

## Mid-Term Assignment

Course Title: **Human Physiology II**

Rad 2<sup>nd</sup> semester section A

Instructor: **Dr. M .Shahzeb khan (PT)**

Marks: 30

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**Note:**

- Attempt all questions, all questions carry equal marks.
- Answer Briefly and to the point, avoid un-necessary details

**Q1:** (A) A post stroke patient come to clinic, during examination you found that patient is unable to speak nor understand, what you are talking (Global Aphasia), in such case which lobes of brain could be involved?

Explain that lobes and write down its function.

(B) A post stroke patient come to clinic, during examination you found that patient have difficulty in walking including problem with balance and also have tremor. Which part of brain could be involved in this patient? Explain that part and write down its function.

**Q 2:** (A) During assessment of post stroke patient, you found that patient have sensory loss over skin of forehead, eye lids and nose as well as teeth of upper jaw, moreover also have motor loss in mylohyoid muscle and in anterior belly of digastric. Which cranial nerve involve in this patient?

Write down function and its different component.

(B) Post stroke patient come to clinic, during assessment you found that patient have lost general and taste sensation in posterior 1/3 of tongue. Which cranial nerve involve?

Write down its function and components.

**Q3:** (A) What is accommodation in eye and explain its relation with lens of eye?

(B) How stimulus of light goes through eye ball and reach up to Brain? Explain in detail

Paper.Humman physiology

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Q N .(1) A

Ans..... Global aphasia..

- ❖ **Global aphasia is a disorder caused by damage to the part of our brain that control language.**
- ❖ **A person with Global aphasia may only able to produce and understand a handful of word.**
- ❖ **Causes.**
- ❖ *\_Stroke. Head ingaury.brain tumor*
  
- ❖ *So what is stroke .stroke is most common cause of aphasia.a blockage of blood flow to the brain cause stroke..it can permenant damage your language.speak*
- ❖ **Symptoms.**
  - ❖ *Inability to Speak*
  - ❖ *Making garmitical mistakes.*
  - ❖ *Trouble understanding*

**Lobe involved in speech or speak are of the following.**

- *Each cerebrum has also derived into four region called lobe.frontal lobe. Temporal lobe.occipital lobe and parital lobe .but here temporal and frontal lobe are primely involved in speaking and understanding*  
**Temporal lobe.**
- *The Brain is divided into distinctive lobe.*
- *The Temporal lobe is located behind your ear and extend to both sides of the brain*

**Function.** *The temporal lobe is involved in speaking. Vision.and language so this is the function of temporal lobe.*

### *Frontal lobe*

- *The frontal lobe of the brain is vital to our conciseness as well as function that appear unlikely human such as spoken. Language. Understanding.*  
*Function.*
- *Some of the many other function The frontal lobe play is daily function.*
- *Speech and Language production.*

### **QN.(1) B**

#### **Ans....**

- *The majority of the stroke injury The motor fiber connected to movement.*
- *Typically stroke damage portion of the one side of the brain and effect the opposite side of the the body. A stroke can make one side of the body weak paralyzed making it difficult or impossible to Walk.*
- *A patient balance may also be Shakey if the the cerebellum the part of the brain that control equilibrium is injured and along with the paralysis.weakness.and loss of balance*
- *There are four type of cause linked to walking difficulty.*
  - 1. Injured or trauma*
  - 2. Muscular joint or spine*
  - 3. Neurological issue*

*Medical professional used different techniques to diagnose and find the cause of walking.. 1 . Hearing test. 2. CT scan. .3. inner ear scan*

#### **Part of brain involved in walking...**

- *Cerebellum*
- *Cerebellum are the back of the brain*
- *Second largest brain region*
- *Function*
- *Function to maintain muscle tone.control balance equilibrium. Control walking.*

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### **QN.3(A)**

#### **Ans.... Accommodations in eye.**

- *The lens bend thicker or thinner in order to focuss the light into a sharp image focusing is called accommodation.*
- *Accommodations is the mechanism by which the eye change refractive power by altering the shape of lens in order to focuss object at variables distance.*
- *Or process by which the eye increase optical power to maintain a clear image (focuss ) on an object as it draw near the eye.*

- Or the ability of eye to change the focal length of eye lens with the help of ciliary muscle to get a clear image of near object and for object is known as accommodations of power of eye. Etc..

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**QN (3).B**

**Ans....** There is a very simplified description of the many wonder in the eye.

- Eye ball the white of the eye is the sclera
- Inside that is the black spot,the pupil.
- The retina is a thin layer of tissues that lines the back of the eye on the inside.
- Light pass into the eye ball through the pupil which can enlarge or shrink
- Behind the pupil the light travel through the line
- As the back of the eye ball the light strick the retina which contain Nerve fiber of the optic nerve and the nerve cell sensitive to the light
- Light enter the front of the eye through the pupil and is focused by the lens onto the retina .

*Two types of cell.*

- *Rode cell.....Rode cell on the retina responsd to the light and send message through the optic nerve..*
- *Cone cell..... there are less cone cell*
- *They see color*
- *The light image is then carried into the cell and nerve in the Retina and in to the light center in the brain..*
- *So in this way the light reach to the Brain..*

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**QN.(2). A**

**Ans ....one ....the sixth cranial Nerve effect eye movement to the side and other the seventh cranial nerve . affect facial movement .a stroke on one side of the pone will affect this Nerve causing the eye and facial muscle weakness.**

- Sensory cranial Nerve help ba person to see smeel .and hear.
- Motor cranial Nerve help control muscle movement in the head.
- **Olfactory Nerve**
- Olfactory Nerve transmit information to the Brain regarding a person's sense of smeel

- When a person inhale fragments molecule olfactory receptor with in the nasal passage send the impulse to the cranial cavity.
- It is sensory nerve
- It help in sensation of smell
- So injury to olfactory Nerve causing disorder of loss of nose sensation
- It is sensory sensation because it is sensory nerve.
  
- **Oculomotor nerve**
- It is motor Nerve
- It supply to extra ocular muscle
- This raise upper eye light
- It tone our eye ball
- This Nerve help to control muscle movement of the eye
- The neck provide attachment to most of the of the muscle that move the eye ball and upper eye lid.
- The treacherer muscle nerve Also involved in eye movement downward.
- So injury to the oculomotor muscle cause loss of teeth of upper jaw .
  
- **Trigeminal nerve**
- This Nerve are both sensory and motor
- Help in facial sensation and chewing movement
- Symptoms of damage to the trigeminal Nerve are mainly loss of the sensation of the face . although the mandibular Division of the trigeminal Nerve .also control jaw function of the teeth.
- The trigeminal Nerve has three components. ophthalmic. mandibular and maxillary nerve.
- Mandibular Nerve supply to skin .jaw. And teeth.so injury to the mandibular nerve cause loss of sensory loss of skin.
- It supply to skin
- It supply to anterior belly of diaphragm
- It also supply to mylohyoid muscle
- **Facial nerve**
- It is mix nerve
- Supply occur in muscle of the face
- Supply posterior belly of diaphragm
- Facial Nerve are move in frontal lobe of the brain
- So injury to the facial Nerve loss sensation of skin

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**QN.(2)B**

**Ans... *Glansopharyngeal Nerve.***

- It is mix Nerve

- *Mix nerve mens sensory and motor Nerve*
- *It moter supply to our phyrnx*
- *And in phyrnx there is stylophorngelial muscle which helps in swallowing*
- *It sensory supply to posterior 1/3 of the tongue.*
- ***Damage to the Glasopharngial nerve can results in loss of taste sensation to the posterior one third of the tongue and impaired swallowing....***

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##### **THE END.** #####  
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