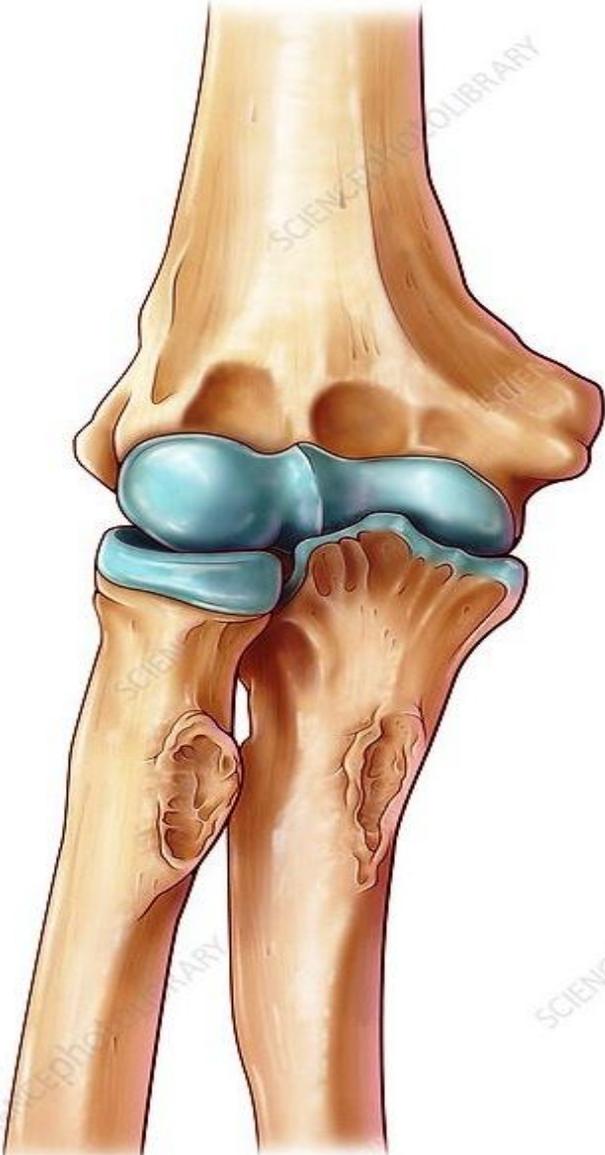


ELBOW , RADIOULNAR JOINTS



BY

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ELBOW JOINT

Type:- Synovial

Variety:- Hinge

Articular Surface:-

Above:-

Trochlea, capitulum of humerus articulate with

Below:-

trochlear notch of ulna & head of radius respectively



ELBOW JOINT

Capsule

Attachment:

Superiorly:-

Front :-Above the coronoid and radial fossae

Back :- above olecranon fossa

Medially:-root of medial epicondyle

Laterally:- root of lateral epicondyles

Inferiorly:-

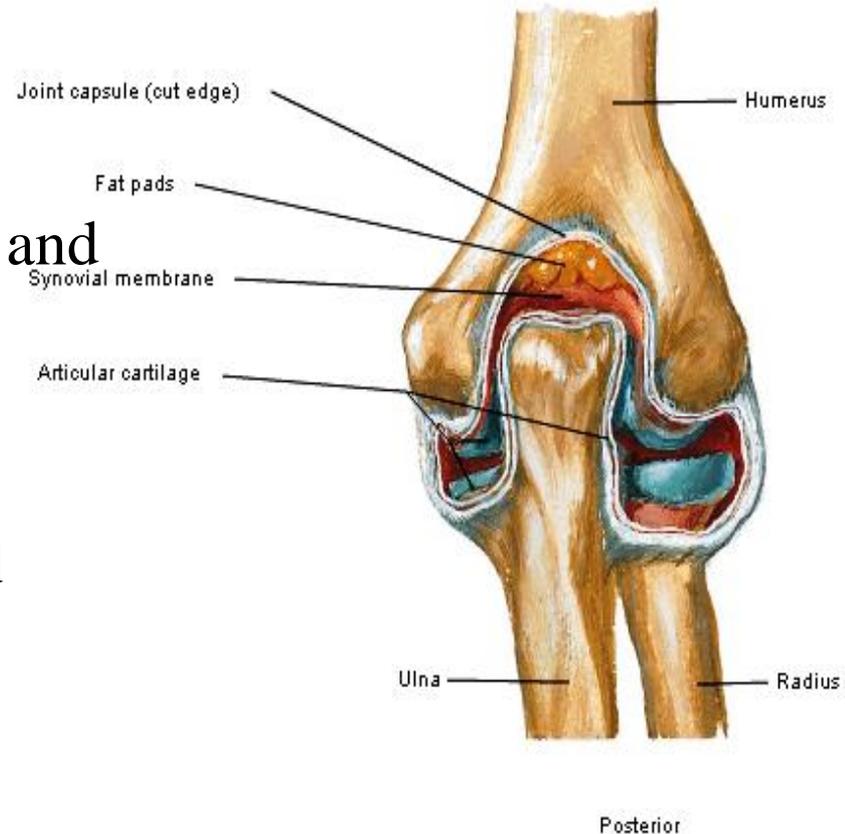
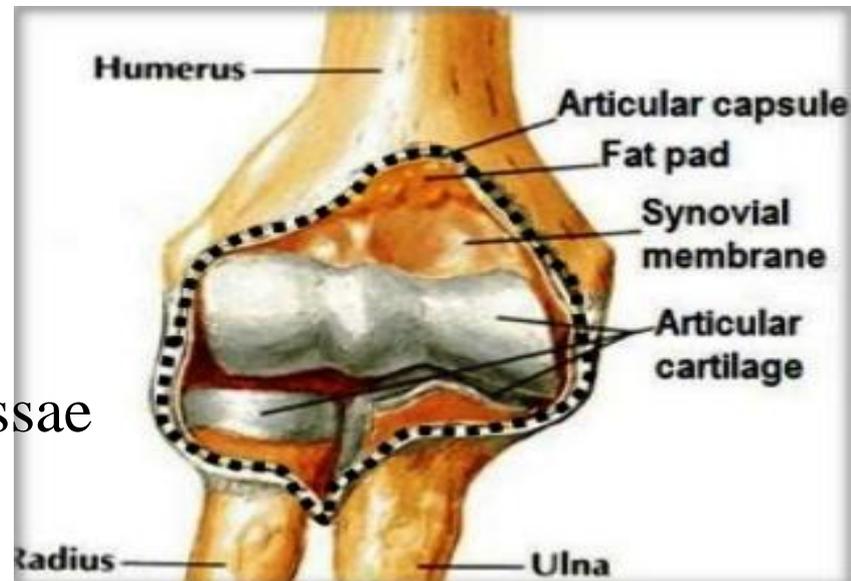
Front :- margins of the coronoid process and annular ligament

Back :- margins of olecranon process

Characters:

Thin in front & back to allow flexion and extension

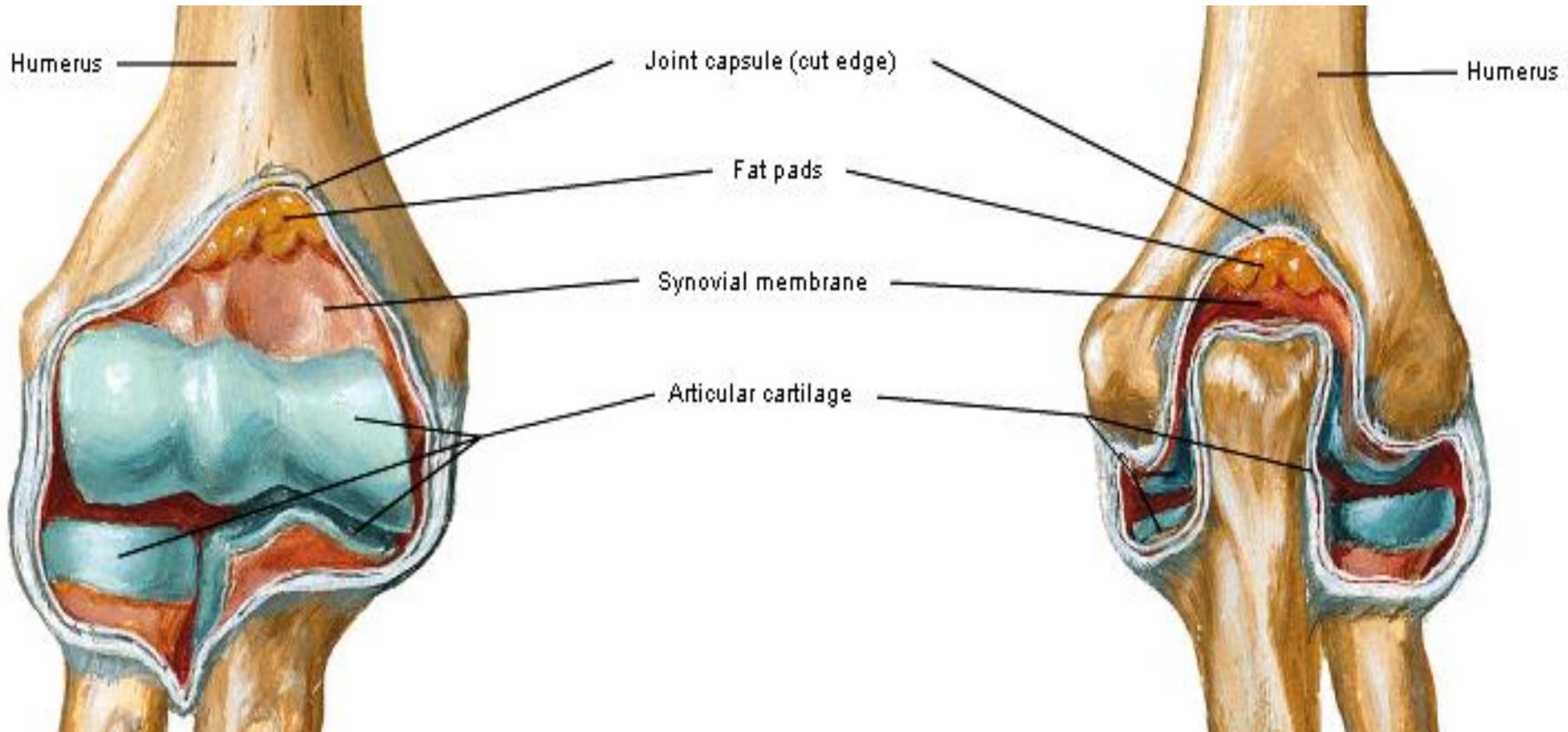
Thick on sides to prevent adduction and abduction



ELBOW JOINT

Synovial membrane:-

Lines the capsule and covers the non articular structures



ELBOW JOINT

Ligaments:-

Radial collateral (Lateral) ligament

Fan shaped

Extends from lateral epicondyle to annular ligament

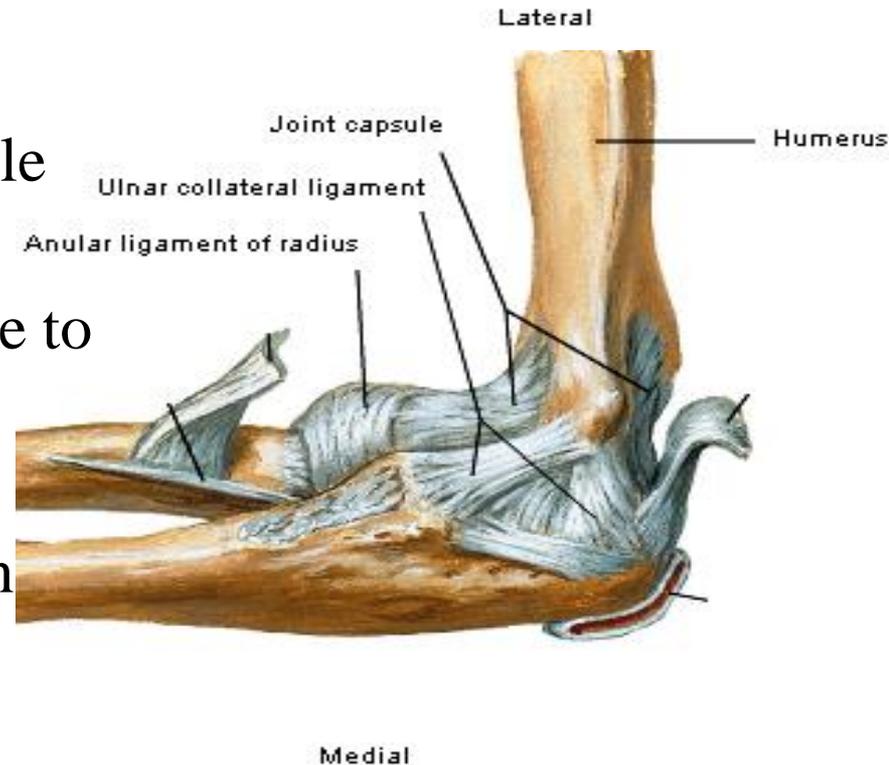
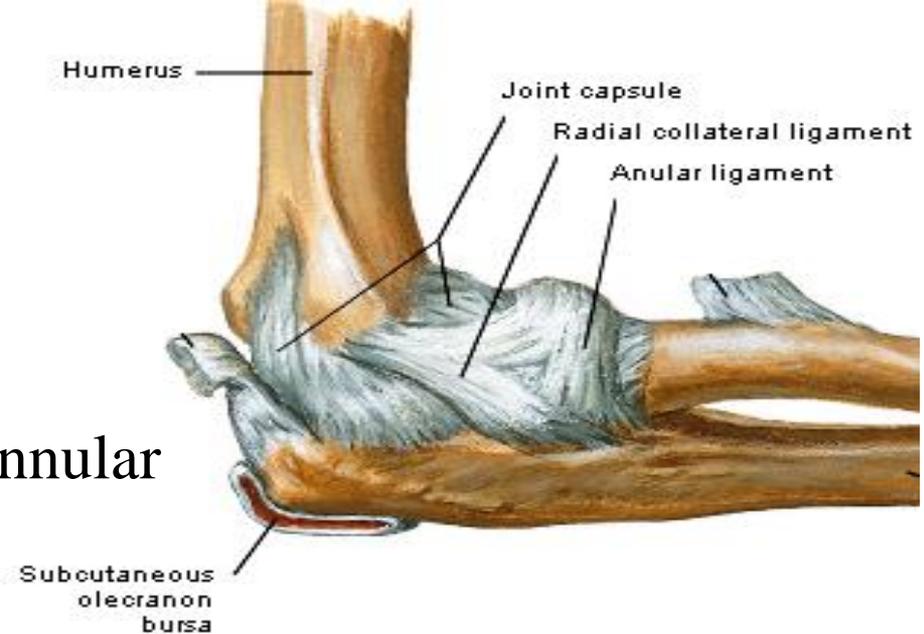
Ulnar collateral (medial) ligament

Triangular formed of 3 bands

Anterior band:- from medial epicondyle to medial border of coronoid process

Posterior band: from medial epicondyle to medial border of olecranon process

Oblique band:- from medial border of coronoid to medial border of olecranon process



ELBOW JOINT

Relations

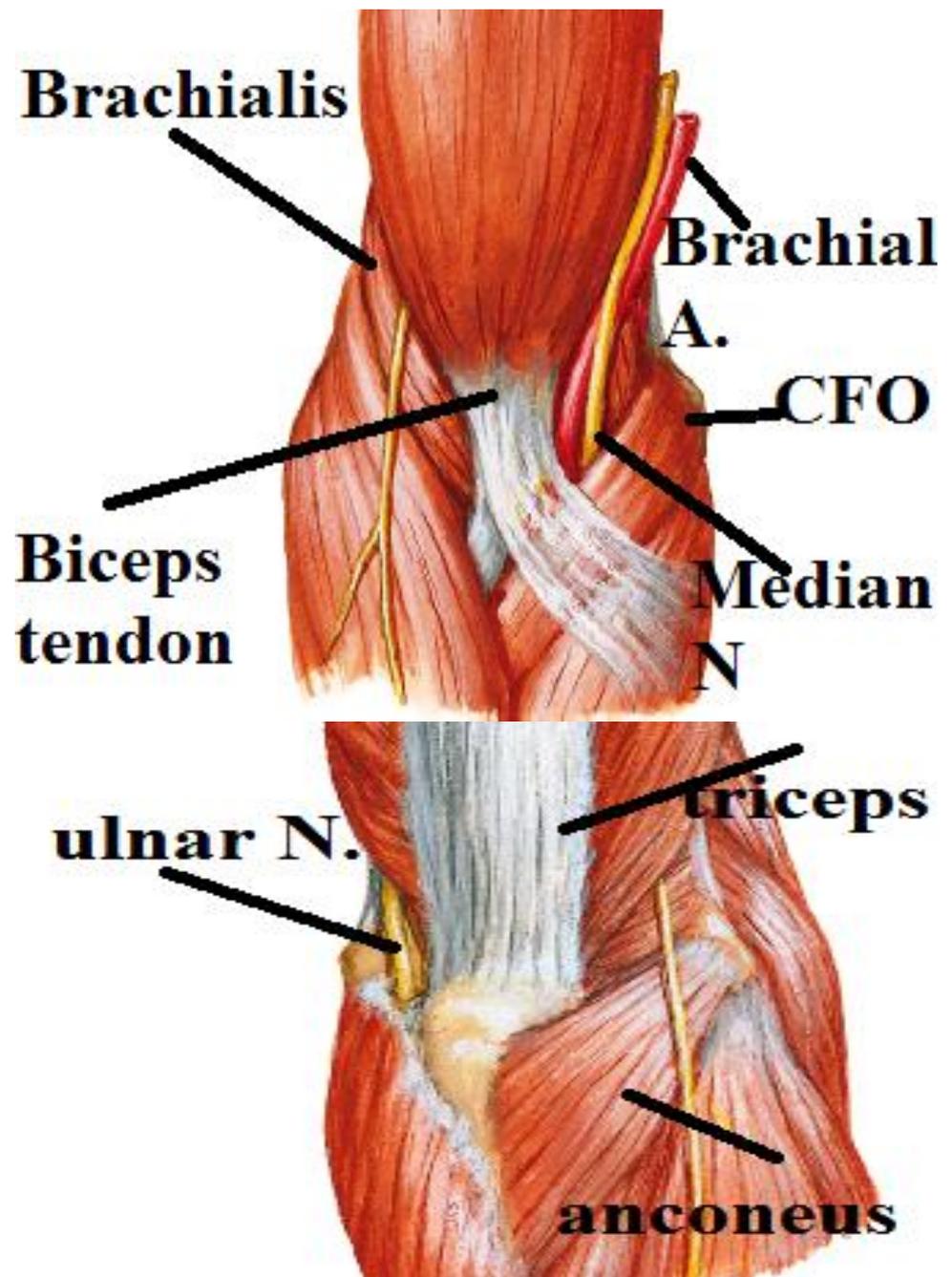
Anteriorly:

Brachialis separating it from
median nerve,
brachial artery,
biceps tendon

Posteriorly: triceps & anconeus

Medially: ulnar nerve, CFO

Laterally:- radial nerve, CEO



ELBOW JOINT

Nerve supply:

receives branches

ulnar,

median,

radial,

Musculocutaneous

Movements

Flexion: brachialis,

biceps,

brachioradialis:- flexion of midpronated forearm

Extension: triceps,

anconeus

RADIOULNAR JOINTS

A- SUPERIOR RADIOULNAR JOINT

Type:- Synovial

Variety:- Pivot

Articular Surface:-

-Articular circumference of head of radius

-Radial notch of ulna & annular ligament

Capsule:-

covers the annular ligament

continuous above with capsule of elbow joint

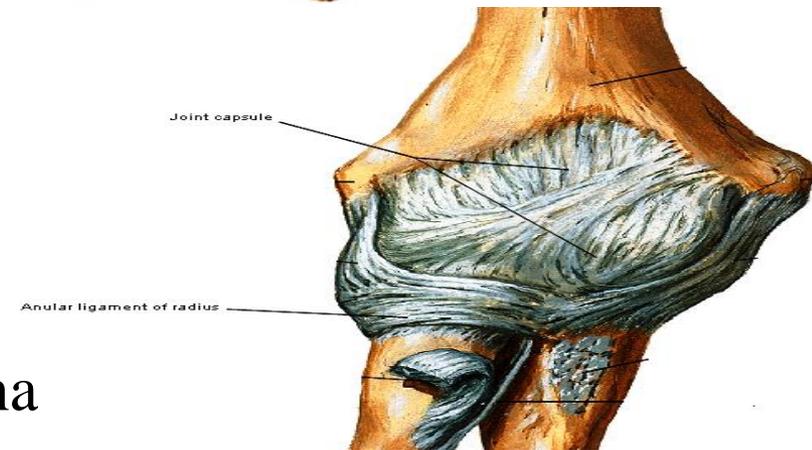
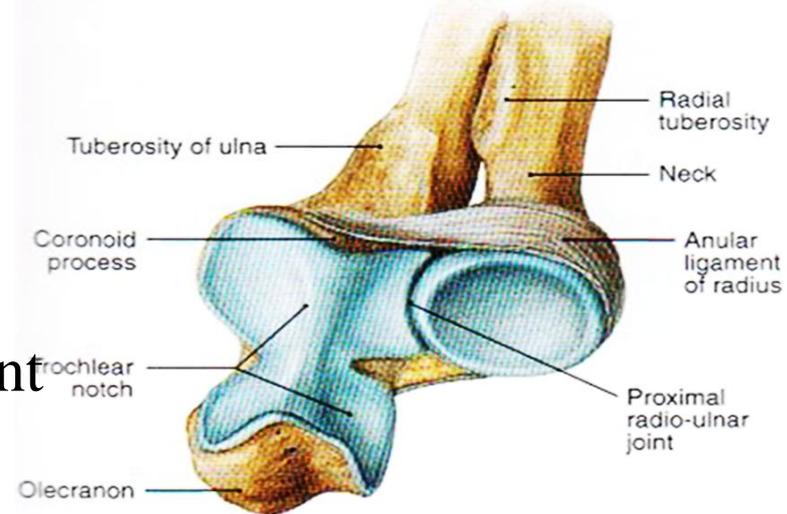
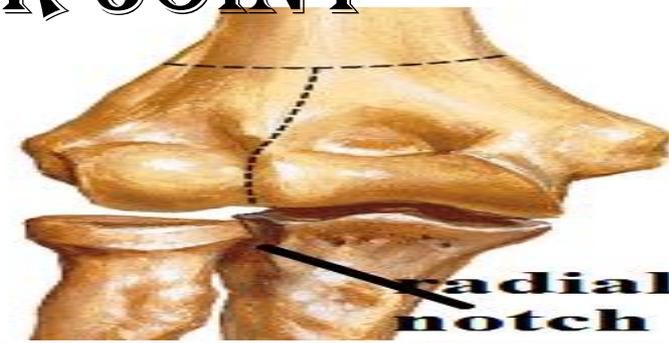
Synovial membrane:-

continuous with that of elbow joint

Ligaments:-

Annular ligament:- Strong fibrous band surrounds the head of radius

Attached to margins of radial notch of ulna



B- INFERIOR RADIOULNAR JOINT

Type:- Synovial

Variety:- Pivot

Articular Surface:-

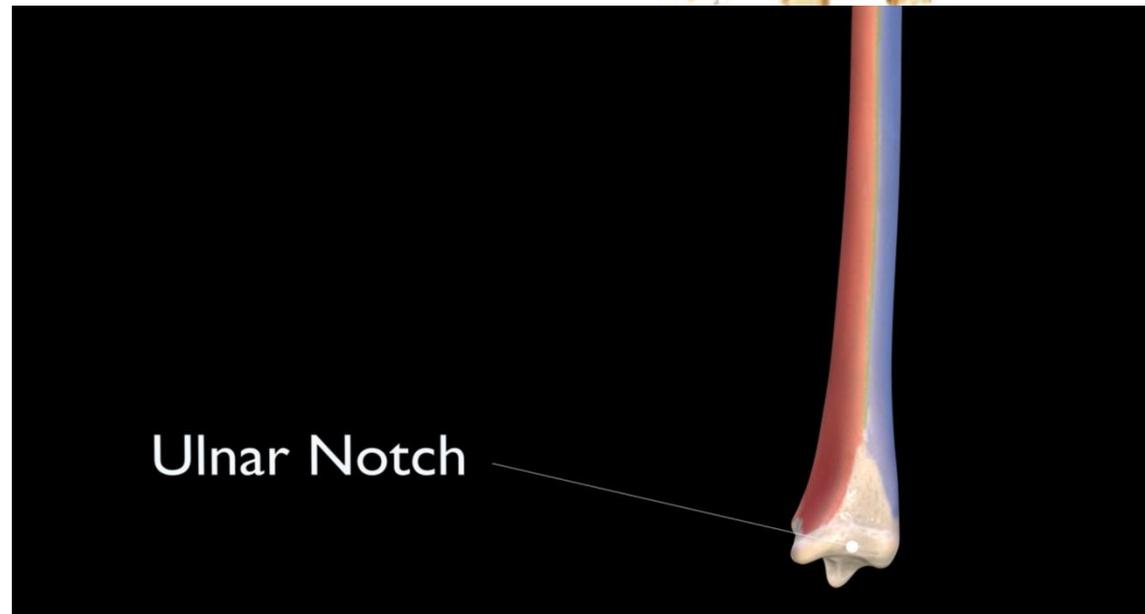
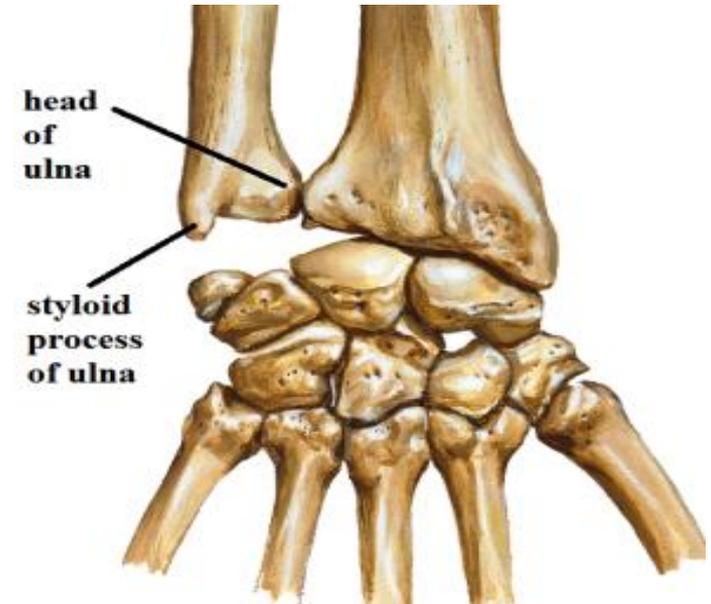
- Head of ulna
- ulnar notch of radius

Capsule:-

attach to margins of the articular surface

Synovial membrane:-

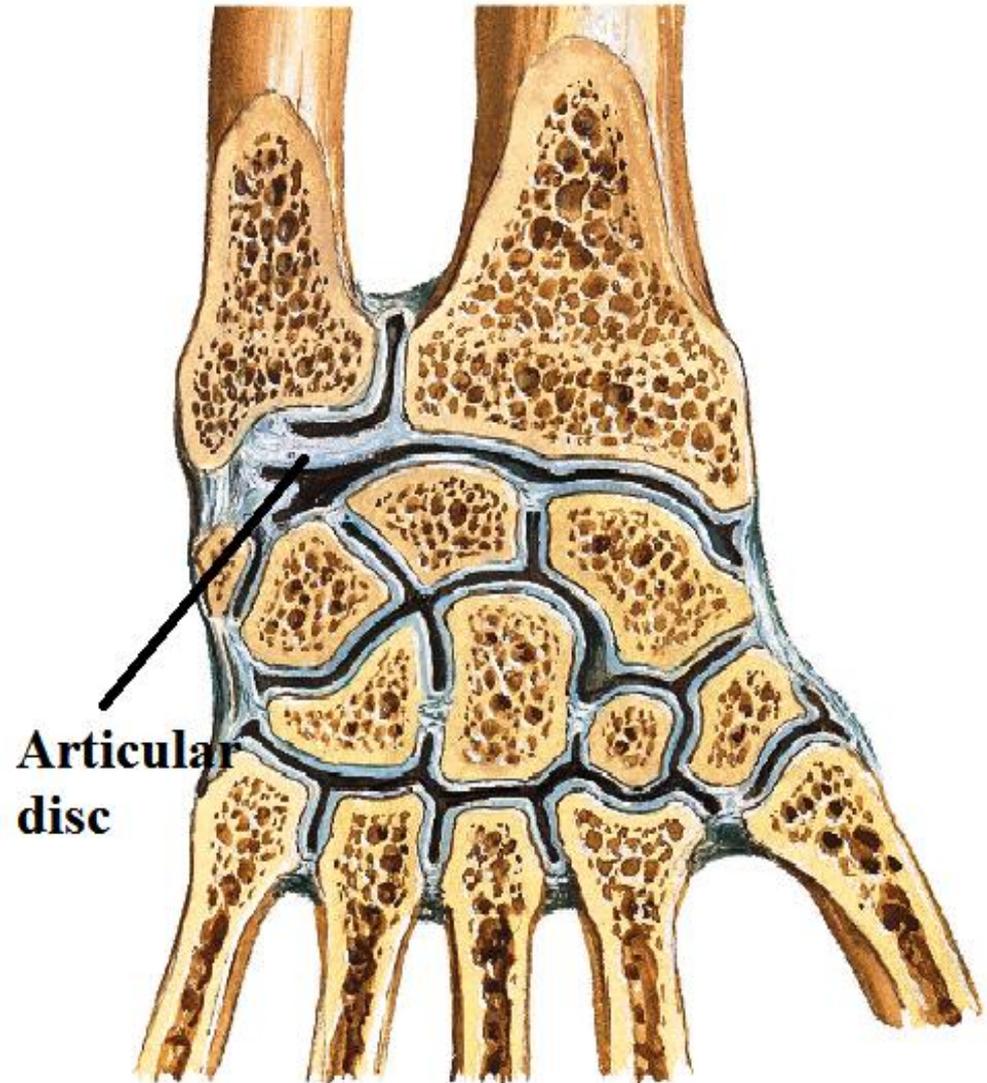
line the capsule



B- INFERIOR RADIOULNAR JOINT

Articular disc

- triangular
- fibrocartilagenous disc
- Extends from styloid process of ulna to inferior margin of ulnar notch of radius
- separates inferior radioulnar joint from wrist joint



RADIOULNAR JOINT

Movements of radioulnar joints

pronation: (radius cross the ulna to direct palm backwards)

Initiated by: brachioradialis

Completed by:

pronator teres

Pronator quadratus

supination: (radius parallel to ulna to direct palm forwards)

Initiated by: brachioradialis

Completed by:

Supinator: when forearm is extended

Biceps: when forearm is flexed



C- MIDDLE RADIOULNAR JOINT

Type:- Fibrous joint

2 parts

Oblique cord:-

Fibrous band extends from ulnar tuberosity to shaft of radius below radial tuberosity

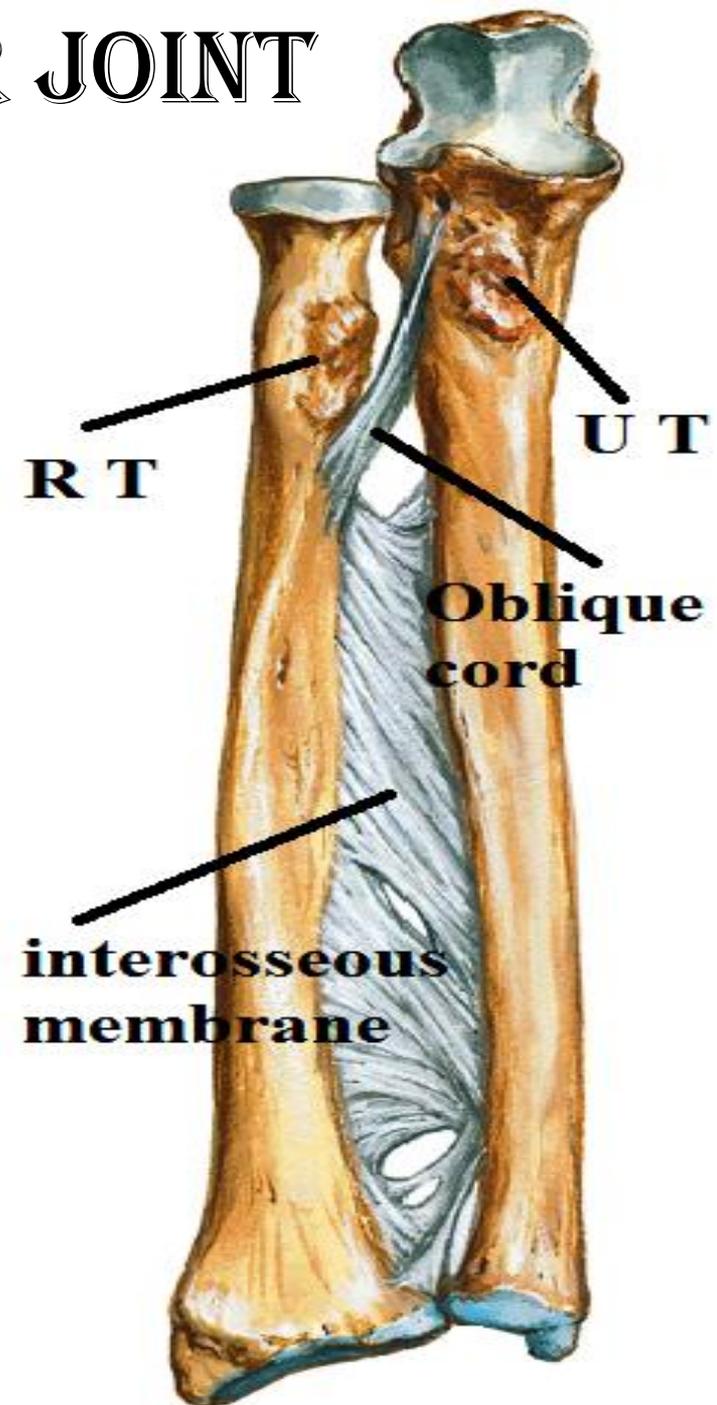
Interosseous membrane:-

-Fibrous membrane extends between interosseous border of radius & ulna

-Its fibers directed downwards and medially from radius to ulna

-Function

- Binds radius to ulna
- shock absorption
- Gives origin to deep muscles of forearm



THANQ