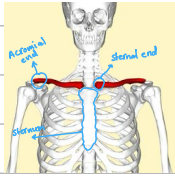


Anatomy

First: Joints of the upper limbs

1] Articulation of clavicle :

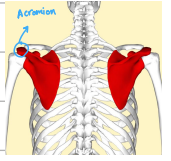


A. Sternoclavicular joint : sternal end with sternum

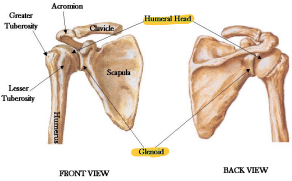
Type: synovial plane (Uniaxial)

B. Acromioclavicular joint : Acromion with lateral end of clavicle

Type: synovial plane (Uniaxial)



2] Articulation of scapula :



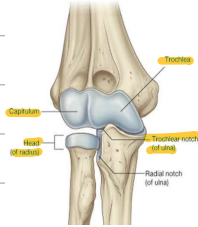
- Shoulder joint : Head of humerus with glenoid cavity

Type: Ball and socket synovial plane (Multiaxial)

Movements: 1- Flexion, Extension 2- Adduction, Abduction

3- Medial and lateral rotation 4- Circumduction

3] Articulation of Humerus :



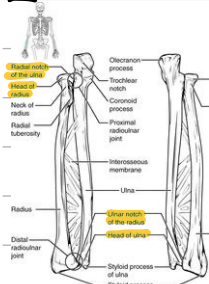
- Elbow joint : Trochlea with trochlea notch of ulna

Capitulum with head of radius

Type: Hinge synovial plane (Uniaxial)

Movement: Flexion and Extension

4] Articulation of Radius and Ulna :



A. Proximal radioulnar joint : Head of radius with radial notch of ulna [and annular ligament]

B. Distal radioulnar joint : Head of ulna with Ulnar notch of radius

Type: pivot synovial (Uniaxial)

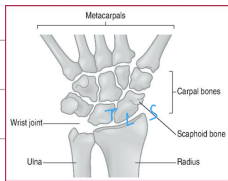
Movement: pronation and supination

C. Wrist joint : Above → Inferior surface of radius and articular disc Distal radioulnar joint

Below → Scaphoid - Lunate - Triquetrum

Type: Condyloid synovial (Biaxial)

Movement: 1. Flexion, Extension 2. Abduction, Adduction



5] Joints of Hand :

A. Intercarpal joint : Between carpal bones

Type: plane synovial (Uniaxial)

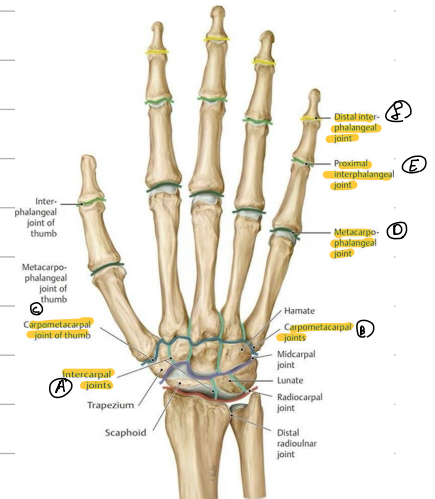
Movement: Gliding movement

B. Carpometacarpal joint [Medial four fingers] :

Carpal and medial four metacarpal bones.

Type: plane synovial (Uniaxial)

Movement: Gliding movement



C. Carpometacarpal joint [Thumb]

Trapezium and 1st metacarpal bone

Type: Saddle synovial (Biaxial)

Movement: 1. Flexion, Extension 2. Abduction, Adduction

D. Metacarpophalangeal joint:

Head of metacarpal bone and base of proximal phalanges

Type: synovial condyloid (Biaxial)

Movement: 1. Flexion, Extension 2. Abduction, Adduction

E. Proximal interphalangeal joint:

Proximal and middle phalanges

Type: Hinge synovial (Uniaxial)

Movement: Flexion and Extension

F. Distal interphalangeal joint:

Middle and distal phalanges

Type: Hinge synovial (Uniaxial)

Movement: Flexion and Extension

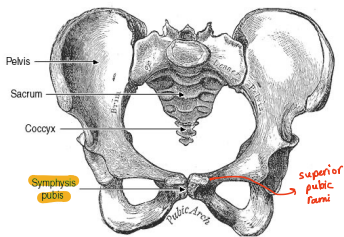
Second: Joints of the lower limbs

1 Articulation of hip bone:

A. Symphysis pubis

Right and left superior pubic rami

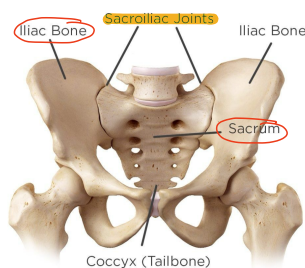
Type: secondary cartilaginous
Slightly movable



B. Sacroiliac joint

Auricular surface of the ilium and sacrum

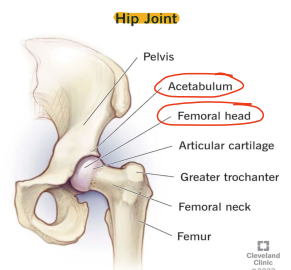
Type: plane synovial
Movement: Gliding movement



C. Hip joint

Acetabulum with head of femur

Type: Ball and socket
Movement: 1. Flexion, Extension
2. Abduction, Adduction
3. Medial and lateral rotation
4. Circumduction

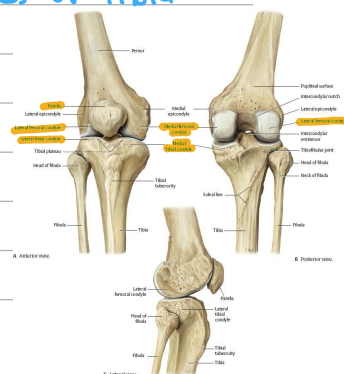


2 Articulation of the tibia:

- Knee joint: Condyles of the femur + condyles of tibia + patella

Type: Modified Hinge synovial

Remember → Fibula doesn't share in the formation of knee joint



[3] Articulation of the fibula :

A. Superior tibiofibular joint [proximal] :

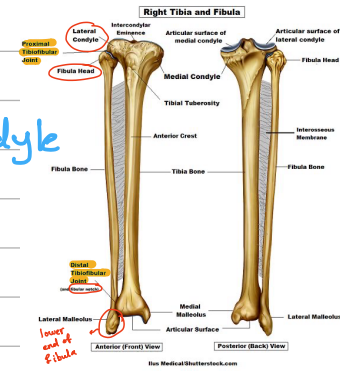
Head of fibula and fibular facet of the lateral tibial condyle

Type : plane synovial (Uniaxial)

B. Inferior tibiofibular joint [Distal] :

Fibular notch of tibia and the lower end of fibula shaft

Type: Fibrous [syndesmoses] → immovable



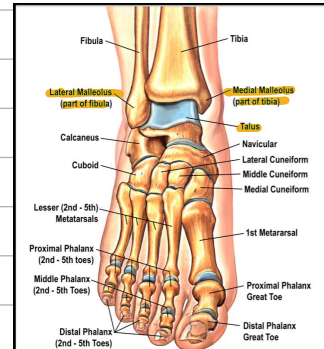
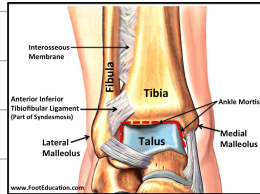
[4] Knee joint :

Above → lower end of tibia, medial malleolus and lateral malleolus of fibula

Below → trochlear surface of the body of talus

Type: Hinge synovial (Uniaxial)

Movement: Dorsiflexion and plantar flexion



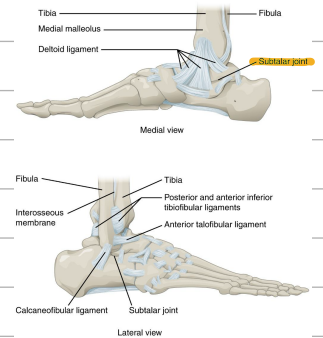
[5] Joints of the foot :

A. Subtalar : Between talus and calcaneum

B. Midtarsal : talocalcaneonavicular and calcaneocuboid

Type: plane synovial

Movement: Inversion and Eversion



Why Inversion is much more free than Eversion ?

Because lateral malleolus is lower than the medial malleolus

اللهم وفقنا من حيث لا نحسب
ربنا لا تضيع لنا تعبنا و مجهودنا ولا
تهدم لنا حلم ولا تجعل درجاتي عائق
بيني وبين النجاح
اللهم انا نسألك النجاح بكرمك ولطفك و
ليس بمجهودنا
اللهم ارنا عجائب قدراتك في دراستنا و
نجاحنا
اللهم اني فوضت امري اليك ثقة و ايمانا
بحسن تدبيرك
يا رب اكتب لي الخير اينما كان