



N.B. The highest point of the iliac crest is a little behind its middle and is opposite the level of the 4th Lumbar spine.

tubercle of the iliac crest : A bony prominence found on the outer lip about 5-6 cm behind the anterior superior iliac spine.

The greater sciatic notch: placed in the posterior border immediately above the acetabulum
 The lesser sciatic notch : placed in the posterior border of the ischium
 *both separated by the spine of the ischium

The 3 bones fuse with each other at puberty in the region of the acetabulum

the pubis is perforated by a large aperture (the obturator foramen)

Below the pubic symphysis, the inferior pubic rami diverge to form the pubic arch

BONES OF LOWER LIMB
 Femur Hip bone

Articulations of hip bone

- 1 sacroiliac joint Above and behind; with the sacrum
- 2 symphysis pubis Below and in front with the other hip bone
- 3 Hip joint Through the acetabulum with the head of the femur

Upper end

- Head**
 - a small, pyramidal process projecting postero-medially
 - Articulates with the acetabulum of the hip bone.
 - Has a small, pit shaped depression called the fovea capitis where the ligamentum teres is attached.
- Neck**
 - Is 5 cm long and connects the head with the shaft
 - It forms an angle of about 110 – 120 with the axis of the shaft
- Greater trochanter**
 - The top of the greater trochanter lies at the level of the pubic crest
 - Its medial surface has deep depression called the trochanteric fossa
- Lesser trochanter**

Shaft

- is smooth and rounded on its anterior surface but posteriorly has a ridge, the Linea aspera, to which are attached muscles and intermuscular septa
- The margins of the linea aspera diverge above and below. The medial margin continues below as the medial supracondylar ridge to the adductor tubercle above the medial condyle. The lateral margin becomes continuous below with the lateral supracondylar ridge
- The Linea aspera diverge superiorly to the gluteal tuberosity laterally and spiral line medially
- The shaft becomes broader toward its distal end and forms a flat, triangular area on its posterior surface called the popliteal surface

Lower end

- Features of it**
 - Medial and lateral condyles: for articulation with the tibia
 - Medial and lateral epicondyles: the only part of the femur that can be felt at the knee
 - Intercondylar fossa or notch
 - Patellar surface: the smooth surface above the condyles on the anterior side that articulates with the patella

The ilium: directed upwards

- borders**
 - 1 Upper (aka iliac crest) between the (anterior+ posterior) superior iliac spine
 - 2 Anterior begins at the anterior superior iliac spine and end at the anterior inferior iliac spine (immediately above the acetabulum)
 - 3 Posterior begins at the posterior superior iliac spine at the level of the second sacral segment to the posterior inferior iliac spine

Surfaces

- 1 Outer (gluteal) contains 3 rough ridges
 - The posterior gluteal line
 - The middle or anterior gluteal line
 - The inferior gluteal line
- 2 Inner (pelvic) shows 4 features
 - A large concave iliac fossa in front.
 - A rough iliac tuberosity (behind and above)
 - An auricular (articular) surface behind and below
 - A smooth pelvic part below

The ischium: directed downwards, posterolaterally

- Body**
 - 1 Above with the posterior border of the ilium forming the lower part of the greater sciatic notch; then projects to form the ischial spine and then forms the lesser sciatic notch
 - 2 Below with the ramus and both form part of the wall of the obturator foramen
- Ischial Tuberosity** a very strong piece of bone which projects from the inferior pole of the body of the ischium
- Ramus** continuous in front with the inferior ramus of the pubis to form the ischiopubic or conjoint ramus

The pubis: directed downwards, anteromedially

- Body**
 - is triangular and articulates with its fellow at the symphysis pubis
 - has 2 surfaces
 - 1 Posterior (or pelvic) surface smooth and forms the anterior wall of the pelvic cavity
 - 2 Anterior (or femoral) surface looks downwards and forwards (towards the thigh) it is rough and gives attachment to muscles
 - has 3 borders
 - 1 Upper border (pubic crest) 2.5 cm long, ends laterally in a projection called the pubic tubercle
 - 2 Lateral border very sharp and forms part of the boundary of the obturator foramen
 - 3 Medial border joins the other side at the symphysis pubis
- 2 rami**
 - The superior ramus**
 - nearly horizontal and triangular in cross section
 - 3 surfaces
 - 1 The pectineal surface extends from the pubic tubercle to the iliopubic eminence. It is bounded behind by the pectineal line and inferiorly by the obturator crest
 - 2 Inferior surface (obturator surface) has obturator groove
 - 3 The pelvic surface continuous with the pelvic (posterior) surface of the body
 - The inferior ramus**
 - two surfaces
 - 1 femoral rough outer surface
 - 2 pelvic smooth inner surface
 - two borders
 - 1 superior border forms part of the obturator foramen
 - 2 inferior border forms part of the pubic arch