

ANATOMY

Introduction

Anatomy : it is the science of the structure of the body

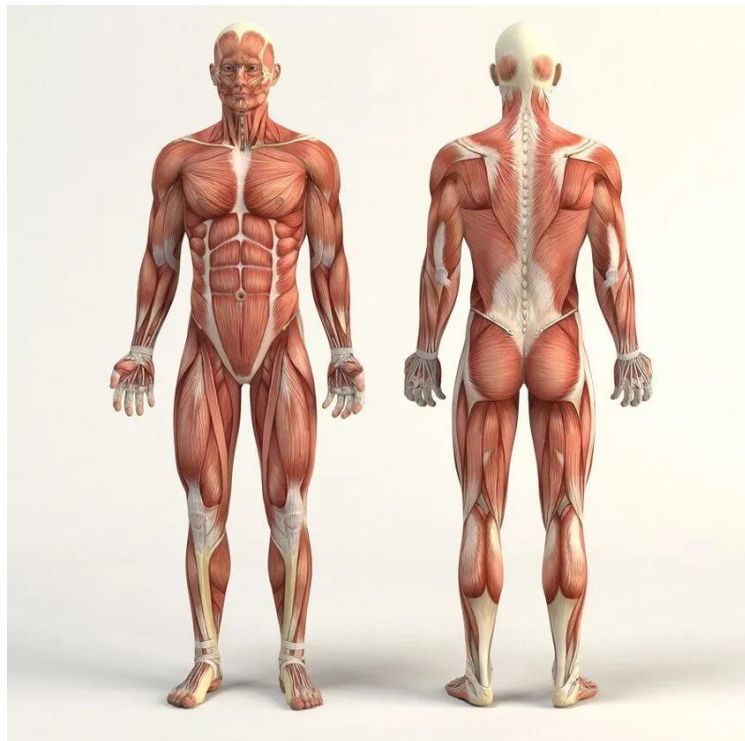
Clinical anatomy :it is the study of the structure of the body in relation to the medicine and health problems.

Anatomical position

Anatomical position : is the description of any region or part of the body according to a specific “standard position of the body”

Components of the anatomical position :

1. The person stand erect.
2. Arms straight by side
3. Legs close together
4. Face and palms face forwards.



Anatomical planes

1. Median sagittal plane :

- It is a vertical plane passing through the middle of the body.
- It divides the body into equal right and left halves

2. Para median (parasagittal) plane :

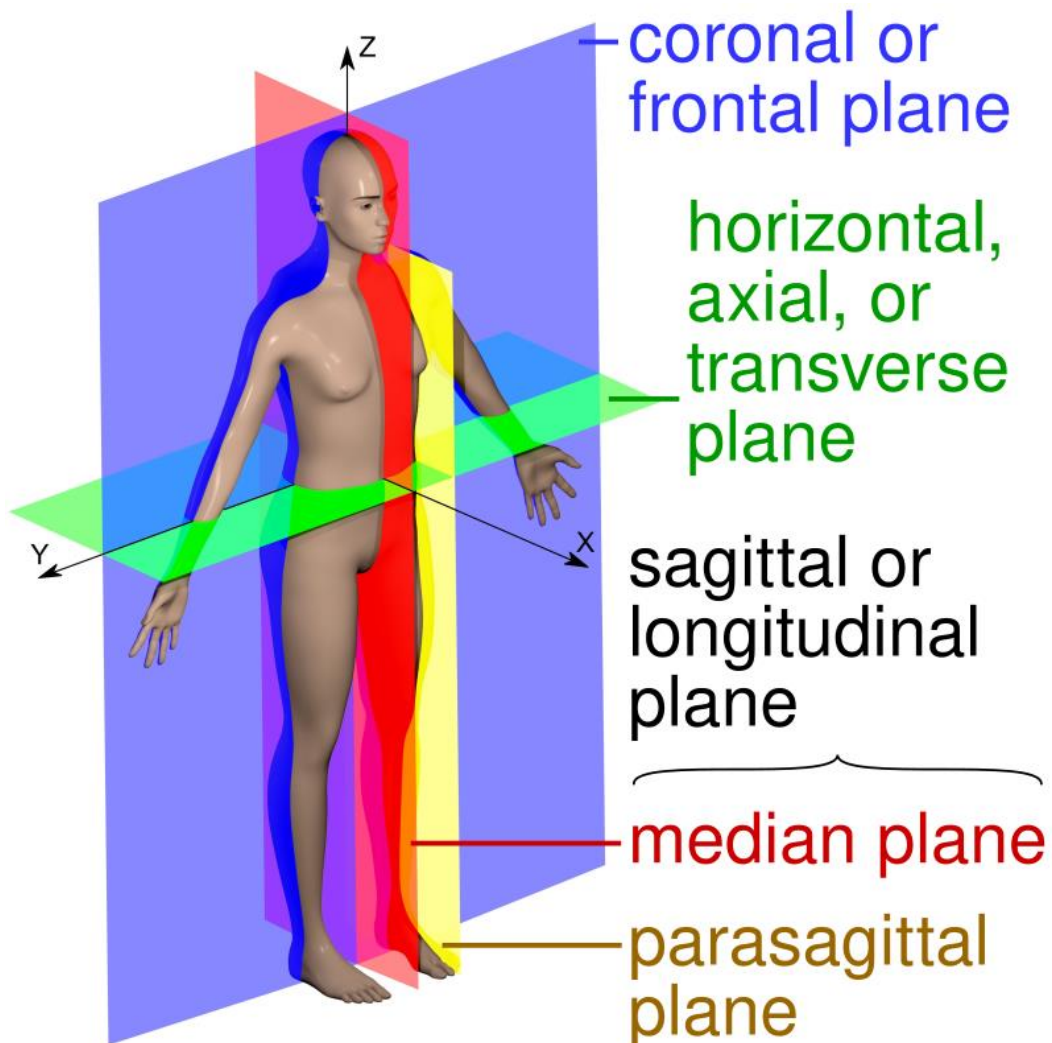
- They are planes parallel to the median sagittal plane.
- It divides the body into unequal right and left halves

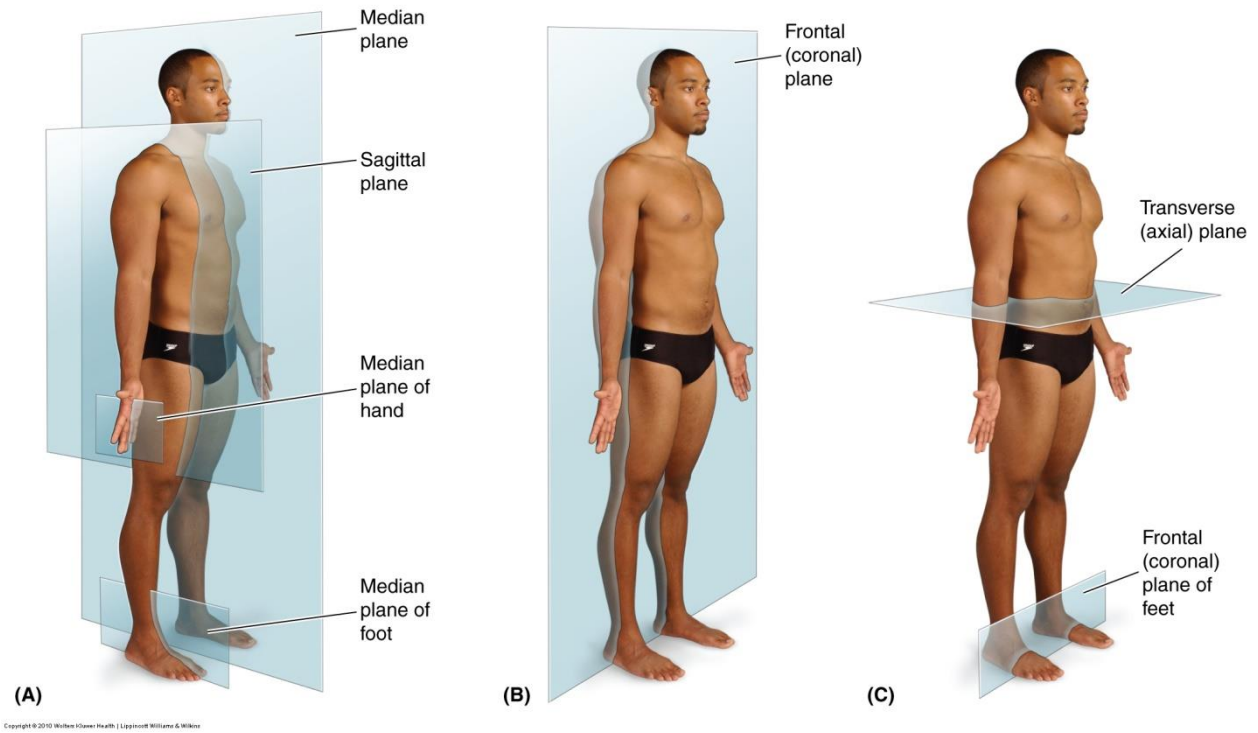
3. Coronal plane:

- It is a vertical plane at right angle to the sagittal plane.
- It divides the body into anterior and posterior parts.

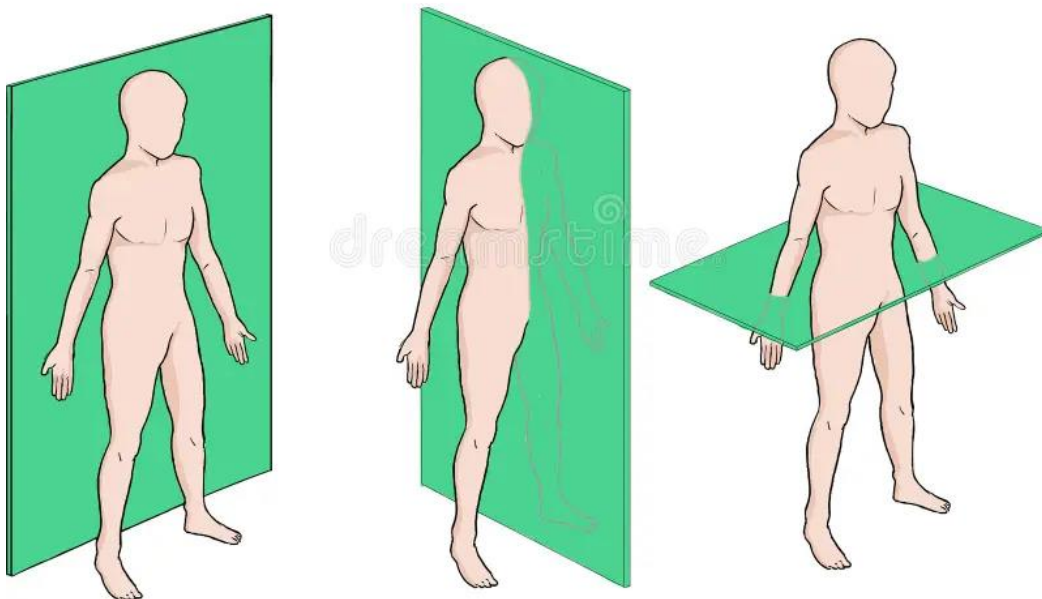
4. Horizontal or the transverse planes

- They are at right angles on both the sagittal and the coronal planes
- It divides the body into upper and lower parts.





Human Anatomy Planes



Terms of position

1) Anterior and posterior:

- a) Anterior (ventral): It means nearer to the front of the body.
- b) Posterior (dorsal) : It means nearer to the back of the body.

Anterior and Posterior

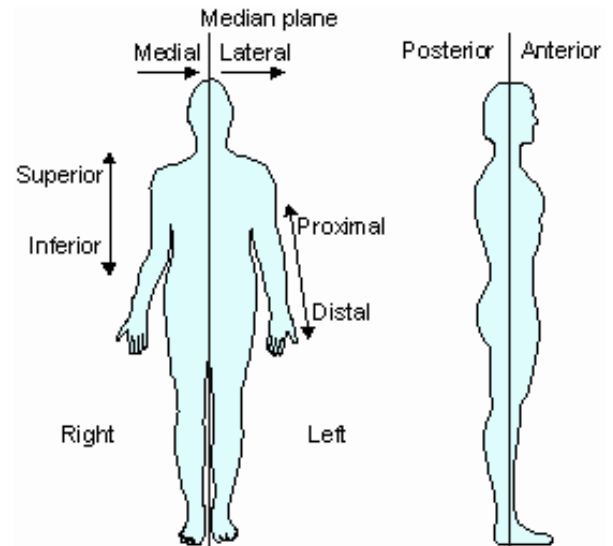
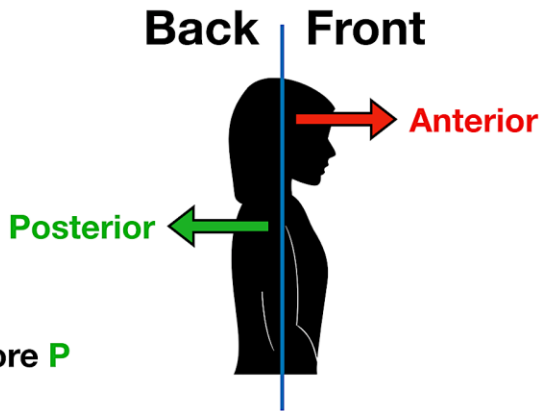
Anterior = *Front*; Toward the front of the body

Anterior = "**A**" = Front

Posterior = *Back*; Toward the back of the body

Posterior = "**P**" = Back

A comes before **P**



2) Superior and inferior:


- a) Superior (cranial): it means nearer to the head .
- b) Inferior (caudal): it means nearer to the feet.

3) Medial and lateral:

- a) Medial : It means nearer to the middle line
- b) It means far away from the middle line.

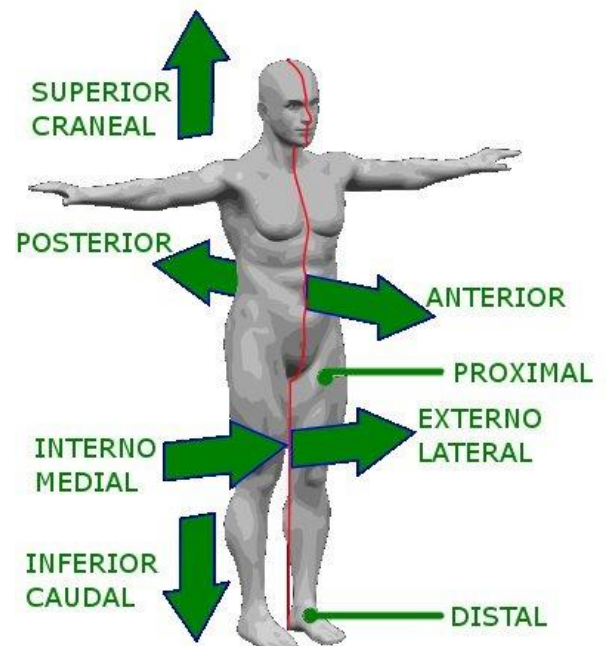
4) Proximal and distal:

- a) Proximal: It means nearer to the root of the limb
- b) Distal : It means far away from root of the limb



Anatomy Directional Terms

Midline



5) Superficial and deeps :

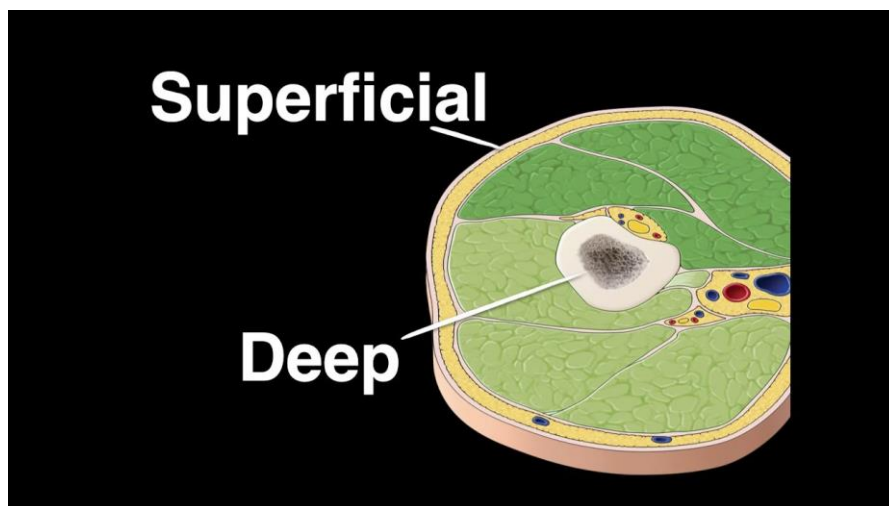
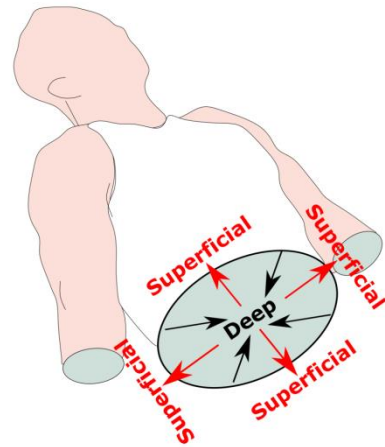
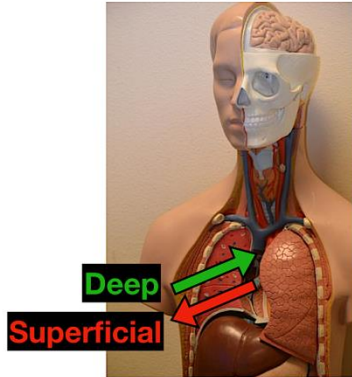
- a) Superficial: It means nearer to the skin
- b) Deep : It means far away from the skin.

Superficial and Deep

Superficial = Closer to the surface of the body

Superficial = **S**urface

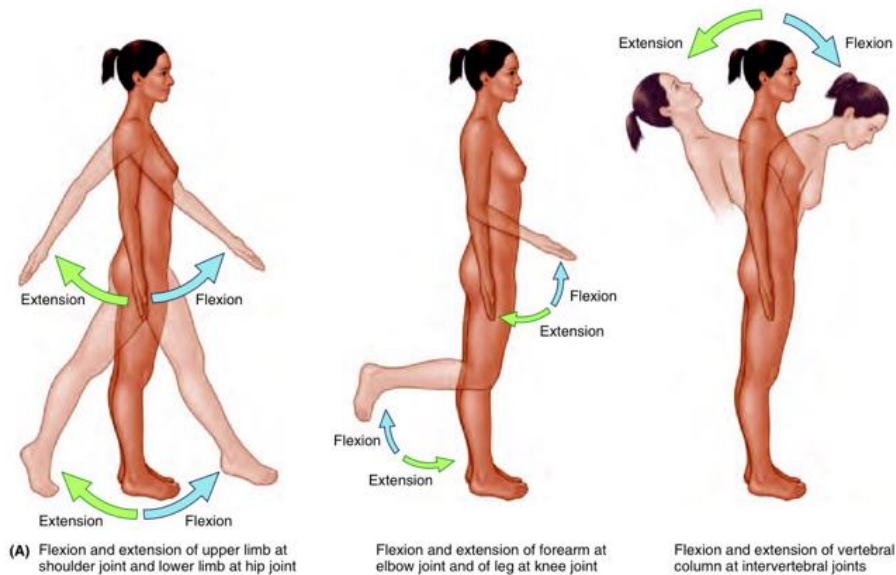
Deep = Away from the surface of the body



Terms of the Movements :

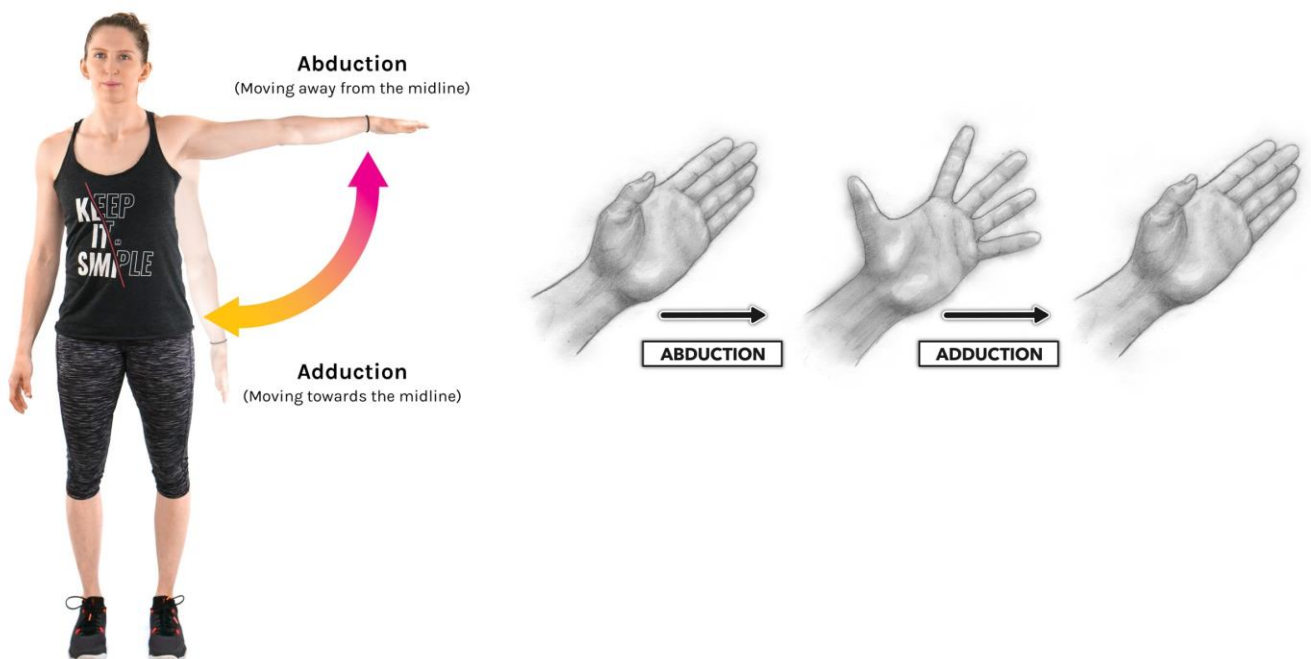
1) Flexion and extension

- a) Flexion : It means bending.
- b) Extension: It means straightening.



2) Adduction and abduction

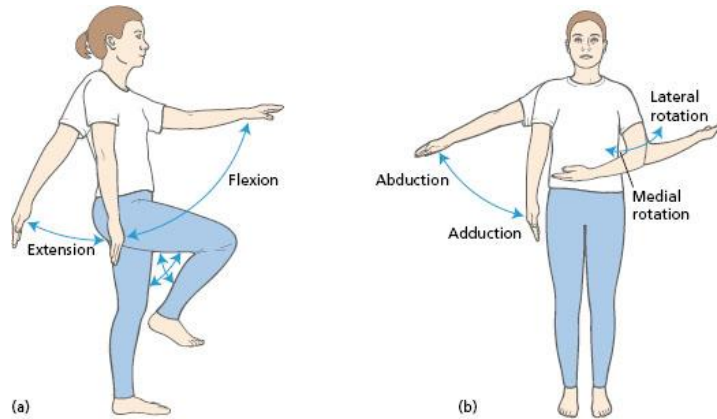
- a) Adduction : It means movement towards the median plane.
- b) Abduction : It means movement away from the median plane .



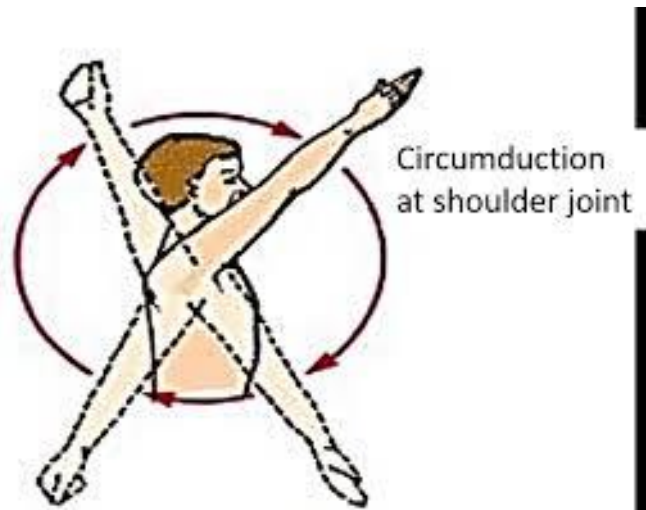
3) Rotation :

a) Medial rotation: Movement of the ventral surface medially

b) Lateral rotation : Movement of the ventral surface laterally.

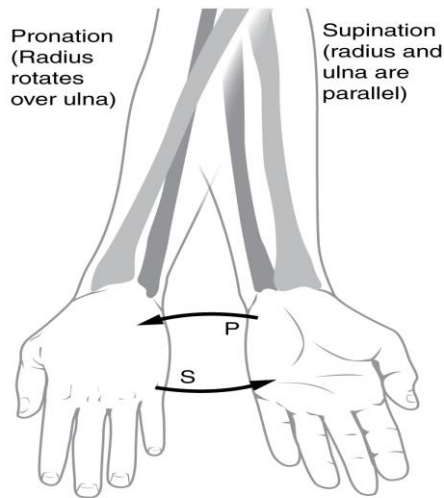


4) Circumduction : It is the combination in sequence of the movements of flexion ,abduction ,extension and adduction (occurs in shoulder and hip joints)



5) Pronation and supination :

- a) Pronation : Medial rotation of the forearm where the palm of the hand turns backwards (the radius crosses in front of the ulna)
- b) Supination : Lateral rotation of the forearm where the palm of the hand faces forwards (the radius lies parallel with the ulna)



(g) Pronation (P) and supination (S)

6) Inversion and eversion:

- a) Inversion : The sole of the foot is directed inwards or medially.
- b) Eversion : The sole of the foot is directed outwards or laterally.

