

Subject: Human Anatomy II

Class: Radiology, 2nd semester

Section: B

Instructor: Dr. Arooba.

MidTerm Assignment, spring 2020.

Marks 30.

Select the best option.

1. A metatarsal bone has the following basic parts:

A. Head, shaft, and tail

B. Head, shaft, and base

C. Head, neck, tubercle, and base

D. Head, neck, tubercle, and tail

2. Sustentaculum tali is located on _____ of calcaneum.

A. Medial surface

B. Lateral surface

C. Anterior surface

D. Superior surface

3. Circumduction is the combination of?

A. Flexion, extension, medial rotation, and lateral rotation

B. Flexion, extension, abduction, and adduction

C. Abduction, adduction, medial rotation, and lateral rotation

D. Extension, adduction, medial rotation, and lateral rotation

4. It looks like inverted Y shaped:

A. Iliofemoral ligament

B. Pubofemoral ligament

C. Ischiofemoral ligament

D. Plantar aponeurosis

5. The increase in neck angle with the shaft of the femur is called:

A. Coxa valga

B. Coxa vara

C. Coxa benda

D. Coxa increase

6. The floor of the acetabulum is non-articular called:

A. Acetabular fossa

B. Acetabular margin

C. Acetabular notch

D. Capsule

7. The tubercle separating the tendons of peroneus longus and peroneus brevis is:

A. Anterior tubercle

B. Posterior tubercle

C. Medial tubercle

D. Peroneal tubercle

8. The symphysis pubis is:

A. Primary cartilaginous joint

B. Secondary cartilaginous joint

C. Synovial joint

D. Fibrous joint

9. Which bone does not part in the formation of the knee joint?

A. Femur

B. Tibia

C. Fibula

D. Patella

10. Regarding tibia:

A. Anterior border is subcutaneous

B. Lateral border is subcutaneous

C. Medial border is subcutaneous

D. Medial surface is subcutaneous

Give brief answers to the following questions. Add diagrams/ pictures where needed.

Each question carries 5 marks.

1. Describe the arches of foot. Name the factors responsible for the maintenance of these arches.

Ans: Foot has three arches : two longitudinal (medial and lateral) arches and anterior transverse arch these arches are form by the tarsal and metatarsal bone and supported by the lineaments tendons in the foot. The curvature of arch is mainly maintained by the fibularislongus tendon,which both cross under the sole of the foot the deep transverse ligaments,the transverse head of of adductor longus and the fibolaruslongus tendon also head to stabalize this arch.

The factors which is responsible for the maintenance of these arch are two strctures which are soft tissue and bony structures.

2. Mention the attachments, nerve supply and actions of the muscle largely responsible for the prominence of buttocks. Which site is safe for the intramuscular injection in this region?

Ans The muscles which are responsible for the prominence of the buttock are group of three muscles which make up buttocks: the gluteus maximus, gluteus medius, gluteus minimus.

Gluteus maximus:

Origin: gluteal surface of the ilium, lumbar fascia, sacrotuberous ligament insertion. Gluteal tuberosity of the femur and iliotibial tract nerve Inferior gluteal nerve (L5, S1 and S2 nerve roots)

Actions:

External rotation and extension of the hip joint, supports the extended knee through the iliotibial tract, chief antigravity muscle in sitting and abduction of the hip.

Gluteus medius

Origin:

Gluteal surface of the ilium, under gluteus maximus insertion Greater trochanter of the femur

Nerve superior gluteal nerve (L4, L5, S1 nerve roots)

Actions:

Abduction of the hip ; preventing adduction of the hip . Medial/internal rotation and flexion of the hip (anterior fibers).

Extension and Lateral/external rotation of the hip (posterior fibers)

Antagonist adductors

Gluteus Minimus:

Origin:

Gluteal surface of ilium, under gluteus maximus insertion Greater trochanter of the femur

Nerve

Superior gluteal nerve (L4, L5, S1 nerve roots)

Actions

Abduction of the hip Medial/internal rotation and flexion of the hip (anterior fibers).

Extensions and Lateral/external rotation of the hip (posterior fiber)

Antagonist

Adductors

The correct area to give an injection is in the center of the triangle 1 to acromion process.

3. How greater and lesser sciatic foramina formed and enlist the structures passing through them

Ans: they are formed by the sacrotuberous ligaments structure which pass through greater greater sciatic foramen are below the piriformis, the superior gluteal vein and artery and the superior gluteal nerve the inferior gluteal nerve ; the sciatic and posterior femoral cutaneous nerves;the internal pudendal artery and veins and the nerves to the internal obturator and quadratus .And the structure which pass through lesser sciatic foramen are tendon and nerve of obturator internus as well as the pudendal nerve and vessels

4. What are hamstring muscles? Give their origin, insertion, nerve supply and action.

Ans: Hamstrings muscles are semimembranosus, semitendinosus and biceps femoris)

Origin:

Tuberosity of the ischium linea aspera

Insertion tibia, fibula

Nerve

Sciatic nerve (tibial nerve and common fibular nerve)

Actions:

Flexion of knee, extension of the hip

Name: Sulaiman Khan

Id: 15951

Radiology 2nd Semester