**Subject: Human Anatomy II UMAR SADIQ**

 **ID NO:15920**

**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 (CORRECT)

C. Head, neck, tubercle, and base

 D. Head, neck, tubercle, and tail

2. Sustentaculum tali is located on\_\_\_\_\_\_ of calcaneum.

A. Medial surface(CORRECT)

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 (CORRECT)

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 (CORRECT)

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 (CORRECT)

C. Coxa benda

D. Coxa increase

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

A. Acetabular fossa (CORRECT)

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 (CORRECT)

8. The symphysis pubis is:

A. Primary cartilaginous joint

B. Secondary cartilaginous joint (CORRECT)

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 (CORRECT)

D. Patella

10. Regarding tibia:

A. Anterior border is subcutaneous (CORRECT)

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 NO 1: ARCHES OF FOOT : The foot has three aeches two longitudnal and one anterior transverse arch. Longitudnal arches ; tlere are two longitudnal arches .it is formed by calcanus , talus ,navicular ,three cuneforms and first three metatarsal bones.It is supported by bones,muscles,ligament.

TRANSVERSE ARCH:

The transverse arch is located in coronal plane of the foot.It is formed by metetarsal bones ,the cuboid and three cuneiform bones.

FACTOR RESPONSIBLE FOR MAINTAINENCE OF ARCH;

1)Shape of the bone

2)Intersegment ties or ligament and muscles that hold different segment of arch.

3)The beam that connect the ends of arch.

4)Slings keeps tje summit of arch pulled up .

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 NO2: ATTACHEMENTS OF BUTTOCKS:

 Attachement of buttocks originate from gluteal sirface of illium , sacrum and coccyx.It slops across the buttocks at a 45degree angle then insert into the illiotibial track and the gluyeal tuberosity of the femur.

NERVE SUPPLY OF BUTTOCKS ;

THE superior gluteal nerve L4,L5,S1 passes through the sciatic notch above the piriformis musvle it supplies the gluteal medius and minimus and tensor fasciae lateral muscles .The inferior gluteal nerve L5 .S1.S2 supplies the gluteaus maximus.

ACTION;

It is the main extensor of thigh and assists with lateral action.

SAFE SITE FOR INJECTION:

The correct area to give an injection is the centre of triangle 1 to 2 inches below the acromion process.

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

ANS NO 3: GREATER SCIATIC FORAMEN FORMATION ; Greater sciatic foramen is an opening in the posterior human pelvis .It is formed by the sacrotuberous and sacrospinous ligament .The piriformis muscles passes therough the foramen and occupies most of its volume.

LESSER SCIATIC FORAMEN FORMATION; The lesser sciatic foramen is an opening between pelvis and the back of thigh .The foramen is formed by sacrotuberous ligament which runs between the sacrum and ischial spine.

STRUCTURE PASSING THROUGH SCIATIC FORAMEN ;

1) Piriformis muscle

2)The tendion of the obturator internus .

3)Internal pudendal vessels .

4)Pudendal nerves .

5)Nerve to the obturator internus.

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

ANS NO4; HAMSTRING MUSCLES

Hamstring are a group of muscles and their rear of the upper leg .They include

1)The biceps femoris

2) Semitendonusus

3) semimembranosus

The hamstring flex the knee joint and extend the thigh to the back side of the body .

THEY ARE USED IN

.Walking

.Runnimg

.Other physical activities

ORIGIN ;

.Semitendeinosus - Ischial tuberosity

.Semimembranous - Ischial tunerosity

.Bicep femoris - Linea aspra and lateral supracondylar of femur.

INSERTION ;

.semitendenus - medial surface of tibia

.Semimembrannous - medial tinial condyle

.Bicep femoris - Lateral side of the head of fibula common temdon with the long head.

 ACTION ;

1) flexion

2) Hip extensin

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