

Date: _____

①

Hira Gul
14949
Anatomy
4th semester

Question # 1

→ Write about the structure of eye. Also name the foramina found in the base of skull.

→ Answer:-

Structure Of Eye:-

The eye consist of three coats or layers.

- 1 → External fibrous coat
- 2 → Middle vascular coat
- 3 → Inner nervous coat.

→ The eye ball contain three major refractive media

- aqueous humor
- vitreous body
- lens.

→ Fibrous Coat:-

→ The external protective fibrous coat.

→ Made up of posterior opaque

part sclera.

→ Anterior transparent part the cornea.

● Sclera :-

→ composed of dense fibrous tissue and is white that covers all of the eye ball except the cornea.

→ The lamina cribrosa area of sclera that is pierced by nerve fiber.

→ The vena vorticosae also pierce the sclera.

→ The sclera is directly continuous in front with corneoscleral junction or limbus.

● Cornea :-

→ The transparent part.

→ responsible for refraction of the light entering the eye.

→ The cornea is in contact with the aqueous humor posteriorly

→ The corneal epithelial environment is maintain by lacrimal gland.

Date: _____

→ Vascular Coat :-

- The middle pigmented coated layer
- consist from behind forward
 - Choroid
 - Ciliary body
 - Iris

→ Choroid :-

- composed of an
 - outer pigmented layer
 - inner "
 - highly vascular layer.

→ Ciliary Body :-

- continuous posteriorly with the choroid
- Anteriorly with peripheral margin of the iris.
- composed of
 - ciliary ring
 - ciliary process
 - ciliary muscle.

→ Iris :-

- Iris is a thin, contractile, pigmented diaphragm with central aperture pupil.
- suspended b/w cornea & lens in aqueous humor.

Date: _____

(4)

- The iris is attached to the anterior surface of the ciliary body.
- The muscles of iris are involuntary consist of circular & radiating fibers.

→ Nervous Coat:-

- consist of retina
- retina consist of
 - Inner pigmented layer
 - Inner nervous layer
- The outer surface is in contact with choroid.
- The inner surface is in contact with the vitreous body.
- The posterior part of retina is an oval, yellowish area the macula lutea.
- It has a central depression the fovea centralis

→ Aqueous Humor:-

- transparent watery fluid similar to plasma
- contains low protein concentration

Date: _____

(5)

- it is secreted from the ciliary epithelium
- supporting lens.

→ Vitreous Body:-

- transparent gel that fills the eyeball behind the lens.
- The hyaloid canal runs through the vitreous body from the optic disc.
- vitreous body is to contribute slightly to the magnifying power of the eye.

→ Lens:-

- transparent, biconvex, enclosed in a capsule.
- situated behind the iris.
- consist of an elastic capsule which envelops the structure a cuboidal epithelium
- The lens fibers make up the bulk of the lens.

Date: _____

6.

→ Names of foramina of skull:-

- 1- Foramen caecum
- 2- Optic canal
- 3- Superior orbital fissure
- 4- Foramen rotundum
- 5- Foramen ovale
- 6- Foramen spinosum
- 7- Foramen lacerum
- 8- Carotid canal
- 9- Foramen magnum
- 10- Hypoglossal canal
- 11- Jugular foramen
- 12- Internal acoustic meatus.

~~Question # 2.~~

extraocular muscles

Aqueous humor

Vitreous humor

Pupil

Iris

Cornea

Retina

Lens

Fovea

Optic nerve

→ write the names of the muscles of the medial fascial compartment of thigh with their origin & insertion?

→ Muscles Of The Medial Thigh :-

→ Adductor Magnus :-

- Adductor part : originates from the inferior ramus of pubis

- Hamstring part :

originates from ischial tuberosity and inserted to medial supracondylar line

→ Adductor part is inserted in the linea aspera of femur

→ Adductor longus :-

→ originates from the pubis

→ inserted in the linea aspera.

→ Adductor Brevis :-

→ originates body of pubis and inferior pubic ramus.

→ inserted in posterior surface of femur

Date: _____

8.

→ Obturator Externus:-

- originate from obturator foramen.
- inserted in to posterior aspect of greater trochanter.

→ Gracilis:-

- originate from inferior ramus of the pubis
- inserted in the medial surface of the tibia.

Question # 4

- write about the sutures of skull also write a note on Trigeminal nerve and its branches.

→ Sutures of skull:-

- Sutures are a type of fibrous joint that are unique to the skull.
- immovable and fuse completely around the age of 20.
- Points of potential weakness in both childhood & adulthood.

Date: _____

9-

→ The main sutures are

→ Coronal suture:-

which fuses the frontal bone with the two parietal bones.

→ Sagittal suture:-

which fuses both parietal bones to each other.

→ Lambdoid suture:-

fuses occipital bone to the two parietal bone.

→ Trigeminal nerve:-

→ The largest 12 cranial nerve.

→ originating in the brain

→ They come in pairs & connect different areas & organs of body.

→ Transmit two type of information
1- Sensory
2- Motor.

→ Its main function is transmitting sensory information to skin, sinuses & mucous membran in face.

Date: _____

10.

→ Stimulates movement is the jaw muscles.

→ Branches:-

→ Ophthalmic nerve:-

Sensory information from conveys

- scalp
- forehead
- upper parts of sinuses
- cornea of the eye
- bridge of the nose.

→ Maxillary Nerve:-

Sensory information from: transmits

- lower eyelid & associated mucous membranes.
- middle part of the sinuses
- nasal cavity & middle part of the nose.
- cheeks.

→ Mandibular:-

The only part of trigeminal nerve that has both sensory & motor function

- outer part of ear
- lower part of mouth and

Date: _____

11-

- and the mucous membrane
- front & middle parts of tongue
 - teeth of the lower jaw and the associated mucos membranes
 - lower lip
 - chin

Question 3

→ What is the effect of injury of external laryngeal nerve & also write about how to test the integrity of facial nerve.

→ Answer:-

→ External laryngeal nerve supplies the cricothyroid muscles

→ its injury results in flaccidity of the muscle that affects the vocal cords indirectly

→ resulting in produce low pitch sound.

→ Test the integrity of facial nerves-

→ Facial nerve supplies has motor and sensory part

- it supplies the anterior 2/3 of tongue for taste, facial muscles & stapedius muscle of ear.
- and orbicularis oculi muscle of eyes.
- To check integrity of facial nerve ask the patient to close eyes. If facial nerve is not intact ~~ask him~~ ~~to~~ won't be able to close eyes.
- ask him to raise to look. wrinkle formation on forehead shows the integrity of 7th nerve.
- ask the patient to show your teeth. angle of mouth will deviate if facial nerve is not intact.
- ask him to taste some sweets things. if he can taste it means 7th nerve is intact.
- if he hears low pitch voice in high level then facial nerve stapedius is damaged.

Question # 5.

→ Write note on Spinal cord with reference to its anatomical position & structure also write a short note on pharynx with enumeration to its constrictors.

→ Spinal Cord:-

The Spinal cord is a long, thin tubular structure made up of nervous tissue, which extends from the medulla oblongata in the brain stem to the lumbar region of the vertebral column. It encloses the central canal of the spinal cord, which contains cerebrospinal fluid.

→ Structure:-

- The spinal cord is the main path way for information connect brain & peripheral nervous system
- It is about 45cm long in men
- About 43 cm in women.

Date: _____

(14)

- ovoid-shaped.
- enlarge in the cervical & lumbar regions.
- The cervical enlargement from C5 to T₁ vertebra.
- The lumbar enlargement located b/w L₁ & S₃
- The spinal cord are protected by three layer of tissue called meninges.
- **Position :-**

- The spinal cord is located in the vertebral foramen and is made up of 31 segments
- 8 cervical
- 12 thoracic
- 5 lumbar
- 5 sacral
- 1 coccygeal
- A pair of spinal nerves leaves each segment of the spinal cord.

Date: _____

(10)

→ Pharynx :-

→ The body cavity that connects the nasal & oral cavities with the larynx & esophagus.

→ it is commonly referred to throat.

→ The pharynx is part of both the digestive & respiratory system.

→ Divide into three sections

- nasopharynx
- oropharynx
- laryngo pharynx.