

# SUMMARIES & QUESTIONS

Were given by our doctors

#### Note:

It's just a **collection** of all the summaries and questions that where in our slides.

No further additions has been

added by students.

Skeleton of <u>lower limb</u> consists of: ♦

**Femur:** is the bone of thigh. ♦

**Tibia:** is the <u>medial bone of the leg.</u> ♦

**Fibula:** is the <u>lateral bone of leg.</u> ♦

Skeleton of <u>foot</u>: ♦

Tarsal bones (7 in number), <u>calcaneum</u> is the <u>largest</u> bone forming the <u>heel.</u> ♦

Metatarsal bones (5 in number). >

Phalanges (14 in number). ♦

The subcutaneous parts of bones in the lower limb are:  $\diamond$ 

Patella. ♦

Anterior border of the tibia ♦

Tibial tuberosity. ♦

Medial surface of shaft of tibia.  $\diamondsuit$ 

Medial malleolus of tibia. ♦

Lateral malleolus of fibula. ♦

The foot is a complex structure. There are 26 bones in each foot alone. The foot is also well muscled and is  $\diamond$  supported by <u>ligaments</u> and tissue known as <u>fascia</u>.

Support is of prime importance in the foot, as it bears the weight of the body and must adopt different  $\diamond$  configurations to permit locomotion.

Lecture 2
Bones of Lower Limbs

Lecture 2

Bones of Lower Limbs

#### 1-The patella:

- A. Lies on the back of the knee joint.
- B. Has apex lying superiorly.
- C. Has smooth articulating anterior surface.
- D. Gives attachment to quadriceps femoris tendon.

# 2-Which one of the foot bones contributes in the ankle joint?

- A. Calcaneum.
- B. Talus.
- C. Cuboid.
- D. Navicular.

#### 3-The tarsal bones of foot consists of :

- A. 5 bones.
- B. 7bones. C. 9 bones.
- D. 10 bones.

- 4-Which one of the following bones is the largest bone in the foot?
- A. Cuboid.
- B. Cuneiform.C. Navicular.
- D. Calcaneum.
- 5-Which one of the following bones forms the heel of foot?
- A. Talus.
- B. Calcaneum.
- C. Cuboid.
- D. Navicular.
- 6-The medial bone of the leg is :
- A. Femur.
- B. Humerus.
- C. Tibia.
- D. Fibula.

Lecture 3
Cervical Spines

# 1-Which one of cervical vertebrae contributes in the ligamentum nuchae?

- A. Atlas.
- B. Axis.
- C. 5<sup>th</sup> vertebra.
- D. 7<sup>th</sup> vertebra.

# 2-Which one of the following ligaments contributes in ligamentum nuchae?

- A. Ligamentum flavum.
- B. Intertransverse ligament.
- C. Supraspinous ligament.
- D. Anterior longitudinal ligament.

#### 3-Atlanto-axial joint is contributing with:

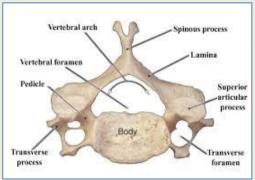
- A. Flexion of head.
- B. Extention of head.
- C. Lateral flexion of head.
- D. Lateral rotation of head.

# 4-Which one of the following is fibrocartilagenous joint?

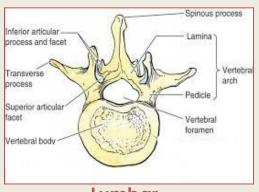
- A. Atlanto-occipital.
- B. Atlanto-axial.
- C. Between the vertebral bodies.
- D.Between the vertebral arches.

# **Summary** Pictures of the different types of vertebras

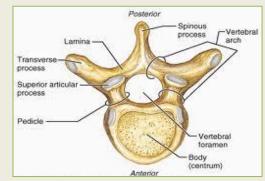
#### **Lecture 4** Thoracolumbar Spine



Cervical



Lumbar



**Thoracic** 

- 1. Which one of the following contributes in lordosis of the spine?
- A. Exaggerated cervical curvature.
- B. Exaggereated thoracic curvature.
- C. Exaggerated lumbar curvature.
- D. Lateral curvature.
- 2-Which one of the following ligaments connects the laminae of adjacent vertebrae?
- A. Supraspinous.
- B. Interspinous.
- C. Intertransverse.
- D. Ligamentum flavum.
- 3. Which one of the following muscles specifically contributes in lateral flexion of lumbar spine ?
- A. Semispinalis.
- B. Quadratus lumborum.
- C. Psoas major.
- D. Rectus abdominis.

Lecture 4
Thoracolumbar Spine



Lecture 5
Muscle of Back

### \*BACK MUSCLES:

- <u>1. Deep group</u>: attached to & moves vertebral column, supplied by posterior rami of spinal nerves.
- 2. Intermediate group: attached to & moves ribs, supplied by anterior rami of spinal nerves.

#### 3. Superficial group:

- Origin: vertebral column.
- <u>Insertion</u>: scapula (EXCEPT latissimus dorsi: humerus).
- Action: moves scapula (EXCEPT latissimus dorsi: moves humerus).
- <u>Nerve supply</u>: anterior rami of spinal nerves through brachial plexus (EXCEPT trapezius: 11th cranial nerve).

# Lecture 5 Muscle of Back

# 1-Which one of the following muscles of back that rotates the humerus medially?

- A. Trapezius.
- B. Latissimus dorsi.
- C. Rhomboid major.
- D. Serratus posterior superior.

## 2-Regarding back muscles, which one of the following statements is correct?

- A. All back muscles are supplied by posterior rami of spinal nerves.
- B. Muscles of intermediate group move vertebral column.
- C. Muscles of superficial group are involved in upper limb movements.
- D. Muscles of deep group serve respiratory functions.

## 3-Which one of the following muscles is involved in movement of upper limb?

- A. Serratus posterior superior.
- B. Serratus posterior inferior.
- C. Erector spinae.
- D. Trapezius.

## 4-Which one of the following muscles connects the vertebral column to humerus?

- A. Levator scapulae.
- B. Trapezius.
- C. Latissimus dorsi.
- D. Rhomboid major.

## 5- Which one of the following muscles contributes in the boundaries of muscular triangle of back?

- A. Erector spinae.
- B. Serratus posterior superior.
- C. Serratus posterior inferior.
- D. Latissimus dorsi

Lecture 7

Pectoral Region & Axilla

# \*Muscles of the pectoral region are connecting the <u>upper limb</u> with <u>anterior</u> and lateral thoracic wall:

- ■Pectoralis major.
- ■Pectoralis minor.
- ■Subclavius.
- •Serratus anterior.
- \*The axilla is a pyramidal space situated between the upper part of arm and the side of the chest, it has 4 walls (anterior, posterior, medial and lateral), base, and apex.
- \*The axilla is an important space as it transmits the neurovascular bundle from the neck and thorax to the upper limb.

#### It contains:

- Axillary vessels.
- Cords and branches of the brachial plexus.
- Axillary lymph nodes.

#### Lecture 7

Pectoral Region & Axilla

# 1- Which one of the following muscles performs adduction of the arm?

- A. Pectoralis minor.B. Pectoralis major.
- C. Subclavius.
- D. Serratus anterior.

#### 2- Serratus anterior is innervated by:

- A. Thoracodorsal nerve.
- B. Long thoracic nerve.
- C. Axillary nerve.
- D. Radial nerve.

# 3- Which one of the following muscles contributes in rotation of the scapula above the head?

- A. Pectoralis major.
- B. Pectoralis minor.
- C. Serratus anterior.
- D. Teres major.

# 4- Which one of the following muscles forms the lateral wall of axilla?

- A. Pectoralis major.
  B. Pectoralis minor.
- C. Serratus anterior.
- D. Biceps brachii.

#### 5- Which stage of the brachial plexus lies in the axilla

- 3
- A. Roots.
- B. Divisions.
- C. Trunks.
- D. Cords.

#### **Lecture 8**

Axillary & Median Nerves

#### **Axillary Nerve**

- Origin: Posterior cord
- Spinal segments: C5, C6
- •Function:
- Motor: Deltoid, teres minor
- •Sensory: Skin over upper lateral part of arm

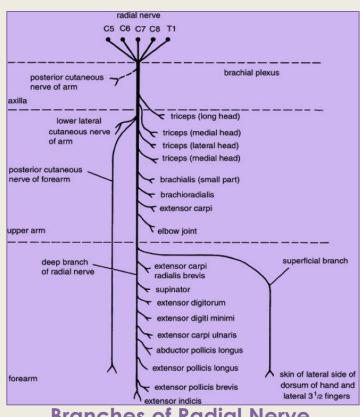
#### **Median Nerve**

- Origin: Medial and lateral cords
- •Spinal segments: (C5), C6 to T1
- •Function:
- •Motor: All muscles in the anterior compartment of the forearm (Except flexor carpi ulnaris and medial half of flexor digitorum profundus), three thenar muscles of the thumb and two lateral lumbrical muscles
- •Sensory: Skin over the palmar surface of the lateral three and one-half digits and over the lateral side of the palm and middle of the wrist

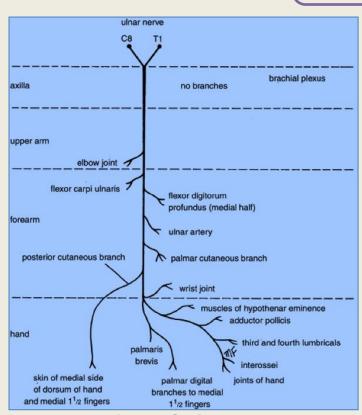
#### Lecture 10 Forearm

- 1-Which one of the following muscles contributes as powerful supinator of forearm?
- a. Palmaris longus.
- b. Pronator teres.
- c. Biceps brachii.
- d. Supinator..
- 2- Which muscle is supplied by median nerve?
- A. Anconeus.
- B. Brachioradialis.
- C. Extensor carpi radialis longus.
- D. Flexor digitorum superficialis.
- 3- Which muscle is related to common flexor origin?
- A. Flexor digitorum profundus.
- B. Flexor pollicis longus.
- C. Pronator quadratus.
- D. Pronator teres.

#### Lecture 12 Radial & Ulnar Nerves



**Branches of Radial Nerve** 



**Branches of Ulnar Nerve** 

#### Lecture 14

Gluteal Region & Back of Thigh

- 1- Which of the following is powerfull lateral rotator of the thigh?
- A. Gluteus minimus.
- B. Gluteus medius.
- C. Piriformis.
  D. Tensor fascia lata.
- 2- Which one of the following muscles gives attachment to iliotibial tract?
- A. Biceps femoris.
- B. Adductor longus.
- C. Gluteus maximus.
- D. Gluteus medius.
- 3- Which one of the following is passing through greater sciatic foramen?
- A. Tendon of obturator internus muscle.
- B. Sciatic nerve.
- C. Femoral nerve.
- D. Obturator nerve.
- 4- The action of hamstring muscles is :
- A. Flexion of hip joint.
- B. Extension of hip joint.
- C. Lateral rotation of hip joint.
- D. Extension of knee joint.

- 5- Hamstring muscles are not including:
- A. Biceps femoris.
- B. Semitendinosus.
- C. Gracilis.
- D. Semimembranosus.
- 6- Abduction of hip joint is performed by:
- A. Gluteus maximus.
- B. Gluteus medius.
- C. Obturator internus.
- D. Piriformis.
- 7- Which one of the following muscles forms ligament at the back of knee joint?
- A. Semitendinosus.
- B. Semimembranosus.
- C. Biceps femoris.
- D.Adductor magnus.

Lecture 18
Joints

- → Joint is the site where two or more bones come together, whether movement occurs or not between them.
- → Joints are classified according to the tissues that lie between the bones into 3 types: fibrous, cartilaginous & synovial.
- Synovial joints are freely movable & characterized by the presence of: fibrous capsule, articular cartilage, synovial membrane & joint cavity containing synovial fluid.
- Synovial joints are classified according to the range of movement into: plane and axial.
- Axial are divided according to the number of axes of movements into: uniaxial, biaxial & polyaxial or multiaxial.
- Stability of synovial joints depends on: shape of articular surfaces, ligaments & muscle tone.
- ♦ Joints have same nerve supply as muscles moving them.

Lecture 18
Joints

- 1- Which of the following is a hinge synovial joint?
- A. Shoulder.
- B. Elbow.
- C. Sternoclavicular.
- D. Symphysis pubis.
- 2- Which of the following is a cartilaginous joint?
- A. Hip.
- B. Elbow.
- C. Sternoclavicular.
- D. Symphysis pubis.
- 3- Which of the following is a pivot synovial joint?
- A. Shoulder.
- B. Elbow.
- C. Sternoclavicular.
- D. Radioulnar

- 4- In the synovial joint :
- A. Articular surfaces are united by a plate of fibrocartilage.
- B. The synovial membrane is not vascular.
- C. Stability is not related to muscle tone.

  D. Movement is free.
- 5- The elbow joint:
- A. Is a fibrous joint.
- B. Is a secondary cartilaginous joint.
- C. Allows only flexion & extension.
- D. Is a synovial pivot joint.

Lecture 19 Shoulder Region

- ♦ MUSCLES OF SHOULDER REGION:
- 1. Origin: scapula.
- 2. <u>Insertion</u>: humerus.
- 3. <u>Action</u>: move humerus (SHOULDER JOINT)
- 4. <u>Nerve supply</u>: anterior rami of spinal nerves through brachial plexus.
- ROTATOR CUFF: 4 muscles in scapular region surround and help in stabilization of shoulder joint:

(supraspinatus, infraspinatus, teres minor, subscapularis).

- ♦ Shoulder joint:
- 1. Type: synovial, ball & socket
- 2. Articular surfaces: head of humerus & glenoid cavity of scapula
- 3. Stability: depends on rotator cuff
- 4. Relations: rotator cuff and axillary nerve
- 5. Movements: flexion, extension, abduction, adduction, medial & lateral rotation

Lecture 19 Shoulder Region

# 1- Which one of the following muscles is inserted into the lesser tuberosity of the humerus?

- A. Subscapularis
- B. Deltoid
- C. Teres major
- D. Infraspinatus
- 2- Which one of the following muscles is part of the rotator cuff?
- A. Subscapularis.
- B. Deltoid.
- C. Teres major.
- D. Rhomboid minor.
- 3- Regarding the shoulder joint, which one of the following statements is correct?
- A. It is a stable joint.
- B. It is a synovial joint of hinge variety.
- C. Latissimus dorsi muscle adducts shoulder joint.
- D. Downward dislocation of shoulder joint may cause injury to the radial nerve.

#### Lecture

Hip, knee & Ankle Joints

- 1- The muscle that extends the hip & flexes the knee joint is:
- A. Gluteus maximus.
- B. Quadriceps femoris.
- C. Sartorius.
- D. Semitendinosus.
- 2- The bursa that communicates with the synovial membrane of knee joint is:
- A. Suprapatellar.
- B. Prepatellar.
- C. Subcutaneous infrapatellar.
- D. Deep infrapatellar.
- 3- The muscle that dorsiflexes the ankle is:
- A. Flexor digitorum longus.
- B. Tibialis anterior.
- C. Peroneus brevis.
- D. Gastrocnemius.

# GOOD

