C. It is divided into three parts by the pectoralis minor muscle.
   D. Its third part is related medially to the ulnar nerve.
   E. Its third part is related posteriorly to the axillary nerve.

2. The subscapular artery, mark the answer:
   A. Arises from the first part of axillary artery.
   B. Gives the posterior circumflex humeral artery.
   C. Shares in anastomoses around elbow.
   D. It shares in anastomosis around shoulder.
   E. Terminates as by supplying pectroalis major.

3. Lateral thoracic artery, mark the wrong answer:
   A. Arises from the first part of axillary artery.
   B. Runs along the lower border of pectoralis minor.
   C. Supplies serratus anterior.
   D. Anatomoses with the intercostals arteries.
   E. It supplies the lateral part of the mammary gland in females.

4. The following artery pierces clavipectoral fascia
   A. Superior thoracic
   B. Acromiothoracic
   C. Lateral thoracic
   D. Anterior circumflex humeral
   E. Subscapular

5. The muscle that divide the course of axillary artery is:
   A. Pectoralis major
   B. Pectoralis minor
   C. Subclavius
   D. Teres minor
   E. Teres major

6. Which of the followng arteries shares in the anastomosis around surgical neck of humerus?
   A. Anterior circumflex humeral
   B. Subscapular
   C. Lateral thoracic
   D. Acromiothoracic
   E. Superior thoracic

7. Which of the followng arteries is a branch from subclavian artery?
   A. Anterior circumflex humeral
   B. Suprascapular
   C. Lateral thoracic
   D. Acromiothoracic
   E. Superior thoracic

8. The following are branches of the brachial artery EXCEPT:
   A. Profunda brachii artery.
   B. Subscapular artery.
   C. Superior ulnar collateral.
   D. Inferior ulnar collateral.
   E. Nutrient arteries to the humerus.

9. The brachial artery:
   a. Starts at the upper border of teres major muscle.
   b. Ends opposite the neck of radius.
   c. gives superior and lateral thoracic arteries.
   d. Descends on the lateral side of the humerus.
   e. It descends medial to median nerve in cubital fossa.

10. Profunda brachii artery, Mark the wrong answer:
   A. Arises from third part of axillary artery.
   B. Passes with the radial nerve in the spiral groove.
   C. Descends between the heads of triceps.
   D. It supplies triceps muscle.
   E. It shares in anastomosis around elbow.

11. Profunda brachii artery:

a. Arises from third part of axillary artery.
b. Passes with the median nerve in the spiral groove.
c. Descends between long and short heads of biceps.
d. It supplies the radius bone.
e. It supplies triceps

12. Which of the following is a branch of the brachial artery?

a. anterior and posterior circumflex humeral arteries.
b. deltoid artery.
c. superior and inferior ulnar collateral arteries.
d. thoracoacromial artery.
e. anterior and posterior ulnar recurrent arteries.

13. Branches of the ulnar artery in the forearm include:

a. Superficial palmar branch.
b. Inferior ulnar collateral artery.
c. Common interosseous artery.
d. Radial recurrent artery.
e. Superior ulnar collateral artery.

14. The superficial palmar arterial arch of the hand:

a. Is formed primarily by the ulnar artery.
b. Runs with the deep branch of ulnar nerve.
c. Located in thenar compartment.
d. Lies proximal to the deep palmar arterial arch
e. Lies superficial to palmar aponeurosis

15. The following arteries share in the anastomosis around the elbow, EXCEPT:

A. Radial recurrent artery.
B. Anterior circumflex humeral artery.
C. Anterior ulnar recurrent artery.
D. Posterior ulnar recurrent artery,
E. Superior ulnar collateral artery.

16. Which of the following is derived from the radial artery?

a. dorsal and palmar carpal arteries.
b. common interosseous artery.
c. anterior interosseous artery.
d. poster interosseous artery.
e. ulnar recurrent artery.

17. Anastomosis around elbow, mark the wrong answer:

A. Between brachial and both ulnar and radial arteries.
B. Anterior interosseous artery shares in the anastomosis.
C. Present on the front and back of the lateral epicondyle.
D. Profunda brachii shares in the anastomosis.
E. Allows free blood flow when there is obstruction.

18. Trauma to the anatomical snuffbox may affect:

a. Ulnar artery
b. Radial artery
c. Ulnar nerve.
d. Median nerve
e. None of the above.

19. Regarding the radial artery, the following statements are correct, EXCEPT:

A. It begins opposite the neck of radius.
B. It ends by forming the deep palmar arch.
C. Its pulsation can be felt lateral to the flexor carpi radialis.
D. It gives the common interosseous artery.
E. It is one of the terminal branches of the brachial artery.

20. The cephalic vein:

a. Arises from the medial end of the dorsal venous arch of the hand.

b. Is part of floor of the anatomical snuff box.

c. Connected with the axillary vein by the median cubital vein.

d. Pierces the clavipectoral fascia.

e. Runs in the groove between brachialis and brachioradialis

21. Regarding the basilic vein:

a. Arises from the lateral end of the dorsal venous arch of the hand.
b. Crosses the anatomical snuff box.
c. Connected with the axillary vein by the median cubital vein.
d. Pierces the clavipectoral fascia.
e. Continues as the axillary vein.

22. Cephalic vein is a tributary of:

a. brachial vein
b. axillary vein
c. subclavian vein
d. basilic vein
e. median cubital vein

23. Aneurysm in brachial artery may stop the blood flow in

A. Anterior circumflex humeral
B. Radial
C. Lateral thoracic
D. Subscapular
E. Superior thoracic

24. Regarding radial and ulnar arteries, the following statements are true, EXCEPT:

A. They arise from brachial artery at the level of the neck of the radius.
B. Both arteries give recurrent branches.
C. Ulnar artery forms the superficial palmar arch.
D. Radial artery forms the deep palmar arch.
E. Ulnar artery runs deeply in anatomical snuffbox.

25. The following arteries are branches of the ulnar artery EXCEPT:

A. Anterior ulnar recurrent artery.
B. Posterior ulnar recurrent artery.
C. Radialis indicis artery.
D. Common interosseous artery.
E. Deep palmar artery.

26. Branches of the ulnar artery in the forearm include:

A. Superficial palmar branch.
B. Anterior ulnar recurrent artery.
C. Common interosseous artery.
D. All of the above.
E. B and C only.

27. Relations of the ulnar artery at the wrist:

A. Lies anterior to the flexor retinaculum.
B. Lies lateral to the pisiform bone.
C. Lies lateral to the ulnar nerve.
D. All of the above.
E. A and B only.

28. The branches of One of the following arteries don't share in anastomosis around elbow:

A. Radial
B. Ulnar
C. Brachial
D. Anterior interosseus
E. Posterior interosseous

1.	B
2.	D
3.	A
4.	B
5.	B
6.	A
7.	B
8.	B
9.	B
10.	A
11.	E
12.	C
13.	C
14.	A
15.	B
16.	A
17.	B
18.	B
19.	D
20.	D
21.	E
22.	B
23.	B
24.	E
25.	C
26.	E
27.	D
28.	D

MCQs on Lower Limbs

1. One of the following muscles is supplied by the femoral nerve in abdomen: a- Iliacus. b- Vastus lateralis. c- Sartorius. d- Vastus medialis.	A
2. The femoral nerve: a- Comes from the dorsal divisions of the L2, 3 & 4. b- Ends four inches below the inguinal ligament. c- Supply all the muscles of the floor of the femoral triangle except pectineus. d- Passes to the thigh through the lateral compartment of the femoral sheath.	A
3. One of the following structures pass deep to the inguinal ligament: a- Spermatic cord. b- Psoas major muscle. c- Ilioinguinal nerve. d- Great saphenous vein.	B
4. The articularis genu muscle, mark the correct statement: a- Is the deep fibers of the vastus medialis muscle. b- Is fixed to the upper border of the suprapatellar bursa. c- Is supplied by the obturator nerve. d- Arises from the upper half of the medial surface of the femur.	B
5. The head of the quadriceps muscle which acts on the hip joint: a- Vastus lateralis muscle. b- Rectus femoris. c- Vastus intermedius. d- Vastus medialis.	B

6. The sartorius muscle: a- Flexes the knee joint and extends the hip joint. b- Is one of the boundaries of the femoral triangle. c- Arises from the anterior inferior iliac spine. d- Is fusiform muscie.	B
7. One of the following muscles is supplied by the obturator nerve: a- Psoas major. b- Sartorius. c- Iliacus. d- Adductor brevis.	D
8. The obturator nerve: a- Supplies the hip joint. b- Supplies the knee joint. c- Gives. a cutaneous branch to the lower medial side of the thigh. d- Arises from lumbar plexus.	B
9. The most powerful extensor of the hip joint is: a- Semimembranosus. b- Gluteus maximus. c.:. Sacrospinalis. d- Gluteus medius.	B
10. The structure which passes through the greater sciatic foramen is: a- Quadratus femoris. b- Sciatic nerve. c- Tendon of obturator externus muscle. d- Nerve to obturator internus.	B

11. The tensor fascia lata, muscle: a- Attached to the posterior part of iliac crest. b- Inserted into the iliotibial tract. c- Innervated by the inferior gluteal nerve. d- Lies deep to the gluteus medius muscle.	C
12. The following structure deep lies to the gluteus maximus: a- Iliofemoral ligament. b- Obturator nerve. c- Straight head of rectus femoris muscle. d- Greater trochanter of femur.	D
13. Extension of the hip joint is done by the following muscle: a- Iliacus muscle. b- Sartorius muscle. c- Semimembranosus muscle. d- Rectus femoris muscle.	C
14. Abductors of the hip joint are: a- Called into action in sitting. b- Their paralysis cause waddling gait. c- Gluteus medius and maximus. d- Supplied by inferior gluteal nerve.	B
5. The sciatic nerve supplies one of the following muscles: a- Semimembranosus. b- Vastus medialis. c- Rectus femoris. d- Quadratus femoris.	A

16. The obturator nerve; mark the most suitable answer: a- Is formed of the ventral divisions of L2, 3 & 4 nerves. b- Is completely motor. c- Supplies all the adductor and flexor thigh muscles. d- It passes through the adductor canal.	A
17. Paralysis of the saphenous nerve results in the following deformity: a- Inability to invert the foot. b- Loss of sensation on the lateral malleolus. c- Loss of sensation on the medial malleolus. d- Loss of sensation on pocalized area on the dorsum of the foot.	C
18. The powerful extension of the thigh, required when one is standing from a sitting position, is a function of the: a- Gluteus maximus muscle. b- Psoas major muscle. c- Iliacus muscle. d- Obturator externus muscle.	A
19. significant weakness in abduction of the thigh would involve the following muscle: a- Gluteus medius. b- Pectineus. c- Gracilis. d- Adductor magnus.	A
20. The sartorius muscle is : a- It is innervated by the obturator nerve. b- It arises from the anterior superior iliac spin. c- It inserts on the lateral surface of the tibia. d- It forms the medial border of the femoral triangle.	B

21. Medial rotation of the thigh is dcme the following muscle: a- Gluteus maximus. b- Quadratus femoris. c- Gluteus minimus. d- Superior gemellus.	C
22. Which of the following structures passes through the lesser sciatic foramen: a- Piriformis muscle. b- Inferior gluteal nerve. c- Tendon of obturator internus muscle. d- Sciatic nerve.	C
23. The quadratus femoris is inserted into, choose the correct answer: a- Greater trochanter of the femur, b- Lesser trochanter of the femur. c- Middle of trochanteric line. d- Quadrate tubercle.	D
24. Damage to the femoral nerve on the lateral wall of the pelvis would affect the function of the following muscle: a- Sartorius. b- Gracilis. c- Adductor longus. d- Adductor brevis.	A
25. The iliotibial tract receives attachment of the following muscle: a- Tensor fasciae lata muscle. b- Gluteus medius muscle. c- Iliacus. d- Gluteus minimus.	A

26. A crushing blow that breaks the anterior superior iliac spine would damage the origin of the: a- Biceps femoris muscle. b- Pectineus muscle. c- Rectus femoris muscle. d- Sartorius musde.	B
27. Which of the following nerves innervates at least one muscle that acts on both the hip and the knee joints: a- Ilioinguinal nerve. b- Femoral nerve. c- Saphenous nerve. d- Common peroneal nerve.	B
28. In walking, the hip bone of the suspended leg is raised by which of the following muscles acting on the supported side of the body: a- Gluteus maximus. b- Obturator internus. c- Gluteus medius. d- Obturator externus.	C
29. Which of the following muscles is a flexor of the thigh: a- Superior gamellus. b- Adductor longus. c- Gracilis. d- Psoas major.	D
30. The following structure pass through the lesser sciatic foramen: a- Superior gluteal artery. b- Sciatic nerve. c- Obturator internus tendon. d- Pudendal nerve.	C

31. The femoral nerve originates from which of the following roots? a- T12, LI, L2. b- LI, L2, L3. c- L2, L3, L4. d- L3, L4, L5.	C
32. Loss of extension of the knee would result from damage to the:. a- Femoral nerve. b- Tibial nerve. c- Tibial and common peroneal nerves. d- Obturator and femoral nerves.	A
33. Muscle that extends leg include the following muscle: a- Biceps femoris. b- Rectus femoris. c- Semitendinosus. d- Gradlis.	B
34. Concerning the femoral nerve it: a- Enters the thigh medial to the femoral sheath. b- Supplies motor nerves to most of the muscles of the anterior and medial compartments of the thigh. c- Lies medial to the femoral artery in the femoral triangle. d- Has no motor branches below the knee.	D
Regarding the iliotibial tract: a- It is attached between iliac crest and lateral condyle of the tibia. b- It receives the insertion of gluteus medius and tensor fascia lata. c- It belongs to the investing layer of the deep fascia of the thigh. d- It is connected to linea aspra by the medial intermuscular septum.	B

36. Regarding the obturator nerve, mark correct a- Is formed by ventral divisions of 2, 3 and 4' lumbar nerves. b- Supplies ankle joint. c- Crosses the internal iliac artery. d- Leaves the pelvis through femoral sheath.	A
37. Paralysis of the gluteus medius and minimus will result in the: a- Inability to adduct the thigh at the hip joint. b- Sinking of pelvis on the normal side when same foot is raised. c- Inability to laterally rotate the thigh at the hip joint. d- Waddling gate in case of bilateral paralysis of the muscles.	D
38. One of the following muscles is lateral rotator of the thigh: a- The iliopsoas. b- The rectus femoris. c- The biceps femoris. d- The obturator internus.	D
39. The obturator nerve supplies the following muscle: a- Sartorius. b- Iliacus. c- Gracilis. d- Rectus femoris.	C
40. regarding the hamstring muscles (Posterior compartment of thigh), mark correct statement: a- All are supplied by common peroneal nerve. b- They can extend the knee. c- Biceps femoris produces medial rotation of knee. d- Upper half of semimembranosus is membranous.	A

41. Following muscle produce abduction of hip joint: a- Gluteus medius. b- Obturator internus. c:- Superior gemellus. d- Quadratus femoris.	**A**
42. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	**A**
43. To avoid sciatic nerve injury, an intramuscular injection in the gluteal region is given in which of the following quadrants? a- Upper outer quadrant. b- Lower outer quadrant. c- Upper inner quadrant. d- Lower inner quadrant.	**A**
44. Regarding the action of the glutei muscles, one answer is correct: a- Gluteus maximus is medial rotator of the thigh. b- Glutei.Js medius is adductor of the hip joint. c- Both glutei maximus and medius are extensors of the hip joint. d- Both glutei medius and minimus are powerful abductor of the hip joint.	**D**
45. Regarding the patella, choose the correct answer: a. It gives attachment to the quadriceps tendon to its upper part and ligamentum patellae to the lower part. b. Its displacement in the medial direction is prevented by the large medial condyle of the femur. c. It is separated from the skin by a fascia which is liable to become inflamed, producing visible swelling. d. It receives lower horizontal fibers of the adductor longus on its medial side forming patellar retineculum.	**A**

46. In the floor of the femoral triangle one of the following muscles is seen: a- Adductor magnus. b- Iliacus. c- Vastus medialis. d- Tensor fascialata.	**B**
47. The boundaries of the femoral triangle is by the following: **a-** Adductor longus, pectineus and sartorius. **b-** Inguinal ligament, sartorius and adductor longus. c- Inguinal ligament, sartorius and adductor brevis. **d-** Inguinal ligament, sartorius and adductor magnus.	**B**
48. The cribriform fascia is pierced by: a- Great saphenous vein. b- Superior epigastric artery. c- Deep circumflex iliac artery. d- Obturator.	**A**
49. The femoral sheath: a- Its medial compartment is occupied by the femorai artery. b- Its lateral compartment is occupied by the femoral nerve. c- The intermediate compartment is occupied by the femoral vein. d- The anterior wall is formed by fascia iliaca.	**C**
50. The femoral ring is bounded medially by: a- Lacunar ligament. b- Inguinal ligament. c- Pubic ramus. d- Femoral artery.	**A**

... triangle one of the following branches arise from femoral artery: a- Superior epigastric. b- Obturator artery. c- Superficial circumflex iliac. d- Deep circumflex iliac.	C
52. One of the following structures is in the adductor canal: a- Femoral artery. b- Femoral lymph node. c- Profunda femoris artery. d- Great saphenous vein.	A
53. The blood supply of the head of the femur is: a- Only from the trochanteric anastomosis. b- Only from the obturator artery. c- From the gluteal, circumflex femoral and the obturator arteries. d- Mainly from the obturator artery and partially from trochanteric anastomosis.	C
4. Regarding the knee joint: a- The tendon of popliteus muscle is intracapsular, intrasynovial. b- The popliteus muscle lock the knee joint at the beginning of flexion. c- The lateral meniscus is more liable to injury than the medial meniscus. d- Locking of the joint occurs at the end of extension.	D
. The popliteal artery, choose the correct answer: a- Ends at the level of the medial epicondyle of the femur. 6- Is deeper than the popliteal vein. c- Gives no articular branches in the popliteal fossa. d- Accompanies the lateral popliteal nerve in the popliteal fossa.	B

56. The following is inside the knee joint: a- Tendon of biceps femoris muscle. b- Cruciate ligaments. c- Semimembranosus bursa. d- Collateral ligaments.	B
57. The muscles supplied by the superficial peroneal nerve; mark the correct answer: a- Evert the foot. b- Invert the foot. c- Passes in front of the lateral malleolus. d- Dorsiflex the foot.	A
58. Eversion and inversion of the foot occurs at; mark the suitable answer: a- Ankle joint. b- Subtalar joints. c- Inferior tibiofibular joint. d- First tarsometatarsal joint.	B
59. The superficial calf muscles; select the correct statement: a- Plantar flex the ankle joint. b- Invert the foot. c- Enters the foot by passing deep to the flexor retinaculum. d- Are five in number.	A
60. Inversion of the foot is done by; mark the correct answer: a- Tibialis anterior and tibialis posterior muscles. b- Extensor digitorum longus. c- Peroneus longus. d- Peroneus tetieus.	A

61. The following structure attaches to the calcaneus: aa Tibialis posterior tendon. b- Gastrocnemius tendon. c- Flexor hallucis longus tendon. d- Popliteus muscle.	B
62. Concerning the muscles of the first layer of the sole, choose the correct statement: a- Abductor hallucis lies on the lateral side. b- Flexor digitorum brevis lies on the medial side. c- Flexor digitorum accessorius lies in this layer. d- Abductor digiti minimi lies on the lateral side.	D
63. Concerning the third layer of the sole, choose the correct statement: a- Flexor hallucis brevis lies on the lateral side. b- Lumbrical muscles lie in this layer. c- Flexor digiti minimi lies on the medial side. d- Adductor hallucis has two heads.	D
64. Concerning the flexor hallucis longus muscle, choose the correct answer: a- Grooves the lower surface of the calcaneus. b- An important factor in maintaining the transverse arch of the foot. c- Lies superficial to the flexor retinaculum. d- Is supplied by posterior tibial nerve.	D
65. The deltoid ligament; mark the correct answer: a- Lies on the lateral aspect of the ankle joint. b- Attached inferiorly to the spring ligament. c- Is rather a week ligament. d- Is quadrilateral in shape.	B

66. Reduced blood supply to the lateral compartment of the leg results primarily from damage to the: a- Anterior tibial artery. b- Lateral malleolar artery . c- Circumflex fibular artery. d- Peroneal artery.	D
67. The tibial collateral ligament (medial collateral ligament) of the knee extends from the medial epicondyle of the femur to the: a- Lateral condyle of the tibia. b- Medial condyle of the tibia. c- Articular capsule. d- Neck of the fibula.	B
68. The muscles of the posterior compartment of the thigh receive blood supply primarily by branches of the: a- Popliteal artery. b- Profunda femoris artery. c- Superior gluteal artery. d- Femoral artery.	B
69. Concerning the short (small) saphenous vein; mark the most suitable answer: a- Passes in front the lateral malleolus. b- Ascends over the back of the calf. c- Ends in the long saphenous vein. d- -connected directly with femoral vein.	B
70. Concerning the great (long) saphenous vein; tick the most suitable answer: a- Begins at the lateral end of the dorsal venous plexus on the dorsum of foot. b- Ascends immediately behind the lateral malleoulus. c- Ascends along the lateral side of the leg to the knee. d- Ends in the femoral vein.	D

71. The quadratus femoris is inserted into, choose the correct answer: a- Greater trochanter of the femur, b- Lesser trochanter of the femur. c- Middle of trochanteric line. d- Quadrate tubercle.	D
72. Concerning the femoral sheath, choose the correct answer: a- It encloses the proximal portions of the popliteal artery and vein. b- Posteriorly it is formed by the fascia transversalis. c- The femoral nerve is medial to the femoral sheath. d- The inguinal ligament is anterior to the femoral sheath.	D
73. Weak inversion of the foot would result from damage to which of the following muscles: a- Flexor hallucis brevis. b- Flexor digitorum brevis. c- Tibialis anterior. d- Peroneus longus.	D
74. The superficial muscles of the posterior compartment of the leg insert on which of the following bones: a- Talus. b- Navicular. c- Calcaneus. d- Tibia.	C
75. Which of the following muscles dorsiflexes the foot at the ankle joint: a- Peroneus longus. b- Extensor digitorum brevis. c- Tibialis posterior. d- Tibialis anterior.	D
76. The base of the femoral triangle is formed by the: a- Sartorius muscle. b- Adductor longus muscle. c- Inguinal ligament. d- Pubic tubercle.	C
77. The following muscle evert the foot: a- Tibialis anterior. b- Extensor hallucis longus. c- Flexsor hallucis longus. d- Peroneus tertius.	D
78. Concerning the dorsalis pedis artery, choose the correct answer: a- It is a continuation of the anterior tibial artery. b- It enters the sole of the foot by passing between the two heads of second dorsal interosseouus muscle. c- It can be palpated on the dorsum of the foot between the tendons of tibialis anterior and the extensor hallucis brevis muscles. d- It joins the medial plantar artery.	A
79. The structure contribute to the above and lateral boundary of popliteal fossa: a- Semimembranosus muscle. b- Plantaris. c- Biceps femoris. d- Medial head of the gastrocnemius muscle.	C
80. The following structure pass through the lesser sciatic foramen: a- Superior gluteal artery. b- Sciatic nerve. c- Obturator internus tendon. d- Pudendal nerve.	C

81. The femoral ring is bounded anteriorly by: a- Femoral vein. b- Lacunar ligament. c- Obturator artery. d- Inguinal ligament.	D
82. A femoral hernia descends through the femoral canal, and the neck of the hernial sac lies: a- At the saphenous opening. b- Above and medial to the pubic tubercle. c- At the femoral ring. d- In the obturator canal.	C
83. The following structures pass through othe subsartorial canal from upper to lower end is: a- Posterior division of the obturator nerve. b- Saphenous nerve. c- Femoral artery. d- Nerve to the vastus intermedius.	C
84. The floor of the femoral triangle is bounded medially by: a- Pectineus. b- Adductor longus. c- Iliacus. d- Psoas major.	B
85. The peroneal Artery is a branch of which artery: a- Anterior tibial artery. b- Popliteal artery. c- Posterior tibial artery. d- Arcutate artery.	C

86. Which statement is true regarding the ankle joint: a- It is strengthened laterally by the deltoid ligament. b- It is a condylar joint. c- It is formed by the articulation of talus and the distal ends of tibia and fibula. d- It is most stable in the fully planter-flexed position.	C
87. Unlocking of the knee joint to permit flexion Is caused by the action of which muscle: a- Vastus medialis. b- Articularis genu. c- Biceps femoris. d- Popliteus.	D
88. In the adult, the chief arterial supply of the head of femur is from: a- Obturator artery. b- Inferior gluteal artery. c- Deep external pudendal artery. d- Branches from medial and lateral circumflex femoral arteries.	D
89. Damage to the posterior tibial nerve would affect the following muscle: a- Flexor digitorum longus. b- Abductor hallucis. c- F1exor digitorum brevis. d- Flexor hallucis brevis.	A
90. The movements of inversion and eversion take place at: a- First tarsometatarsal joint. b- Ankle joint. c- Talo-calcaneo-navicular joint. d- Inferior tibio-fibular joint.	C
91. The following muscle lies in the lateral compartment of the leg: a- Peroneus tertius. b- Peroneus brevis. c- Tibialis anterior. d- Extensor haHucis longus.	B

2. Regarding muscle actions in lower limb, the following is correct statement: a- Quadriceps femoris flexes the knee joint. b- Abduction and adductkln of the toes by the interossei take place from middle of the second toe. c- Muscles inserted in tendo calcaneus are dorsi flexors. d- Gluteus maximus is a powerful flexor of hip joint.	B
3. Regarding popliteal artery: a- It begins at the opening in the adductor canal. b- It ends at the lower border of the adductor longus muscle. c- Its pulsation can be felt while the knee is extended. d- It gives five genicular branches.	D
4. The nerve commonly injured in fractured neck of the fibula is the: a- Sciatic nerve. b- Superficial peroneal nerve. c- Deep peroneal nerve. d- Common peroneal nerve.	D
5. Following structure passes deep to the extensor retinaculum: a- Tibialis anterior. b- Flexor digitorum longus. c- Posterior tibial vessels. d- Posterior tibial nerve.	A
. Movements of flexion and extension of the foot occur in the following joint: a- Subtalar joint. b- Talocalcaneonavicular joint. - Mid tarsal joint. l- Ankle joint.	D
Following muscle everts the foot: - Tibialus anterior. - Tibialis posterior. · Extensor hallucis longus. - Peroneus brevis.	D

98. The following statement regarding the clinical findings of superficial peroneal nerve injury is correct: a- There is loss of planter flexion of the ankle. b- There is loss of sensations of the sole of the foot. c- Muscles of lateral compartment of the leg are paralyzed. d- Muscles of the sole of the foot are paralyzed.	C
99. Effects of common peroneal nerve injury include one of the following: a- Foot drop and inversion of the foot. b- Foot drop and eversion of the foot. c- Dorsi flexion and eversion of the foot. d- Dorsi flexion and inversion of the foot.	A
100. The following is important factor in maintaining arches of the foot: a- Lateral longitudinal arch is supported by tibialis posterior. b- Abductor digiti minimi supports the medial longitudinal arch. c- Tendon of peroneus longus supports the transverse arch. d- Tendon of flexor hellucis longus supports the arch.	C
101. Regarding adductor canal, the following statement is correct: a- It ends at the adductor hiatus. b- It transmits the femoral nerve. c- Its posterior wall is formed by the adductor brevis muscle only. d- Its lateral wall is formed by the vastus lateralis.	A
102. Regarding the knee joint, the following is true: a- Its lateral meniscus is damaged more frequently than the medial. b- Its lateral meniscus is attached to the lateral collateral ligament. c- Rupture of its anterior cruciate ligament results in excessive backward movement of tibia on femur. d- Stability of the joint depends largely on tone of quadriceps femoris muscle.	D

103. Regarding the femoral sheath and femoral hernia, the following statement is true: a- Femoral sheath is a prolongation of facial lining from the abdominal walls, along the upper part of femoral vessels. b- Femoral canal is the lateral compartment of the femoral sheath. c- Femoral hernia is more common in men than in women. d- Neck of the femoral hernia lies below and medial to the pubic tubercle.	**A**
104. Superficial peroneal nerve supplies one of the following muscles: a- Peroneus tertius. b- Peroneus longus. c- Tibialis anterior. d- Flexor digitorum longus.	**B**
105. One of the following muscles is supplied by the deep peroneal nerve: a- Tibialis anterior. b- Tibialis posterior. c- F1exor digitorum longus. d- Peroneus brevis.	**A**
106. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	**A**
107. Femoral canal contains: a- Femoral artery. b- Femoral vein. c- Femoral nerve. d- Lymphatic vessels.	**D**
108. Regarding great saphenous vein, following statements are true: a- It starts at lateral end of dorsal venous arch. b- It passes behind medial malleolus. c- It empties into femoral vein. d- It has no valves.	**C**
109. Regarding the ankle joint, the following is correct: a- Sprains of the ankle are usually caused by excessive inversion of the foot. b- The medial or deltoid ligament is stronger than the lateral one. c- Its fracture dislocations is caused by forced external rotation and over eversion of the foot. d- Movements of inversion and eversion take place at the ankle joint.	**C**
110. Regarding the arches of the foot, the following is correct statement: a- The head of talus is the .. keystone .. in the center of the lateral longitudinal arch. b- The short and long plantar ligaments support medial longitudinal arch. c- Flat foot is produced by the depression of the arches. d- The cuboid is the center of the medial longitudinal arch.	**C**
111. Regarding the adductor (subsartorial) canal and its contents, mark one correct statement: a- Its anteromedial wall is formed by the vastus medialis. b- Its lateral wall is formed by the vastus lateralis. c- Its posterior wall is formed by the adductor longus and magnus. d- The femoral artery has no branches in the canal.	**C**
112. Regarding the fascia of the thigh, mark the correct statements: a- The fascia lata of thigh is thickened medially to form iliotibial tract. b- The saphenous opening is a gap in the fascia lata. c- The saphenous opening is 6 em below and lateral to pubic tubercle. d- Two facial septa pass from fascia lata to the femur.	

103. Regarding the femoral sheath and femoral hernia, the following statement is true: a- Femoral sheath is a prolongation of facial lining from the abdominal walls, along the upper part of femoral vessels. b- Femoral canal is the lateral compartment of the femoral sheath. c- Femoral hernia is more common in men than in women. d- Neck of the femoral hernia lies below and medial to the pubic tubercle.	A
104. Superficial peroneal nerve supplies one of the following muscles: a- Peroneus tertius. b- Peroneus longus. c- Tibialis anterior. d- Flexor digitorum longus.	B
105. One of the following muscles is supplied by the deep peroneal nerve: a- Tibialis anterior. b- Tibialis posterior. c- Flexor digitorum longus. d- Peroneus brevis.	A
106. Regarding quadriceps femoris muscle, choose the correct answer: a- Extends the knee joint. b- Flexes the knee joint. c- Extends the hip joint. d- Abducts the hip joint.	A
107. Femoral canal contains: a- Femoral artery. b- Femoral vein. c- Femoral nerve. d- Lymphatic vessels.	D

108. Regarding great saphenous vein, following statements are true: a- It starts at lateral end of dorsal venous arch. b- It passes behind medial malleolus. c- It empties into femoral vein. d- It has no valves.	C
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Regarding the popliteal artery, select correct statement: a- Lies superficial to popliteal vein. b- Is crossed anteriorly by the tibial nerve. c- Terminates by dividing into anterior and posterior tibial arteries. d- Ends at the upper border of popliteus muscle.	C
114. Following are important factors in maintaining arches of the foot: a- The medial longitudinal arch is supported by long plantar ligament. b- The lateral longitudinal arch is supported by tibialis posterior. c- Tendon of tibialis anterior suspends the lateral longitudinal arch. d- Tendon of peroneus longus acts as a tie beam for the transverse arch.	D
115. Regarding the medial planter nerve, select the correct answer: a- It arises from the anterior tibial nerve deep to the flexor retinaculum. b- It supplies adductor hallucis muscle. c- It supplies flexor digitorum brevis muscle. d- It supplies medial two planter interossei muscles.	D
16. Regarding tibialis posterior muscle, indicate the correct statement: a- It arises from tibia, fibula and interosseous membrane. b- Its tendon passes superficial to that of flexor digitorum longus. c- It produces inversion of the foot by acting at the ankle joint. d- It helps in suspending the lateral longitudinal arch of the foot.	A
7. The bone which fracture in over doing the movement of eversion is: a- The lateral malleolus. b- The calcaneum. c- The medial malleolus. d- The inferior margin of lower end of tibia.	A

118. If a surgeon wants to take bone chips for grafting, the most suitable place in the leg and foot is: a- Medial malleolus. b- Anteromedial surface of the tibia. c- The first metarsal bone. d- The fibula.	D
119. Regarding the fracture of the neck of the femur, select true statement: a- Is common in young age. b- Produces necrosis of the greater trochanter. c- Is easy to heal in old age. d- The limb rotates laterally after this fracture.	D
120. In a "locked knee" which of the following ligaments become a- Fibular collateral. b- Tibial collateral. c- Anterior cruciate. d- Posterior cruciate.	C
121. The common type of football injuries in the knee joint is rupture of choose the correct answer: a- Fibular collateral ligament. b- Posterior cruciate ligament. c- Plantar aponeurosis. d- Medial meniscus.	D
122. The muscle which act as plantar flexors of the foot include: a- Extensor hallucis longus. b- Extensor digitorum longus. c- Tibialis anterior. d- Soleus.	D

...-old man suffered a superior gluteal nerve injury in a motorcycle crash in which his right lower limb was caught beneath the bike. He is stabilized in the emergency department. Later he is examined and he exhibits a waddling gait and a positive Trendelenburg sign. Which of the following would be the most likely physical finding in this patient? a. Difficulty in standing from a sitting position b. The left side of the pelvis droops or sags when he attempts to stand with his weight supported just by the right lower limb c. The right side of the pelvis droops or sags when he attempts to stand with his weight supported just by the left lower limb d. Weakened flexion of the right hip e. Difficulty in sitting from a standing position	B
2. After dividing the overlying superficial tissues and gluteal musculature in a 68-year-old female patient, the orthopedic surgeon carefully identified the underlying structures while performing a total hip arthroplasty. The key landmark in the gluteal region, relied upon in surgical explorations of this area, is provided by which of the following structures? A. Gluteus medius B. Obturator internus tendon C. Sciatic nerve D. Piriformis muscle E. Spine of the ischium	D
A 56-year-old man with advanced bladder carcinoma suffers from difficulty while walking. Muscle testing reveals weakened adductors of right thigh. Which nerve is most likely compressed by tumor to result in walking difficulty? A. Femoral B. Obturator C. Common fibular (peroneal) D. Tibial Sciatic	B

4. A 32-year-old patient received a badly placed intramuscular injection to the posterior part of his gluteal region. The needle injured a motor nerve in the area. Later, he had great difficulty rising to a standing position from a seated position. Which muscle was most likely affected by the injury? A. Gluteus maximus B. Gluteus minimus C. Hamstrings D. Iliopsoas E. Obturator internus	A
5. A 22-year-old woman is admitted to the emergency department after another vehicle collided with the passenger side of the convertible in which she was riding. Radiologic examination reveals an avulsion fracture of the greater trochanter. Which of the following muscles would continue to function normally if such an injury was incurred? A. Piriformis B. Obturator internus C. Gluteus medius D. Gluteus maximus E. Gluteus minimus	D
6. A 29-year-old construction worker falls onto some rusty wire mesh and suffers a deep laceration to his right buttock. When the ambulance arrives to transporthim to the emergency department and it is noted that he has difficulty stepping up into the ambulance with his right leg. Which nerve has probably been damaged? A. Superior gluteal B. Tibial C. Common fibular (peroneal) D. Inferior gluteal E. Nerve to piriformis	D

7. **A 43-year-old man visits the outpatient clinic with a painful, swollen knee joint. The patient's history reveals chronic gonococcal arthritis. A knee aspiration is ordered for bacterial culture of the synovial fluid. A standard suprapatellar approach is used, and the needle passes from the lateral aspect of the thigh into the region immediately proximal to and deep to the patella. Through which of the following muscles would the needle pass?**

A. Adductor magnus
B. Short head of biceps femoris
C. Rectus femoris
D. Sartorius
E. Vastus lateralis

E

8. **A 23-year-old man is taken to the emergencyDepartment because of anorexia, nausea, vomiting, and Severe abdominal pain in the right lower quadrant. On Examination, he has tenderness in the right lower quadrant with rebound tenderness. The physician suspects Appendicitis. The patient was unable to straighten the patient's flexed thigh. Which of theFollowing muscles most likely caused this symptom?**

A. Adductor magnus
B. Psoas major
C. Biceps femoris
D. Obturator internus
E. Gluteus Medius

B

9. **Three years following a 62-year-old's hip replacement, the man's CT scans indicated that two of his larger hip muscles had been replaced by adipose tissue. The opinion is offered that his superior gluteal nerve could have been injured during the replacement procedure, and the muscles supplied by that nerve had atrophied and been replaced by fat. Which of the following muscles receives its innervation from the superior gluteal nerve?**

A. Tensor fasciae latae
B. Rectus femoris
C. Gluteus maximus
D. Piriformis

A

10. **During a gymnastic session, a 24-year-old woman Suddenly developed pain and swelling on the right Buttock. This happened following a forceful thigh Movement. There is severe weakness of right hip extension and knee flexion. Adduction of the thigh is also Slightly weak. An avulsion fracture of the ischial tuberosity is found on a radiograph. Which of the following Group of muscles has most likely involved in this Process?**

A. Adductor brevis, adductor longus, adductor magnus, pectineus, and gracilis
B. Biceps femoris, semimembranosus, semitendinosus, and adductor magnus
C. Iliacus and psoas major
D. Gluteus medius and gluteus minimus
E. Gluteus maximus and adductor magnus
F. Iliacus, psoas major, rectus femoris and sartorius

B

11. **A 22-year-old woman is admitted with high fever and vaginal discharge. Physical and laboratory examinations reveal gonorrheal infection. A series of intramuscular antibiotic injections are ordered. Into which of the following parts of the gluteal region should the antibiotic be injected to avoid nerve injury?**

A. Anterior and superior to a line between the posterior superior iliac spine and the greater trochanter
B. In the middle of a line between the anterior superior iliac spine and the ischial tuberosity
C. Inferolateral to a line between the posterior superior iliac spine and the greater trochanter
D. Inferomedial to a line between the posterior superior iliac spine and the greater trochanter
E. Halfway between the iliac tuberosity and the greater trochanter

A

12. A 45-year-old intoxicated man was struck by a tour bus while walking in the middle of the street. The man was admitted to the emergency department andduring physical examination was diagnosed with "adductor gait," in which an individual crosses one limb in front of the other, due to powerful hip adduction. Which of the following nerves was most likely involved in this condition? **D**

A. Tibial
B. Obturator
C. Inferior gluteal
D. Superior gluteal
A. Femoral

13. A 6-year-old boy with a family history of muscular disease leading to wheelchair dependency in his maternal uncles presents with difficulty in standing from the seated position. He bends forward, uses his hands to help him push up from the floor, and then straightens his knees to stand. Which of the following muscles is most likely involved by this disease process? **D**

A. Tibialis posterior and gastrocnemius
B. Quadratus femoris
C. Gluteus medius and gluteus minimus
D. Gluteus maximus
E. Hamstrings

14. The neurosurgeon had removed a portion of the dense tissue (dura mater) covering the brain of the patient when she removed the tumor that had invaded the skull. To replace this important tissue covering of the brain, she took a band of the aponeurotic tissue of the lateral aspect of the thigh, covering the vastus lateralis muscle. What muscle, supplied by the inferior gluteal nerve, inserts into this band of dense tissue as part of its insertion? **C**

A. Gluteus medius
B. Gluteus minimus
C. Gluteus maximus
D. Tensor fasciae latae
Rectus femoris

15. In the radiographs of the knee of a male 28-yearold basketball player, who had apparently suffered a tear in a medial ligament of the knee, the tubercle on the superior aspect of the medial femoral condyle could be seen more clearly than in most individuals. What muscle attaches to this tubercle? **D**

A. Semimembranosus
B. Gracilis
C. Popliteus
D. Adductor magnus
E. Vastus medialis

16. A 51-year-old immigrant with tuberculosis is found to have large flocculent masses over the lateral lumbar spine. There is a similar mass located in the ipsilateral upper medial side of thigh. This pattern of involvement most likely suggests an abscess tracking along which of the following muscles? **B**

A. Piriformis
B. Psoas major
C. Adductor longus
D. Gluteus maximus
E. Obturator internus

17. A 29-year-old woman is involved in a car crash and is taken to the emergency department. Radiographs reveal a fracture of her pelvis. During healing of the pelvic fracture, a nerve becomes entrapped in the bone callus. Musculoskeletal examination reveals an inability to adduct the thigh. Which of the following nerves is most likely affected? **A**

A. Obturator
B. Femoral
C. Inferior gluteal
D. Superior gluteal
E. . Tibial

... is a psychiatric patient suddenly becomes aggressive. In order to calm him down, the patient is given an intramuscular injection in the upper lateral quadrant of thebuttock. The injection is given at this specific locationto prevent damage to which of the following nerves?

A. Lateral femoral cutaneous
B. Sciatic
C. Superior gluteal
D. Obturator
A. E. Inferior gluteal

B

19. A 58-year-old woman presents to the outpatient surgery clinic for removal of varicose veins on the medial aspect of her foot. The operation was successful however, one month later she reports loss of sensationover the medial aspect of her leg and foot. Which of the following nerves was most likely injured during theprocedure?

A. Saphenous
B. Obturator
C. Lateral femoral cutaneous
D. Tibial
E. Femoral

A

20. After a revascularization procedure involving the common iliac artery, a 68-year-old man has difficulty walking. Nerve conduction studies reveal decreased activity in the nerve that innervates the adductors of the thigh. Which nerve is this?

A. Femoral
B. Obturator
C. Common fibular (peroneal)
D. Tibial
E. Sciatic

B

21. A 23-year-old woman was taken to the emergency department after being involved in a head-on collision with a truck. On physical examination a hematoma was seen in the medial thigh. A CT scan revealed a fracture of the femur with a ruptured femoral artery. She was taken to the operating room for repair of the damaged structures. Two days postoperatively during physicalexamination the patient has loss of sensation to the anterior medial thigh and medial side of her leg and foot. Branches of which of the following nerves were most likely injured in the repair of the fracture?

A. Femoral
B. Saphenous
C. Obturator
D. Tibial
E. Fibular (peroneal)

A

22. A 43-year-old victim of a drunk driving car crash is undergoing reconstructive arm surgery. The surgeon performs an autograft using a weak adductor of the leg located superficially on the medial side of the thigh. Which muscle is most likely being harvested to perform this reconstruction?

A. Gracilis
B. Sartorius
C. Rectus femoris
D. Vastus lateralis
E. Vastus medialis

A

23. During a 100-meter sprint a 25-year-old male Olympic athlete suddenly pulls up in discomfort and is seen to be clutching the back of his left thigh in agony.Upon further examination the athlete describes the pain as a "tearing" sensation and is unable to flex his knee. Based on these symptoms which of the following actions are affected due to this injury?

A. Flexion of the hip and extension of the knee
B. Extension of the hip and dorsiflexion
C. Medial rotation of the hip
D. Lateral rotation of the hip
E. Hip extension and knee flexion

24. A 42-year-old man is admitted to the emergency department after his automobile hit a tree. He is treated for a pelvic fracture and several deep lacerations. Physical examination reveals that dorsiflexion and inversion of the left foot and extension of the big toe are very weak. Sensation from the dorsum of the foot, skin of the sole, and the lateral aspect of the foot has been lost and the patellar reflex is normal. The foot is everted and plantar flexed. Which of the following structures is most likely injured?

A

a. The lumbosacral trunk at the linea terminalis
b. L5 and S1 spinal nerves torn at the intervertebral foramen
c. Fibular (peroneal) division of the sciatic nerve at the neck of the fibula
d. Sciatic nerve injury at greater sciatic foramen ("doorway to gluteal region")
e. Tibial nerve in the popliteal fossa

25. A 23-year-old man is admitted to the emergency department with a deep, bleeding stab wound of the pelvis. After the bleeding has been arrested, a magnetic resonance imaging (MRI) examination gives evidence that the right ventral primary ramus of L4 has been transected. Which of the following problems will most likely be seen during physical examination?

A

a. Reduction or loss of sensation from the medial aspect of the leg
b. Loss of the Achilles tendon reflex
c. Weakness of abduction of the thigh at the hip joint
d. Inability to evert the foot

26. A 45-year-old man is treated at the hospital after he fell from his bicycle. Radiologic examination reveals fractures both of the tibia and the fibula. On physical examination the patient has a foot drop, but normal eversion. Which of the following nerves is most likely injured?

E

a. *Tibial*
b. *Common fibular (peroneal)*
Superficial fibular (peroneal)
Saphenous
Deep fibular (peroneal)

27. A 49-year-old male construction worker is admitted to the emergency department with a painful lump on the proximal medial aspect of his thigh. Radiologic and physical examinations reveal that the patient has a herniation of abdominal viscera beneath the inguinal ligament into the thigh. Through which of the following openings will a hernia of this type initially pass to extend from the abdomen into the thigh?

A

a. Femoral ring
b. Superficial inguinal ring
c. Deep inguinal ring
d. Fossa ovalis
e. Obturator canal

28. A 37-year-old man is admitted to the hospital after an injury to his foot while playing flag football with friends on a Saturday morning. A series of radiographs demonstrates a fracture involving the talocrural (tibiotalar, ankle) joint. Which movements are the major ones to be affected by this injury?

A

a. Plantar flexion and dorsiflexion
b. Inversion and eversion
c. Plantar flexion, dorsiflexion, inversion, and eversion
d. Plantar flexion and inversion
e. Dorsiflexion and eversion

29. A 45-year-old man presents at the local emergency clinic with the complaint of a painful knee and difficulty in walking. A computed tomography (CT) scan examination reveals a very large cyst in the popliteal fossa compressing the tibial nerve. Which movement will most likely be affected?

E

a. Dorsiflexion of the foot
b. Flexion of the thigh
c. Extension of the digits
d. Extension of the leg
e. Plantar flexion of the foot

30. A 19-year-old football player was hit on the lateral side of his knee just as he put that foot on the ground. Unable to walk without assistance, he is taken to the hospital. An MRI examination reveals a torn medial collateral ligament. Which structure would most likely also be injured due to its attachment to this ligament? a. Medial meniscus b. Anterior cruciate ligament c. Lateral meniscus d. Posterior cruciate ligament e. Tendon of the semitendinosus	**A**
31. A 49-year-old man underwent a coronary bypass graft procedure using the great saphenous vein. Postoperatively, the patient complains of pain and general lack of normal sensation on the medial surface of the leg and foot on the limb from which the graft was harvested. Which nerve was most likely injured during surgery? a. Common fibular (peroneal) b. Superficial fibular (peroneal) c. Lateral sural d. Saphenous e. Tibial	**D**
32. A 72-year-old woman is admitted to the hospital with a painful right foot. A CT scan examination reveals a thrombotic occlusion of the femoral artery in the proximal part of the adductor canal. Which artery will most likely provide blood supply to the leg through the genicular anastomosis? a. Medial circumflex femoral b. Descending branch of the lateral circumflex femoral c. First perforating branch of the deep femoral d. Inferior gluteal e. Descending genicular branch of femoral	**B**
33. A 75-year-old woman is admitted to the hospital after falling in her bathroom. Radiologic examination reveals an extracapsular fracture of the femoral neck. Which artery is most likely at risk for injury? a. Inferior gluteal b. First perforating branch of deep femoral c. Medial circumflex femoral d. Obturator e. Superior gluteal	**C**
34. Upon removal of a knee-high leg cast, a 15-yearold boy complains of numbness of the dorsum of his right foot and inability to dorsiflex and evert his foot. Which is the most probable site of the nerve compression that resulted in these symptoms? a. Popliteal fossa b. Neck of the fibula c. Lateral compartment of the leg d. Anterior compartment of the leg	**B**
35. During the preparation of an evening meal a female medical student dropped a sharp, slender kitchen knife. The blade pierced the first web space of her foot, resulting in numbness along adjacent sides of the first and second toes. Which nerve was most likely injured? a. Saphenous b. Deep fibular (peroneal) c. Superficial fibular (peroneal) d. Sural e. Common fibular (peroneal)	**B**
36. The news reported that the 58-year-old ambassador received a slashing wound to the medial thigh and died from exsanguination in less than 2 minutes. What was the most likely nature of his injury? a. The femoral artery was cut at the inguinal ligament b. A vessel or vessels were injured at the apex of the femoral triangle c. The femoral vein was transected at its junction with the saphenous vein d. The medial circumflex femoral was severed at its origin	**B**

37. Following an injury suffered in a soccer match, a 32-year-old woman is examined in a seated position in the orthopedic clinic. Holding the right tibia with both hands, the clinician can press the tibia backward under the distal part of her femur. The left tibia cannot be displaced in this way. Which structure was most likely damaged in the right knee?

a. Anterior cruciate ligament
b. Lateral collateral ligament
c. Medial collateral ligament
d. Medial meniscus
e. Posterior cruciate ligament

E

38. A 72-year-old woman suffered a hip dislocation when she fell down the steps to her garage. Which of the following is most significant in resisting hyperextension of the hip joint?

a. Pubofemoral ligament
b. Ischiofemoral ligament
c. Iliofemoral ligament
d. Negative pressure in the acetabular fossa
e. Gluteus maximus muscle

C

39. A 75-year-old man is transported to the emergency department with severe pain of his right hip and thigh. A radiologic examination reveals avascular necrosis of the femoral head. Which of the following conditions most likely occurred to produce avascular necrosis in this patient?

a. Dislocation of the hip with tearing of the ligament of the head of the femur
b. Intertrochanteric fracture of the femur
c. Intracapsular femoral neck fracture
d. Thrombosis of the obturator artery
e. Comminuted fracture of the extracapsular femoral neck

C

40. A 58-year-old male farmer was accidentally struck with a scythe (a long, curved cutting blade) by another worker while they were cutting wheat. He was admitted to the county hospital with severe bleeding. During physical examination the doctor noted that the patient had a foot drop; sensation was present over the dorsum of the foot and the skin of the posterior calf. Which of the following nerves was injured?

A. Femoral nerve
B. Sciatic nerve
C. Superficial fibular (peroneal) nerve
D. Deep fibular (peroneal) nerve
E. Common fibular (peroneal) nerve

D

41. A 46-year-old woman stepped on a broken wine bottle on the sidewalk and the sharp glass entered the posterior part of her foot. The patient was admitted to the hospital, and a physical examination concluded that her lateral plantar nerve had been transected (cut through). Which of the following conditions will most likely be confirmed by further physical examination?

A. Loss of sensation over the plantar surface of the third toe
B. Paralysis of the abductor hallucis
C. Paralysis of the interossei and adductor hallucis
D. Flexor hallucis brevis paralysis
E. Flexor digitorum brevis paralysis

C

42. A 22-year-old male martial arts competitor was examined by the clinician because of pain and serious disability suffered from a kick to the side of his knee. Physical examination revealed a dark bruise just distal to the head of the fibula. Which of the following muscles will most likely be paralyzed?

A. Tibialis anterior and extensor digitorum longus
B. Tibialis posterior
C. Soleus and gastrocnemius
D. Plantaris and popliteus
E. Flexor digitorum longus and flexor hallucis Longus

A

43. In an accident during cleanup of an old residential area of the city, the Achilles tendon of a 32-year-old worker was cut through by the blade of a brush cutter. The patient is admitted to the hospital and a laceration of the Achilles tendon is diagnosed. Which of the following bones serves as an insertion for the Achilles tendon? a. Calcaneus b. Fibula c. Cuboid d. Talus E. Navicular	A
44. During a football game a 21-year-old wide receiver was illegally blocked by a linebacker, who threw himself against the posterolateral aspect of the runner's left knee. As he lay on the ground, the wide receiver grasped his knee in obvious pain. Which of the following structures is frequently subject to injury from this type of force against the knee? A. Fibular collateral ligament B. Anterior cruciate ligament C. Lateral meniscus and posterior cruciate ligament D. Fibular collateral and posterior cruciate ligament E. All the ligaments of the knee will be affected	B
45. Lower limb angiography of an 82-year-old woman reveals a possible cause for her limb pain during her workout routines in the health spa. The artery that was occluded is one that should have been demonstrable passing between the proximal part of the space between the tibia and fibula. Which of the following arteries is most likely affected? A. Deep femoral B. Popliteal C. Posterior tibial D. Fibular (peroneal) E. Anterior tibial	E

46. A 34-year-old male power lifter visits the outpatient clinic because he has difficulty walking. During physical examination it is observed that the patient has a problem unlocking the knee joint to permit flexion of the leg. Which of the following muscles is most likely damaged? A. Biceps femoris B. Gastrocnemius C. Popliteus D. Semimembranosus E. Rectus femoris	C
47. A popliteal arterial aneurysm can be very fragile, bursting with great loss of blood and the potential loss of the leg if it is not dealt with safely and effectively. In the 18th century, Dr. John Hunter (1728-1793) discovered that if a primary artery of the thigh is temporarily compressed, blood flow in the popliteal artery can be reduced long enough to treat the aneurysm in the popliteal fossa surgically, with safety. What structure is indicated in Fig. 5-3 that is related to his surgical procedure? A. Sartorius B. Femoral vein C. Femoral artery D. Gracilis E. Adductor brevis	A
48. A 49-year-old male worker fell from a ladder, with his weight impacting on the heels of his feet. Radiologic examination reveals comminuted calcaneal fractures. After the injury the contraction of which one of the following muscles could most likely increase the pain in the injured foot? A. Flexor digitorum profundus B. Gastrocnemius C. Tibialis posterior D. Tibialis anterior E. Fibularis (peroneus) longus	B

49. A 24-year-old woman received a small-caliber bullet wound to the popliteal fossa from a drive-by assailant. The patient was admitted to the emergency department, where the surgeons recognized that the bullet had severed the tibial nerve. Such an injury would most likely result in?

A. Inability to extend the leg at the knee
B. Foot drop
C. A dorsiflexed and everted foot
D. A plantar flexed and inverted foot

C

50. An 82-year-old grandmother slipped on the polished floor in her front hall and was transported to the emergency department and admitted for examination with a complaint of great pain in her right lower limb. During physical examination it is observed by the resident that the right lower limb is laterally rotated and noticeably shorter than her left limb. Radiologic examination reveals an intracapsular fracture of the femoral neck. Which of the following arteries supplies the head of the femur in early childhood but no longer in a patient of this age?

A. Superior gluteal
B. Lateral circumflex femoral
C. A branch of the obturator artery
D. Inferior gluteal

C

51. The swollen and painful left foot of a 23-year-old female long distance runner is examined in university orthopedic clinic. She states that she stepped on unseen sharp object while running through the park several days earlier. Emergency surgery is ordered to deal with her tarsal tunnel syndrome. The tarsal tunnel is occupied normally by tendons, vessels, and nerves that pass beneath a very strong band of tissue (flexor retinaculum) on medial side of ankle. What is the most anterior of structures that pass through this tunnel?

A. Flexor hallucis longus tendon
B. Plantaris tendon
C. Tibialis anterior tendon
D. Tibialis posterior tendon

D

52. A 22-year-old man is admitted to the emergency department after falling from his bicycle. Radiologic examination reveals a fracture of the tibia above the ankle. MRI and physical examination reveal that the tibial nerve is severed on the posterior aspect of the tibia. Which of the following signs will most likely be present during physical examination?

A. Sensory loss of the dorsum of the foot
B. Sensory loss on the sole of the foot
C. Foot drop
D. Paralysis of the extensor digitorum brevi
E. Sensory loss of the entire foot

B

53. A 24-year-old man is admitted to the emergency department after a car collision. Radiologic examination reveals a fracture at the junction of the middle and lower thirds of the femur. An MRI examination provides evidence that the popliteal vessels were injured when the distal fragment of the fracture was pulled posteriorly. Which of the following muscles is most likely to displace the distal fracture fragment?

A. Soleus
B. Gastrocnemius
C. Semitendinosus
D. Gracilis

B

54. A 65-year-old man is admitted to the hospital after falling from his roof while cleaning leaves and pine needles from the gutters. Among other injuries suffered in his fall, radiologic examination reveals a fracture of the talus bone in one foot. Much of the blood supply of this bone can be lost in such an injury and can result in osteonecrosis. From what artery does this bone receive its primary vascular supply?

A. Medial plantar
B. Lateral plantar
C. Dorsalis pedis
D. Anterior tibial
E. Posterior tibial

E

35. A 34-year-old male long-distance runner complained to the team physician of swelling and pain of his shin. Skin testing in a physical examination showed normal cutaneous sensation of the leg. Muscular strength tests showed marked weakness of dorsiflexion and impaired inversion of the foot. Which nerve serves the muscles involved in the painful swelling? A. Common fibular (peroneal) B. Deep fibular (peroneal) C. Sciatic D. Superficial fibular (peroneal) E. Tibial	**B**
36. A 7-year-old girl accidentally stepped on a sharp snail shell while walking to the beach. She was admitted to the hospital, where she received a tetanus shot, and the wound was cleaned thoroughly and sutured. One week later, during a return visit to her physician, it is seen that she has great difficulty in flexing her big toe, even though there is no inflammation present in the sole of the foot. Which nerve was most likely damaged by the piercing of the shell? A. Lateral plantar nerve B. Medial plantar nerve C. Sural nerve D. Superficial fibular (peroneal) nerve	**B**
37. A 49-year-old man is admitted to the emergency department with a cold and pale foot. Physical examination reveals that the patient suffers from peripheral vascular disease; duplex ultrasound studies indicate possible occlusion of his popliteal artery, and the pulse of the posterior tibial artery is absent. What is the most common location for palpation of the pulse of the posterior tibial artery? A. Lateral to the muscular belly of the abductor hallucis B. Posteroinferior to the medial femoral condyle C. Groove midway between the lateral malleolus and the calcaneus D. Groove midway between the medial malleolus and the calcaneus E. Medially, between the two heads of the gastrocnemius	**D**

58. Young parentswere concerned thattheir 14-monthold daughter had not yet begun walking. Their pediatrician reassured them, saying that one of the muscles of the leg, the fibularis (peroneus) tertius, had to complete its central neurologic development before the child could lift the outer corner of the foot and walk without stumbling over her toes. What is the most common nerve supply of this muscle? A. Sural B. Lateral plantar C. Deep fibular (peroneal) D. Superficial fibular (peroneal) E. Tibial	**C**
59. A 55-year-old man is admitted to the hospital for an iliofemoral bypass. The operation is performed successfully and the blood flow between the iliac and femoral arteries is restored. During rehabilitation which of the following arteries should be palpated to monitor good circulation of the lower limb? A. Anterior tibial B. Deep fibular (peroneal) C. Deep plantar D. Dorsalis pedis E. Dorsal metatarsal	**D**
60. A 55-year-old woman is bitten by a dog in the dorsum of the foot and is admitted to the emergency department. The wound is cleaned thoroughly, during which it is seen that no tendons have been cut, but the dorsalis pedis artery and the accompanying nerve have been injured. Which of the following conditions would be expected during physical examination? A. Clubfoot B. Foot drop C. Inability to extend the big toe D. Numbness between the first and second toes	**D**

61. A 31-year-old woman presents to the department of surgery with a complaint of facial paralysis (Bell's palsy), which had appeared a year earlier and had resulted in paralysis of muscles of one side of her face. The chief of plastic surgery recommends a nerve graft, taking a cutaneous nerve from the lower limb to replace the defective facial nerve. The surgery is successful. Six months after the procedure, there is restoration of function of previously paralyzed facial muscles. There is an area of skin on the back of the leg laterally and also on the lateral side of the foot that has no sensation. What nerve was used in the grafting procedure? A. Superficial fibular (peroneal) B. Tibial C. Common fibular (peroneal) D. Sural	**D**
62. A 27-year-old woman had suffered a penetrating injury in the popliteal region by an object thrown from a riding lawnmower. She was admitted to the emergency department for removal of the foreign object. After making a midline incision in the skin of the popliteal fossa, the surgical resident observed a vein of moderate size in the superficial tissues. What vein would be expected at this location? A. Popliteal vein B. Perforating tributary to the deep femoral vein C. Great saphenous vein D. Lesser (short) saphenous vein	**D**
63. A 58-year-old diabetic patient is admitted to the hospital with a painful foot. Physical examination reveals that the patient suffers from peripheral vascular disease. There is no detectable dorsalis pedis arterial pulse, but the posterior tibial pulse is strong. Which of the following arteries will most likely provide adequate collateral supply from the plantar surface to the toes and dorsum of the foot? A. Anterior tibial B. Fibular (peroneal) C. Arcuate D. Medial plantar E. Lateral plantar	**E**
64. A 45-year-old is admitted to the hospital after his left leg impacted a fence post when he was thrown from a powerful four-wheel all-terrain vehicle. Radiologic examination reveals posterior displacement of the tibia upon the femur. Which of the following structures was most likely injured? A. Anterior cruciate ligament B. Posterior cruciate ligament C. Lateral collateral ligament D. Lateral meniscus ligament E. Patellar ligament	**B**
65. A 55-year-old man visits the outpatient clinic complaining that he cannot walk more than 5 minutes without feeling severe pain in his feet. An image of the feet of this patient is shown in Fig. 5-10. What is the most common cause of this condition? A. Collapse of medial longitudinal arch, with eversion and abduction of the forefoot B. Exaggerated height of the medial longitudinal arch of the foot C. Collapse of long plantar ligament D. Collapse of deltoid ligament E. Collapse of plantar calcaneonavicular ligament	**A**
66. A 32-year-old man is admitted to the emergency department after a car collision. Radiologic examination reveals a distal fracture of the femur. The patient is in severe pain, and a femoral nerve block is administered. What landmark is accurate for localizing the nerve for injection of anesthetics? A. 1.5 cm superolateral to the pubic tubercle B. 1.5 cm medial to the anterior superior iliac spine C. 1.5 cm lateral to the femoral pulse D. 1.5 cm medial to the femoral pulse E. Midway between the anterior superior iliac spine and pubic symphysis	**C**

67. A 48-year-old woman is admitted to the hospital with severe abdominal pain. Several imaging methods reveal that the patient suffers from intestinal ischemia. An abdominopelvic catheterization is ordered for antegrade angiography. A femoral puncture is performed. What is the landmark for femoral artery puncture? A. Halfway between anterior superior iliac spine and pubic symphysis B. 4.5 cm lateral to the pubic tubercle C. Midpoint of the inguinal skin crease D. Medial aspect of femoral head E. Lateral to the fossa ovalis	D
68. A 23-year-old man is admitted to the emergency department after injuring his knee while playing football. During physical examination there is pain and swelling of the knee, in addition to locking of the knee in full extension. Radiologic examination reveals a bucket handle meniscal tear (Fig. 5-12). Which of the following ligaments is most likely injured? A. Posterior cruciate B. Medial collateral C. Lateral collateral D. Anterior cruciate E. Coronary	D
69. In preparing to isolate the proximal portion of the femoral artery, the vascular surgeon gently separated it from surrounding tissues. Posterior to the femoral sheath, what muscle forms the lateral portion of the floor of the femoral triangle? A. Adductor longus B. Iliopsoas C. Sartorius D. Pectineus E. Rectus femoris	B

70. A 50-year-old man is admitted to the emergency department after a car crash. An MRI examination reveals an injured anterior cruciate ligament. Physical examination reveals a positive drawer sign. Which of the following signs is expected to be present during physical examination? A. The tibia can be slightly displaced anteriorly B. The tibia can be slightly displaced posteriorly C. The fibula can be slightly displaced posteriorly D. The fibula can be slightly displaced anteriorly E. The tibia and fibula can be slightly displaced anteriorly	A
71. A 23-year-old male basketball player injured hisfoot during training and is admitted to the emergency department. An MRI examination reveals a hematoma around the medial malleolus. Upon physical examination the patient shows excessive eversion of his foot. Which of the following ligaments most likely has a tear? A. Plantar calcaneonavicular (spring) B. Calcaneofibular C. Long plantar D. Short plantar E. Deltoid	E
72. A 5-year-old boy is admitted to the emergency department after a car collision. Radiologic examination reveals a fracture of the head of the femur. An MRI examination reveals a large hematoma. Which of the following arteries is most likely injured? A. Deep circumflex iliac B. Acetabular branch of obturator C. Descending branch of lateral circumflex femoral D. Medial circumflex femoral E. Radicular branches of circumflex artery	B

73. A 49-year-old man is admitted to the emergency department with a cold and pale foot. Physical examination reveals that the patient suffers from peripheral vascular disease; his popliteal artery is occluded and no pulse is felt upon palpation. What is the landmark to feel the pulse of the femoral artery?

A. Adductor canal
B. Femoral triangle
C. Popliteal fossa
D. Inguinal canal
E. Pubic symphysis

B

74. A 49-year-old man is admitted to the emergency department complaining that he has difficulties walking. Physical examination reveals that the patient suffers from peripheral vascular disease. An ultrasound examination reveals an occlusion of his femoral artery at the proximal portion of the adductor canal. Which of the following arteries will most likely provide collateral circulation to the thigh?

A. Descending branch of the lateral circumflex femoral
B. Descending genicular
C. Medial circumflex femoral
D. First perforating branch of deep femoral
E. Obturator artery

A

75. A 34-year-old man is lifting heavy weights while doing squats. Unfortunately, while making a maximal effort, he drops the weight and immediately grabs at his upper thigh, writhing in pain. The man is admitted to the emergency department and during physical examination is diagnosed with a femoral hernia. What reference structure would be found immediately lateral to the herniated structures?

A. Femoral vein
B. Femoral artery
C. Pectineus muscle
D. Femoral nerve
E. Adductor longus muscle

A

76. A 25-year-old man, an intravenous drug abuser, had been injecting himself with temazepam (a powerful intermediate acting drug in the same group as diazepam (Valium) and heroin for 5 years, leaving much residual scar tissue over points of vascular access. The patient is admitted to the emergency department for a detoxification program requiring an intravenous infusion. The femoral veins in his groin are the only accessible and patent veins for intravenous use. Which of the following landmarks is the most reliable to identify the femoral veins?

A. The femoral vein lies medial to the femoral artery.
B. The femoral vein lies within the femoral canal.
C. The femoral vein lies lateral to the femoral artery.
D. The femoral vein lies directly medial to the femoral nerve.

A

77. A 22-year-old soccer player collides with one of her teammates. During examination on the field, the posterior drawer test was performed and the tibia moved backward in relation to her femur. Injury to which structure is confirmed by performing this test?

A. Anterior cruciate ligament
B. Lateral collateral ligament
C. Medial collateral ligament
D. Medial meniscus
E. Posterior cruciate ligament

E

78. A 29-year-old man is brought to the physician for removal of a cast from his left leg. He had sustained a fracture of the left lower extremity 6 weeks prior which was immobilized in a cast that extended from just below the knee to the foot. At the time of injury, there was severe pain but normal strength in the extremity. When the cast was removed, physical examination showed a pronounced left foot drop with paresthesia and sensory loss over the dorsum of the left foot and lateral leg. Injury to which nerve is the most likely cause?

A. Common fibular (peroneal)
B. Superficial fibular (peroneal)
C. Deep fibular (peroneal)
D. Sciatic

A

79. A 16-year-old boy presents to the emergency department with a fracture of the first and second toes of his right foot. He received an anesthetic injection in the first web space of his foot, to permit easy manipulation and correction. Which nerve was blocked by the anesthesia? A. Saphenous B. Cutaneous branch of deep fibular (peroneal) C. Cutaneous branch of superficial fibular (peroneal) D. Sural E. Common fibular (peroneal)	B
80. A lateral blow to the knee during a tackle in a football game injures a 24-year-old woman. Field examination reveals an "anterior drawer sign." An MRI demonstrates injury to several structures of the knee, including her medial meniscus. Which structure might also have been injured by the tackle? A. Medial collateral ligament B. Lateral collateral ligament C. Lateral meniscus D. Posterior cruciate ligament E. Tendon of the semitendinosus	A
81. A 37-year-old unconscious man is rushed to the emergency department after being retrieved from a motor vehicle crash. On physical examination bruising and obvious deformity is seen over his left knee joint. Radiological studies showed a posteriorly dislocated supracondylar fracture with severe compression of the popliteal artery. Which of the following arteries would ensure adequate blood supply to the leg and foot in this patient? A. Medial femoral circumflex B. Lateral femoral circumflex C. Anterior tibial artery D. Posterior tibial artery	B
82. A 60-year-old retired male marathon runner complains to his primary care physician that during his daily morning jog he experiences bouts of numbness and tingling on the medial aspect of his heel. Upon further examination the doctor discovers the patient has trouble tiptoeing and shows a positive Tinel's sign. Which of the following conditions is most characteristic of these symptoms? A. Plantar fasciitis B. Ankle inversion sprain C. Morton's neuroma D. Lateral ligament E. Tarsal tunnel syndrome	E
83. A 50-year-old diabetic man presents for a routine wellness checkup. During physical examination it is noted that he has paraesthesia in a classic glove and stocking distribution. The physician decides on a complete peripheral vascular system examination, which includes palpating the pulse of the dorsalis pedis. Where can the dorsalis pedis pulse be palpated? A. Between the tendons of extensor hallucis and extensor digitorum longus on the dorsum of the foot B. Superior to flexor hallucis longus just distal to the tarsal tunnel C. Inferolateral to the pubic symphysis and medial to the deep dorsal vein of the penis D. 2 cm anterior to the medial malleolus	A
84. A 22-year-old male professional football player is admitted to the emergency department with acute right knee pain after sustaining a kick injury to an extended leg. A radiograph and a subsequent MRI revealed that the trauma caused anterior displacement of the tibia with respect to her femur. Which of the following ligaments was most likely injured? A. Fibular (lateral) collateral B. Tibial (medial) collateral C. Patellar D. Anterior cruciate E. Posterior cruciate	D

85. A 27-year-old man has had increasing difficulty walking and complained of an area of numbness on the dorsum of his right foot. Examination reveals a hard mass at the anterolateral aspect of his right leg just below the knee. Imaging studies reveal a large bone tumor between the fibula and tibia that is compressing a nerve, accounting for his neurological symptoms. Which of the following is the most likely description of abnormalities on neurological examination? A. Decreased/absent knee jerk reflex and decreased sensation on the medial aspect of the leg B. Weakness of flexion at the knee and decreased sensation of the plantar aspect of the foot C. Weakness of eversion at the ankle and decreased sensation between the first and second toes D. Weakness of inversion, dorsiflexion at the ankle, and decreased sensation between the first and second toes	D
86. A 56-year-old diabetic man complains of repeated injury and ulcers to his right big toe. He also complains that he finds it difficult maintaining his shoes because the tips of the shoes around the toe area easily wear down. He also complains that for a while now, his first two toes "feel funny." He used to enjoy playing soccer on weekends but has found it difficult to be involved. Which of the following nerves is most likely affected? A. Superior gluteal nerve injury B. Inferior gluteal nerve injury C. Deep fibular (peroneal) nerve injury D. Superficial fibular (peroneal) nerve injury E. Common fibular (peroneal) nerve injury	C

87. After being struck from behind by a motor vehicle, a 55-year-old man presents to the hospital with a swelling of his right knee. Imaging reveals a large hematoma of the popliteal artery compressing his tibial nerve. Upon neurologic examination which movement would likely be diminished in strength? A. Dorsiflexion of the foot B. Flexion of the thigh C. Extension of the digits D. Extension of the leg E. Plantar flexion of the foot	E
88. A lateral blow to the knee during a tackle in a football game injures a 24-year-old woman. Field examination reveals an "anterior drawer sign." An MRI demonstrates injury to several structures of the knee, including her medial meniscus. Which structure might also have been injured by the tackle? A. Medial collateral ligament B. Lateral collateral ligament C. Lateral meniscus D. Posterior cruciate ligament E. Tendon of the semitendinosus	A
89. A 45-year-old man is admitted to the emergency department after a fall and subsequent leg injury. On physical examination the patient has a foot drop but eversion is unaffected. Which nerve is most likely injured? A. Tibial B. Common fibular (peroneal) C. Superficial fibular (peroneal) D. Saphenous E. Deep fibular (peroneal)	E

10. A 32-year-old man is brought to the emergency department with complaints of pain to the left ankle and knee. The patient recalls that during a football game, his left foot landed in a hole as he was running on an uneven dirt field. The ankle was externally rotated and everted while the knee twisted medially. He was unable to bear weight subsequently. During physical examination, the right ankle is swollen and there is exquisite tenderness over the right medial malleolus and the proximal lateral leg. Radiologic examination of the right lower limb reveals a displaced fracture of the neck of right fibula and a comminuted fracture of the tibial plafond and medial malleolus. Which of the following describes the most likely consequences of this injury? A. Weak "push-off" while walking and numbness over the posteromedial leg B. Weak ankle eversion and numbness over the dorsum of the foot C. High stepping gait and numbness over the dorsum and first web space of the foot D. Waddling gait and inability to feel a pin prick over the anterolateral leg E. Swing-out gait and numbness over the medial leg	C

TIPS & RICKS

UPPER LIMB

MCQ

5

BERLIN

Edited by

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1. The axillary artery is divided into three parts by the

A. First rib.
B. Scalenus anterior muscle.
C. Pectoralis minor muscle.
D. Teres major muscle.
E. Teres minor muscle.

2. Branches from the second part of the axillary artery include the

A. Supreme thoracic artery and the thyrocervical trunk.
B. Thoracoacromial and the lateral thoracic arteries.
C. Anterior and posterior humeral circumflex arteries.
D. Subscapular and thoracodorsal arteries.
E. Profunda brachii artery.

3. Which of the following is usually a branch of second part of axillary artery and distributes blood directly to the medial wall of the axilla?

A. The subscapular artery
B. The dorsal scapular artery
C. The anterior humeral circumflex artery
D. The lateral thoracic artery
E. The circumflex scapular artery

4. The thoracoacromial artery is usually a direct branch of

A. Axillary artery
B. Brachial artery
C. Subclavian artery
D. Subscapular artery
E. Thoracodorsal artery

5. Which of the following is a branch of the second part of axillary artery?

A. Lateral thoracic
B. Posterior humeral circumflex
C. Subscapular
D. Thyrocervical trunk
E. Vertebral artery

6. Which of the following arteries is a DIRECT branch of the axillary artery which originates from the artery deep to the pectoralis minor?

A. Anterior humeral circumflex
B. Lateral thoracic
C. Profunda brachii
D. Scapular circumflex
E. Supreme thoracic

7. Regarding the axillary artery:

A. It ends at the lower border of the teres minor muscle
B. It is divided into two parts by the pectoralis minor muscle
C. It begins at the outer border of the first rib.
D. It begins at the medial border of first rib
E. Its third part is related posteriorly to the median nerve

8. Regarding axillary artery:

A. Is a continuation of brachial artery
B. Pectoralis major divides it into three parts by crossing in front of it
C. Its 3rd part gives anterior and posterior recurrent arteries
D. Its 3rd part share in anastomosis around surgical neck of humerus
E. Terminates at upper border of teres major

9. Lateral thoracic artery:

A. Arises from the first part of axillary artery.
B. It supplies the lateral part of the mammary gland in females
C. Run in lateral wall of axilla
D. Is the largest branch of the axillary artery.
E. Supplies subscapularis muscle.

10. The subscapular artery, mark the answer:

A. Arises from the first part of axillary artery.
B. Gives the posterior circumflex humeral artery.
C. Shares in anastomoses around elbow.
D. Gives circumflex scapular artery.
E. Terminates as by supplying pectoralis major.

11. The superior thoracic artery

A. Arises from the second part of axillary artery.
B. Ramifies on the upper part of the medial wall of axilla.
C. Descends on the lateral wall of axilla.
D. Pierces the clavipectoral fascia.
E. Anastomose with brachial artery

12. One of the following is a branch of the brachial artery:

A. Anterior circumflex humeral artery.
B. Subscapular artery.
C. Lateral thoracic artery
D. Profunda brachii artery
E. Suprascapular artery.

13. Regarding the brachial artery:

A. The median nerve lies on the lateral side of its upper half.
B. The median nerve lies on the medial side of its upper half.
C. It gives the radial recurrent artery.
D. It lies lateral to tendon of biceps.
E. It begins at the upper border of the teres major.

14. The brachial artery:

A. Starts at the upper border of teres major muscle.
B. Ends opposite the neck of radius.
C. Gives superior and lateral thoracic arteries.
D. Descends on the lateral side of the humerus.
E. It descends lateral to median nerve allover its course

15. Profunda brachii artery:

A. Arises from third part of axillary artery.
B. Passes with the median nerve in the spiral groove.
C. It supplies the radius bone.
D. It ends by dividing into ascending branches.
E. Supply triceps muscle

16. One of the following is NOT a branch of the ulnar artery:

A. Radial recurrent artery.
B. Interosseous recurrent
C. Common interosseous artery.
D. Palmar (anterior) carpal.
E. Dorsal (posterior) carpal.

17. Branches of the ulnar artery in the forearm include:

A. Common interosseous artery.
B. Anterior ulnar recurrent artery.
C. Superficial palmar branch.
D. All of the above.
E. A and B only.

18. A branch of the brachial artery which could provide collateral circulation to the forearm when the brachial artery is occluded near its termination is the

A. Radial recurrent artery.
B. Anterior ulnar recurrent artery.
C. Posterior ulnar recurrent artery.
D. Interosseous recurrent artery.
E. Profunda brachii artery.

19. A 37-year-old man is shot through the midportion of the left arm, with the bullet transecting the brachial artery. Which of the following collateral routes can furnish blood to the hand after the brachial artery is clamped at the site of the injury?

A. *Anterior circumflex humeral - posterior circumflex humeral*
B. *Superficial palmar arch*
C. *Posterior circumflex humeral - profunda brachii*
D. *Profunda brachii - radial recurrent*
E. *Suprascapular - circumflex scapular*

20. A first year resident attempts to draw blood from a patient's brachial artery in cubital fossa. Sharp pain in forearm and tingling in skin of the lateral palmar surface of the hand. Which nerve has most likely been penetrated?

A. *Anterior interosseous*
B. *Deep radial*
C. *Median*
D. *Superficial radial*
E. *Ulnar*

21. Pulsations in which of the following arteries can be palpated immediately lateral to the pisiform bone?

A. *Anterior interosseous*
B. *Deep palmar arch*
C. *Posterior interosseous*
D. *Radial*
E. *Ulnar*

22. Superficial palmar arterial arch of hand:

A. *Is distal to the deep palmar arch*
B. *Run superficial to palmar aponeurosis*
C. *Is deep to tendons of flexor digitorum profundus*
D. *Formed mainly by radial artery*
E. *Runs with the deep branch of ulnar nerve*

23. The following arteries shares in the anastomosis around the elbow:

A. *Radial recurrent artery.*
B. *Ascending branch of profunda brachii artery*
C. *Anterior circumflex humeral artery.*
D. *Anterior interosseous artery.*
E. *Posterior circumflex humeral artery*

24. Regarding the radial artery:

A. *It begins lateral to the neck of radius.*
B. *It ends by forming the deep palmar arch.*
C. *Its pulsation can be felt medial to the flexor carpi radialis.*
D. *It gives the common interosseous artery.*
E. *Enter the hand superficial to flexor retinaculum*

25. The following arteries are branches of the radial artery:

A. *Anterior ulnar recurrent artery.*
B. *Posterior ulnar recurrent artery.*
C. *Radialis indicis artery.*
D. *Common interosseous artery.*
E. *Superficial palmar artery.*

26. The following arteries are branches of the ulnar artery except:

A. *Princeps pollicis.*
B. *Common interosseous artery.*
C. *Anterior ulnar recurrent artery*
D. *Anterior carpal artery.*
E. *Posterior carpal artery.*

27. One of the following is not a branch of the radial artery:

A. *Radial recurrent artery.*
B. *Palmar (anterior) carpal.*
C. *Dorsal (posterior) carpal.*
D. *Common interosseous artery.*
E. *Deep palmar arch.*

28. Relations of the ulnar artery at the wrist:

A. *Lies anterior to the flexor retinaculum.*
B. *Lies lateral to the pisiform bone.*
C. *Deep to flexor retinaculum.*
D. *All of the above.*
E. *A and b only.*

29. The deep palmar arterial arch of the hand:

A. *Is formed primarily by the ulnar artery.*
B. *Completed by the deep branch of the ulnar artery.*
C. *Completed by superficial palmar branch of radial artery*
D. *Runs with median nerve.*
E. *Lies distal to the superficial palmar arterial arch*

30. Superficial palmar arterial arch of the hand

A. Is located in thenar compartment
B. Is distal to the deep palmar arterial arch
C. Is deep to the tendons of flexor digitorum longus
D. Is formed primarily by the radial artery
E. Runs with the deep branch of ulnar nerve

31. All the following arteries share in the anastomosis around the elbow joint, EXCEPT

A. Radial recurrent
B. Superior ulnar collateral
C. Profunda brachii
D. Anterior ulnar recurrent
E. Anterior carpal artery

32. The arterial supply to the hand

A. Radial artery gives rise to the superficial palmar arch
B. The superficial palmar arch lies superficial to the palmar aponeurosis
C. The deep palmar arch is more distal than the superficial palmar arch
D. Ulnar artery gives rise to the deep palmar arch
E. Radial artery gives rise to deep palmar arch

33. The axillary vein is the continuation of the

A. Brachial vein.
B. Basilic vein.
C. Cephalic vein.
D. Median cubital vein.
E. Brachiocephalic vein.

34. The name of the basilic vein changes to the axillary vein at

A. Apex of axilla
B. Inferior border of first rib
C. Inferior border of teres major
D. Superior border of cubital fossa
E. Superior border of pectoralis minor

35. The cephalic vein is normally a tributary of the:

A. Brachial vein
B. Axillary vein
C. Medial cubital vein
D. Subclavian vein
E. Basilic vein

36. The cephalic vein:

A. Arises from the medial end of the dorsal venous arch of the hand.
B. Crosses the floor of the anatomical snuff box.
C. Connected with the axillary vein by the median cubital vein.
D. Pierces the clavipectoral fascia.
E. Runs in the groove between brachialis and brachioradialis.

37. Regarding the basilic vein:

A. Arises from the medial end of the dorsal venous arch of the hand.
B. Crosses the anatomical snuff box.
C. Connected with the axillary vein by the median cubital vein.
D. Pierces the clavipectoral fascia.
E. Continues as the axillary vein.

38. Regarding veins of upper limb:

A. Bicipital aponeurosis separates median cubital vein from brachial artery.
B. The cephalic vein starts at medial end of dorsal venous arch of the hand.
C. The basilic vein starts at lateral end of dorsal venous arch of hand.
D. The basilic vein pierces the clavipectoral fascia.
E. Axillary artery is accompanied by two venae comitantes.

39. The cephalic vein drains into the:

A. Basilic vein
B. Brachial vein
C. Axillary vein
D. Medial cubital vein
E. Subclavian vein

40. The basilic vein drains into the:

A. Cephalic vein
B. Brachial vein
C. Axillary vein
D. Medial cubital vein
E. Subclavian vein

Answers

1	C
2	B
3	D
4	A
5	A
6	B
7	C
8	D
9	B
10	D
11	B
12	D
13	A
14	B
15	E
16	A
17	E
18	E
19	D
20	C

21	E
22	A
23	A
24	B
25	C
26	A
27	D
28	E
29	B
30	B
31	E
32	E
33	B
34	C
35	B
36	D
37	A
38	A
39	C
40	C