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# Answer No: 01

Pelvic walls :-

⇒ formed of bones and ligaments, Partly lined with muscles covered with fascia

- ① Anterior Pelvic wall
- ② Posterior Pelvic wall
- ③ Lateral Pelvic wall
- ④ Inferior Pelvic floor

⇒ Anterior Pelvic wall :-

- \* Formed of,
- \* Pubic bones
- \* Pubic rami
- \* Symphysis Pubic

⇒ Posterior Pelvic wall :-

- \* Sacrum
- \* Coccyx
- \* Piriformis
- \* Covering Parietal Pelvic fascia

## Sacrum :-

- \* 5 fused vertebrae
- \* forward concavity
- \* Articulation with L5 coccyx and iliac bones
- \* Lumbosacral angle

## Coccyx :-

- \* Articulation with S5
- \* Coccygeal vertebrae has only bodies
- \* Rudimentary transverse process in 1st vertebra.

## Piriformis :-

- \* Lateral rotator of hip
- \* originate from, Sacrum
- \* Pass from greater sciatic foramen
- \* insert into, Greater trochanter of femur

## Lateral Pelvic Wall :-

- \* obturator membrane
- \* Sacrotuberous and Sacrospinous ligament
- \* obturator internus muscles and its fascia.

## Hip bone :-

- \* Hip bone below Pelvic inlet forms lateral pelvic wall.

## Obturator membrane :-

- \* Closes obturator foramen
- \* Obturator canal for obturator nerve and vessels.

## Sacrospinous ligament :-

- \* Arise from,
  - \* Sacrum
  - \* Coccyx
  - \* Insert into, Ischial tuberosity
- ⇒ Both prevent Sacrum and Coccyx from being rolled upward by weight of body

## ↳ Inferior Pelvic Wall :-

- \* Formed by Pelvic diaphragm,
- \* Levator ani
- \* Coccygeal muscles
- \* Covering fascia

## Coccygeal muscles:-

- \* Arise from spine of ischium
- \* Insert into Sacrum and coccyx
- \* They assists the levator ani muscles

## Pelvic fascia:-

⇒ Continuous above and below with abdominal and Perineum fascia respectively

### \* Pelvic fascia:-

⇒ Parietal Pelvic fascia

### \* Parietal Pelvic fascia:-

⇒ Lines the wall of Pelvis

### \* Visceral Pelvic fascia:-

⇒ Covers and supports the Pelvic viscera.



# Answer No: 02

Talus :-

⇒ Articulates above with tibia and fibula at the ankle joint

⇒ Below with calcaneum and in front with navicular bone

★ Possesses.

★ Head

★ Neck

★ body

Head :-

★ Directed distally

★ Has an articular facet for navicular bone

Neck :-

★ lies posterior to the head

★ Slightly narrowed.

⇒ Upper surface of neck of talus is roughened and it gives attachment to ligaments.

⇒ lower surface shows a deep groove the sulcus tali

⇒ sulcus tali and sulcus calcanei in the articulated foot form a tunnel the sinus tarsi.

⇒ sinus tarsi is occupied by strong interosseous talocalcaneal ligament

## Body of talus

★ cuboidal in shape

★ superior surface articulates with tibia

⇒ convex from before backwards and concave from side to side.

## lateral surface

★ triangular articular facet is present for articulation with lateral malleolus of fibula

## Medial Surface

★ conoid shaped articular facet  
is present for articulation with  
medial ~~talus~~ malleolus of ~~tibula~~ tibia

## Posterior Surface

is marked  
by 2 small tubercles  
separated by groove for flexor  
hallucis longus tendon.



Answer No: 03

Hip Joint :-

The hip joint is a ball and socket synovial joint, formed by an articulation between the pelvic acetabulum and the head of the femur.

Type of Joint :-

\* Synovial, ball and socket joint

Capsule :-

- \* Encloses the joint
- \* Attached to acetabular labrum medially
- \* Laterally attached to intertrochanteric line of femur in front
- \* Half way along the posterior aspect of neck of the bone behind

Ligament of Hip Joint :-

- \* Pubofemoral ligament
- \* Iliofemoral ligament
- \* Transverse acetabular ligament
- \* Ligament of the head of the femur
- \* Ischiofemoral ligament

# Synovial membrane:-

- \* Lines the capsule
- \* Attached to the margins of the articular surfaces
- \* Ensheathes ligament of the head of the femur.
- \* Covers the Pad of fat contained in the acetabular fossa
- \* Pouch of the membrane that protrudes through a gap in the anterior wall of the capsule between Pubofemoral and iliofemoral ligament forms Psoas bursa beneath Psoas tendon.

# ligaments

⇒ Divided into those that lie outside the capsule and those that lie within the capsule.

## Extracapsular:

- \* Ligamentum patellae
- \* lateral collateral ligament
- \* medial collateral ligament
- \* oblique popliteal ligament.

## Intracapsular:

- \* Cruciate ligaments
- Anterior cruciate ligament
- Posterior cruciate ligament
- \* Menisci.

## Extracapsular ligaments:

### Ligamentum patellae:

- \* Attached above to the lower border of the patella
- \* Below to the tuberosity of the tibia.

⇒ it is continuation of the central portion of the common

tendon of quadriceps femoris  
muscle-

lateral collateral ligaments-

\* cord like

\* Attached above to the lateral condyle of the femur.

\* Attached below to the head of fibula-

Medial collateral ligament

\* Flat band

\* Attached below to the medial condyle of the femur

\* And below to the medial surface of the shaft of tibia

\* Firmly attached to the edge of the medial meniscus.

## Oblique Popliteal ligament

- \* Tendinous expansion derived from the semimembranosus muscle.

- \* Strengthens the posterior aspect of the capsule

## Anterior Cruciate Ligaments

- \* Attached to the anterior intercondylar area of the tibia.

- \* Passes upwards backwards and laterally to be attached to the posterior part of the medial surface of the lateral femoral condyle

## Posterior Cruciate Ligament

- \* Attached to the posterior intercondylar area of the tibia

- \* Passes upward, forward and medially to be attached to the anterior part of the lateral surface of the medial femoral condyle

# Answer No: 05

## Patella:-

- ⇒ ~~Largest~~ <sup>Bone</sup> that develops within the tendon of the quadriceps femoris muscles in front of the knee joint.
- ⇒ Triangular in shape
- ⇒ Situated in front of knee joint
- ⇒ Can be palpated through skin where it is separated from the skin by subcutaneous bursa
- ⇒ Posterior surface articulates with condyles of femur
- ⇒ Apex lies inferiorly and is connected to tuberosity of tibia by ligamentum patellae.
- ⇒ Upper lateral and medial margins give attachment to different parts of quadriceps femoris muscle
- ⇒ Lower horizontal fibers of vastus medialis
- ⇒ Large size of lateral condyl of the femur.



# Answer No : 06

## FEMUR :-

- ⇒ Longest and Strongest bone of the body.
- ⇒ Bone of the thigh
- ⇒ Articulates with Hip bone at hip joint
- ⇒ upper end of Tibia and Patella at the knee joint
- ⇒ oriented obliquely, being directed inferomedially.
- ⇒ Supports the erect Posture efficiently.

## Parts of the femur

### 3 maj. Parts

- ⇒ Upper end
- ⇒ Shaft
- ⇒ Lower end

### Upper end :-

- ⇒ Head
- ⇒ Neck
- ⇒ Greater trochanter
- ⇒ Lesser Trochanter

### Shaft :-

- ⇒ Gently convex anteriorly, with maximum convexity in the middle 3rd.

Lower end :-

- \* Medial condyles
- \* Lateral condyles
- \* Inter Condylar fossa
- \* Epicondyles

Head of the femur :-

⇒ 2/3rd of a sphere

⇒ Articulates with acetabulum of the hip bone.

⇒ A small pit (fovea) just below and behind the centre, provides attachment to the ligament of head of femur

Neck of the femur :-

⇒ 5cm long and connects head with shaft.

⇒ Directed upwards, medially and slightly forward

⇒ Present 2 borders upper and lower and 2 surface anterior and posterior



Upper border :-

⇒ Concave and horizontal, meets the shaft at greater trochanter.

Lower border :-

⇒ Straight and oblique, meets the shaft at lesser trochanter.

