Final-Term Assignment/Paper (spring -020)
Human Anatomy-II
BS Radiology Sec-A 2nd Semester)
Instructor: Dr. M.Jaffar

Time: 6-hours (9am-3pm) **Max Marks: 50**

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Q1**. Write anterior compartment of thigh and posterior compartment of leg muscles with origin, insertion and action. (10)**

Ans. Anterior compartment of thigh:-

Ans. Quarecipe femurs.

Rictus femurs.

- **Origin**
  - Interior interior iliac spin, margin of acetabulum.
- **Insertion**
  - Patiala and tebial tuberosity via the patellar ligament.
- **Action**
  - Extend, knee , flexes tight.
    Vastus laterals
    Vastus medial.
    Vastus intermedia's.
- **Origin**
  - Femur.
- **Insertion**
  - Patiala and tebial tuberosity via the patellar
- **Action**
  - Extends , knee.

Sartorius

- **Origin**
  - Anterior superior illiac span.
- **Insertion**
  - Medial tibia.

- **Action**
  - Flex , abduct, let, rotate, thigh; weak knee flexor.

Lliopsoas

- **Origin**
  - Lilia , sacrrum , lumber , vertebra.
- **Insertion**
  - Lesser trochanter.
- **Action**
  - Flexor of thigh innervation femoural nerve.

Posterior compartment of Leg muscle.

Triceps surea.
Gastrocnemius (2heads)

- **Origin.**
  - Medial and lateral condyles of femur.
- **Insertion**
  - Posterior calcaneus via Achilles tendon.

Soleus.

- **Origin.**
  - Tibia and fibula.
- **Insertion.**
  - Same as above.
- **Action of both.**
  - Plentareflex foot.

Plantaris (variable)

- **Origin.**
  - Posterior femur.
- **Insertion.**
  - Same as above .
- **Action.**
  - Plentareflex foot, weak knew flexion.
- **All innervated .**
  - By the tebial nerve.

Q2. Define the following (10)

(a) Endocrine gland

Ans:- Endocrine Gland are ductless glands of the endocrine system that secret their products, hormones, directly into the blood. The major gland of endocrine system include the pineal gland, pituitary gland, ovaries, pancreas, testes, thyroid Gland, parathyroid

gland, hypothalamus and adrenal gland. The hypothalamus and pituitary gland are neuroendocrine organs.

(b) Exocrine gland

Ans:- Exocrine gland are glands that secret substances onto an epithelia surface by way of a duct.

Example:-

- Include sweat,
- Salivary.
- Mummery.
- Lacrimal.
- Prostate and mucus.
  Exocrine gland are one of two type of gland in the human body.

(c) Thalamus

Ans:- position

- It is located above the brain stem and between the cerebral cortex and mid brain.

Function

- Carries sensory information from the body to cerebrum and the limbic system.

(d) femoral triangle

Ans:- The femoral triangle (or scrap's triangle) is an anatomical region of the upper third of the thigh. It is a subfascial space which appears as a triangular depression below the inguinal ligament when the thigh is flexed, abducted and laterally rotated.

Q3. Write the Extraocular muscles. Enlist both voluntary and involuntary. (10)

Ans. Extraocular Muscle:-

- The extra ocular muscle are the six muscle that control movement of the eye and one muscle that control eyelid elevation (levator palpebrea) . The action of the six muscles responsible for eye movement depend on the position of the eye at the time of muscle contractions.
- **Voluntary Muscles.**

- Superior rectus
- Inferior rectus
- Medial rectus
- Lateral rectus.
- Superior oblique
- Inferior oblique
- Levator palpebrea superior.

Involuntary Muscles

- Superior tarsal, or Muller's muscle.
- Inferior tarsal muscle.

Q4. Describe the arches of foot and functions of arches. (10)

Ans. Arches of the foot:-

- Bones of the foots are arrange to form three strong arches.
- Arches are fully developed by age 12 or 13,
  - Two longitudinal(lateral and medial).
  - One transvers.

Functions of Arches:-

- Arches help the foot support and distribute the weight of the body and provide leverage during walking.

Q5. Write a note on cerebrum, its lobes and functions. (10)

Ans. Cerebrum:-

- It is divided into 2 halves called cerebral hemisphere.
- They communicate via corpus coliseum.
- Cerebral cortex is the outer region cerebrum.

Lobes of cerebrum:-

- **Frontal Lobe**
  - Most interior portion of the cerebrum (under forehead) "Central sulcus" separate frontal and parietal lobe .
  - Control motor function , personality, and speech,
  - Like center of reasoning, planning some part of speech, movement. Emotion, problem solving.
  - Also Called motor cortex.
- **Partial Lobe.**
  - The most superior portion of the cerebrum (Top of the head) ,
  - Receive and interpret nerve impulse from sensory receptor and Interpret language.
  - Receive sensory input from the skin (touch, pressure, temperature, and pain,)
  - Also Called sensory Cortex.
- **Occipital Lobe.**
  - The most posterior portion of the cerebrum (Back of the head),
  - Receives input of the eyes and controls vision.
  - Also Called "visual cortex".
- **Temporal Lobe.**
  - The left and right lateral portion on the cerebrum (on the side of your head above your ears,)

- Control hearing and smell.
- Also Called auditory cortex.

- **Functions of cerebrum:-**
  - It helps in movement.
  - It controls speech.
  - It is responsible for sensory processing.
  - It determine the intelligence of the being.