ISUBJECT: ANATOMY II

MID TERM ASSIGNMENTS.

SEMESTER: DPT 2ND (SEC A)

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SECTION A.

NOTE: Highlight the correct option of the given MCQs from section A. attempt all 3 questions from section B.

1. **Out of the following bony landmarks to which the Ligamentum teres attached?**
   - A. intertrochanteric line
   - B. trochanteric crest
   - C. Fovea capitis
   - D. Greater trochanter
2. **Neck of the femur connects the head of the femur with the shaft. It is cylindrical, projecting in a superior and medial direction. It is set at an angle of _____degrees to the shaft.**
   - A. 156
   - B. 170
   - C. 135
   - D. 101
3. **The proximal area of the femur forms the hip joint with the acetabulum of the pelvis. It consists of a head and neck, and two bony processes the greater and lesser trochanters. There are also two bony ridges connecting the two trochanters; the intertrochanteric line anteriorly and the trochanteric crest posteriorly. Out of all these proximal bony landmarks which one is the most lateral palpable bony landmark?**
   - A. Greater trochanter
   - B. Lesser trochanter
   - C. The intertrochanteric line
   - D. Trochanteric crest.
4. **_____is the site of attachment for iliopsoas muscle.**
   - A. Greater trochanter
   - B. Lesser trochanter
   - C. The intertrochanteric line
   - D. Trochanteric crest.
5. **Neck of femur fractures are increasingly common and tend to be sustained by the elderly population as a result of low energy falls in the presence of osteoporotic bone. Classically, the distal fragment is pulled upwards and_____**
   - A. Medially rotated
   - B. Externally rotated
   - C. No rotation occurs
   - D. None of the above
6. **Regarding neck of the femur fracture the medial femoral circumflex artery can be damage in_____**
   - A. Intracapsular fracture
   - B. Shaft fracture
   - C. Extracapsular fracture
   - D. Femoral epicondylar fracture
7. **The shaft of the femur descends in slight_____ for stability.**
   - A. Lateral direction
   - B. Medial direction
   - C. Posterior direction
   - D. Diagonal direction
8. **Mr. A met with an accident and his right femur broke at 3 different places. The cut was a clean break and the four pieces were put back together in their original place. What kind of fracture did he have?**
   - A. Contusion
   - B. Hairline Fracture
   - C. Multiple Fracture
   - D. Simple Fracture
9. **A closed femoral shaft fracture can result in _____blood loss.**
   - A. 10-15ml
   - B. 100-150ml
   - C. 1000-1500ml
   - D. 10000-15000ml
10. **Which of the following is the medial bone of lower leg?**
    - A. Patella
    - B. Fibula
    - C. Tibia
    - D. Medial cuboid
11. **The shaft of the tibia is prism-shaped, with_____**
    - A. One border and one surface
    - B. Two borders and one surface

C. Three borders and two surfaces
D. Three borders and three surfaces

12. The calcaneus is often fractured as a result of _____

A. Distraction
B. Axial loading
C. Walking
D. Setting

13. The depth of the acetabulum is raised by the_____

A. Fovea captious
B. Capsule of hip joint
C. acetabular labrum
D. ischial Bursae

14. The most powerful ligament of hip joint is?

A. Iliofemoral ligament
B. Pubofemoral ligament.
C. Ischiofemoral ligament.
D. Transverse acetabular ligament

15. **The hip joint is supplied by the branches of the following arteries EXCEPT**:

A. Medial circumflex femoral artery.
B. Lateral circumflex femoral artery.
C. Radial artery
D. Superior gluteal artery.

Section B

QUESTION NO :1

*Describe Hip joint anatomy. (your answer should cover these headings, (**Articular surfaces of hip joint**, **Ligaments of joint, Stability of hip joint, Blood and nerve supply**)*?

Ans: **HIP JOINT (DEFINITION) :-**

A ball and socket synovial joint is called hip joint.

SCIENTIFIC NAME OF HIP JOINT:

Hip joint scientifically refers to as the acetabulum femoral joint. The joint between the acetabulum and femur of the pelvis.

PRIMARY FUNCTION :

- Static
- Postures
- Static

HIP BONES:

Hip joints is made up of four bones the two main parts are the pelvis with the socket, the ball top.

ARTICULAR SURFACES OF HIP JOINT:

The articular surface of the hip joint are consists of the articulation between the acetabulum of the pelvis and the head of the femur.

- The shape of acetabulum is a cup like depression.

- Located on the inferolateral aspect of the pelvis.

LIGAMENTS OF THE HIP JOINT:

There are seven ligaments of the hip joints

- Ligaments teres femoris
- Capsular ligaments
- Acetabular labrum
- Pubofemoral ligaments
- Illiofemoral ligaments
- Ischiofemoral ligaments
- Transverse Acetabular ligaments

STABILITY OF HIP JOINT:-

- The primary function of joint is to weight bear.
- Increase in depth
- Provides articular large surface

The **Pubofemoral, Ischiofemoral, Illiofemoral** ligaments are much stronger which provide a large degree of stability.

BLOOD AND NERVE SUPPLY :

- Obturator
- Sciatic nerve
- Femoral
- Superior gluteal nerve
- Nerve of the quadratus femoris

It innervates primary by the sciatic,obturator and femoral nerves.

These nerves are same which innervate the knee. The Lateral and Medial circumflex femoral arteries are the major blood supply of the hip joint.

QUESTION NO :2

Q:2 *Explain the following in detail.*

a) Cruciate ligaments
b) Menisci

CRUCIATE LIGAMENTS :

- Cruciate ligaments are also called cruciform ligaments.
- The pair of ligaments arrange like a X letter.

They commonly occurs in several joints of the body,

- Such as Atlanto-axial joint and knee joint.

POSTERIOR CRUCIATE LIGAMENTS :

It attaches on the back side of the intercondylar region of the tibia. It prevents posterior dislocation of the tibia on the femur.

ANTERIOR CRUCIATE LIGAMENTS :

it attaches at the anterior side of the intercondylar region of the tibia

- it blends with the medial meniscus.
- It ascends posteriorly to attach to the femur in the fossa of intercondylar.
- It prevents anterior dislocation of the tibia in the femur.

MENISCI:-

The Lateral and Medial menisci are fibro cartilage structure. Which serve two main functions

- The articular surface of the tibia is **deepen.** It increase the stability of the joint.
- **Shockabsorber** act as by increasing surface area for further dissipate forces.
- It attached on the both ends of the intercondylar area of the tibia.
- They are **C** shape

The tibial collateral ligaments and the joints Capsule is fixed by medial meniscus.

The lateral meniscus is smaller and does not have any extra attachments, rendering it

Fairly mobile.

QUESTION NO :3

Write down a comprehensive note on medial and lateral ligaments of ankle joint?

Ans:

ANKLE JOINT:

- Ankle joint composed of three bones
- Talus

- Fibula
- Tibia
- This joint is responsible for the down and up foot movement.

The talocrural joint is a synovial joint which located in the lower limb. The bone which formed the bone of leg fibula and tibia and in foot talus.

LIGAMENTS OF THE ANKLE JOINT:

The two main ligaments which originate from molecules.

- Lateral ligaments
- Medial ligaments

LATERAL LIGAMENTS :

The lateral ligaments originated from the molecules (bony Prominence projecting from the lateral aspect of the distal fibula).

over-inversion of the foot, is comprised of three separate ligaments:

•**Anterior talofibular** – lateral aspect of the talus, spans between the lateral malleolus

•**Posterior talofibular** – spans between the lateral malleolus and the posterior aspect of the talus.

•**Calcaneofibular** – the lateral malleolus and the calcaneus.

MEDIAL LIGAMENTS :

The deltoid legaments is attached to the medial molecules.

- It consist of the four ligaments
- Navicular bone
- Calcaneus
- Talus
- Malleolus

The medial ligaments is to resist over Everson of the foot.