**Mid-Term Assignment/Paper (spring -020)**

**Human Anatomy-II**

**BS Radiology Sec-A 2nd Semester)**

**Instructor: Dr. M. Jaffar**

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**Q.1** What is cubital fossa? Write the contents of cubital fossa.

**Answer:**

**CUBITAL FOSSA:**

The cubital fossa is an area where transition between the anatomical arm and forearm.

It is located as a depression on anterior surface of the elbow joint.

Answer:

**CONTENT OF CUBITAL FOSSA:**

The contents of cubital fossa include:

。Vessels

。Nerves

。Artery

。Bicep tendons (Lateral to medial)

。Radial nerve

**Nerve:**

。Medial nerve

。Radial nerve

**Artery:**

。Brachial artery

。Radial artery

。Ulnar artery

**Bicep tendon:**

。It enters backwards and laterally and connects to radial tuberosity.

**Q.2** Write the names of ARM, fore arm (anterior compartment and posterior compartment) and hand muscles with action.

**Answer:**

**Muscles of Hand:**

**Muscle of hand can be divided into two groups:**

1. Extrinsic muscle

2. Intrinsic muscle

**EXTRINSIC MUSCLS:**

。They are located in anterior and posterior compartment of the forearm.

。.They control movement and produce forceful grip.

**MUSCLES:**

Muscles include:

。 Flexor carpi radialis

。Palmaris longus

。Felxor carpi ulnaris

。Felxor digitorum suoeeficialis

。Flexor digitorum profunds

。Flexor policies longus

。Pronator quadratus

。Extensor carpi radialis longus

。Extensor carpi radialis breus

。Extensor digitorum

。Extensor digiti minimi

。Extensor carpi ulnaris

。Abductor pollicis longus

。Extensor pollicis longus

。Extensor pollicis brevis

。Extensor indicis

**Actions:**

。Flexion

。Extension

。Abuductio

。Abduction of hand and fingers

。Oppossion of the lumb

**INTRINSIC MUSCLES:**

。They are located within hand.

。They are responsible for motor functions of hand.

**MUSCLES:**

1. Thener muscle

2. Hypothenar muscle

3. Lumbricals muscle

4. Interossei muscle

5. Palmaris brevis

6. Pollicis

**THENER MUSCLES:**

**Opponens Pollicis:**

**ACTION:**

Oppose the thumb, medially rotating and flex the metacarpal on trapezium.

Flexor Pollicis Brevis:

**ACTION:**

Flexes the Metacarpophalangeal (MCP) joint of thumb

**HYPOTHENAR MUSCLES:**

Abductor Digiti Minimi

**ACTION:**

Abducts the pinky finger

Flexor Digiti Minimi Brevis

**ACTION:**

Flexion of little finger.

Opponens Digiti Minimi

**ACTION:**

Abduction and rotation of 5th finger.

**LUMBRICALS:**

**ACTIONS:**

Flex MCP joint, extend at the interphalangeal joint of each finger.

**INTEROSSEI MUSCLE:**

Dorsal Interossei:

**ACTIONS:**

Abduction of fingers

Palmar Interossei:

**ACTIONS**

Abduction of fingers at MCP

**PALMARIS BREVIS:**

**ACTION:**

Deepens the curvature of the hand, improving grip

**POLLICIS:**

**ACTIONS:**

Abduction of thumb

**MUSCLES OF ARM:**

The upper arm is located between the shoulder joint and elbow joint.

It have four muscles = 3 in anterior and 1 in posterior compartment

**ANTERIOR COMPARTMENT:**

Biceps Brachii:

**ACTION:**

Supination of forearm, flex the arm at elbow and at shoulder.

Brachialis:

**ACTION:**

Flexion at elbow

Coracobrachialis:

**ACTION:**

Flex the arm at shoulder, and weak abduction.

**POSTERIOR COMPARTMENT:**

Triceps Brachi:

**ACTION:**

Extension of the arm

**MUSCLES OF FOREARM:**

There are many muscles in forearm.

They divided into 3 categories

1. Superficial Compartment

2. Intermediate Compartment

3. Deep Compartment

**1. SUPERFICIAL COMPARTMENT:**

Flexor Carpi Ulnaris

**ACTION:**

Flexion and abduction at wrist

Palmaris Longus:

**ACTIONS:**

Flexion at wrist

Flexor Carpi Radialis:

**ACTION:**

Flexion and abduction at wrist

Pronator Teres:

**ACTION:**

Pronation of forearm

**2. INTERMEDIATE COMPARTMENT:**

Flexor Digitorum Supreficialis:

.ACTIONS:

Flexion of MCP joint, proximal interphalangeal joint, and flex at wrist.

**3. DEEP COMPARTMENT:**

Flexor digitorum profunds:

**ACTION:**

Flexion of distal interphalangeal joint of fingers

Flexor Pollicis Longus:

**ACTIONS:**

Flexion of interphalangeal joint and MCP joint of thumb

Pornator Quadratus:

**ACTION:**

Pronate the forearm.

**Q.3** What is cranium? Write the number of bones in skull and face.

**Answer:**

**CRANIUM:**

In medical term cranium is a bony structure, which supports and protects the face and the brain.

Cranium is subdivided into:

1. Calvarium
2. Cranial base
3. **Calvarium:**

It has frontal, occipital and 2 parietal bones

1. **Cranial base:**

It has 6 bones in numbers:

1. Frontal
2. Sphenoid
3. Ethmoid
4. Occipital
5. Parietal
6. Temporal bone

**BONES OF SKULL:**

Total bones of skull=22

Face bones =14

Cranial bone =8