Mid-Term Assignment

Course Title: Human Physiology II

Rad 2nd semester section A

Instructor: Dr. M .Shahzeb khan (PT)

Marks: 30

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

January is

Paper human physiology

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Program BS radiology

Semester, 2nd

Section A

Exam Mid

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QNo .3 part B

Ans

- ❖ There is a very simplified description of the many wonders in the eye
- ❖ Eye Ball the white of the eye is the sclera
- ❖ Inside that is the colored part or iris
- ❖ Inside that is the Black spot the pupils
- ❖ The retina is a thin layer of tissue that lines the back of the eye

On the inside

- ❖ Light passes into the *eye Ball through the pupils which can enlarge or sharink*
- ❖ Behind the pupils the light travel through the lens
- ❖ At the back of the eye Ball the light strikes the retina
 Which contains nerves fiber of the optic nerve and the nerve cells sensitive to light
- ❖ Light enter the front of the eye through the pupils and is focused by the lenses Onto the retina

Two types of cell

Red cell

On the retina respond to the light and send message through the optic nerve

Cone cell

There are less cone cell

The see colour

The light image is then carried into the cells and nerve in the retina

And is sent through the optic nerve to the sight center in the brain QNo.3 part A Ans

Accommodation in eye

- ❖ The lens behind thicker on thinner in order to focus the

 The light into a sharp image focusing is called accommodation
- ❖ Accommodation is the mechanism by which the eye change Refractive power By altering the shape of the lens in order to focus object at Avirable distance
- ❖ The process By which the eye increase optic power to maintain a clear images Focus on an object as it draws near the eye



QNo .1 A)

Ans

- Global aphasia is a disorders caused by demage to the part of our brain that's control languages
- **❖** A person with global aphasia may only able to produce and understand handful of words

CAUSE

- > Stroke head ingary brain tumor
- > So what is strock

Stroke is the most common cause of aphasia a blackag of blood flow to the brain cause stroke it can permanent demage your language speak

SYMPTOMS

- > Inability to speak
- Making garmitical mistack
- Trouble understanding

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

- **Each cerebrum has also derived into four region called lobe**
 - (1) Frontal lobes
 - (2) Temporal lobe
 - (3) Occeptial lobe
 - (4) Parital lobe

But here temporal and frontal lobe are primary involved in speaking and understanding

TEMPORAL LOBE

The brain is divided into distinctive lobe

 \triangleright

> The temporal lobes is located behind your ear and enter to the both side of the brain

FUNCTION

The temporal lobe is involved in speaking vision and language so This is the function of temporal lobe

FRONTAL LOBES

➤ The frontal lobe of the brain is vital to our conciseness as well as function that appears unlike human such as spoken languages

FUNCTION

Some of the many other functions of the frontal lobe Play is daily function

Speech language production

QNo.(1)B part

Ans

balance

The majority of the stroke injury the motor fiber connected to movement

Typically stroke demage portion of the one side of the brain and effect the opposite side

Of the body a stroke can make one side of the body weak paralyzed making difficult or

Impossible to walk

A patient balance May also be shakey if the cerebellum the part of the brain that' Control equillabrum is injured and along with the paralysis weakness and loss of

There are four types of cause link to walking difficult ing

1)injured or truma

2)muscular joints or spine

3) neurological issue

Medical professionals used difficult 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
- ❖ 2nd largest brain regions

FUNCTION

Function to maintain muscle tone control balance equillabrum Control walking

QNo 2 part A

Ans

One the sexth cranial nerve effect eye'movement to the side and other the Seventh crinal nerve facial movement astrok on one side of the pone will effect this nerve causing the eye'andfacial muscle weakness

- Sensory crinal nerve help ba person to see
- and hear
- Moter cranial nerve help control muscle Movement in the head
- Olfactory nerve
- Olfactory nerve transmit information to the brain regarding a person sense of smell
- When a person inhale fragment molecules olfactory receptor with in the noasl passage send to the impulse of cranial cavity
- It is sensory nerves
- It helps In sensition of smell
- So injury to olfactory nerve causing disorders of loss of nos sensition
- It is sensory sensition because it is sensory nerve
- Oculomotor nerve
- It is moter nerve
- It supply to extra occuloer muscle
- This raise upper eye light
- It tone our eye Ball
- This nerve help to control Musle movement of the eyev

- The neck provide attachment to most of the muscle that move the eye' Ball and upper eye lid
- The trachler muscle nerve also involved ibeye movements downward
- Trigeminal nerve
- This nerves also both sensory and motor nerve
- It help in facials sensition
- And chewing movement
- SYMPTOMS of dammeg to the trigeminal nerve are many loss of sensition
- Facial nerve.
- It is mix nerve
- Sensory occur In musle of the face
- Supply posterior velly of daigestric
- Facial nerve are move in frontal lobe of the brain
- So injury to the skin
- Qn2(B)
- Ans..
- Glossopharngial nerve
- It is mix nerve
- Mix nerve men's sensory and moter nerve
- It is moter supply to our phyrnx
- In phyrnx there is stylophyrngial musle in swlleing
- It is sensory supply to posterior 1/3 third of the tongue
- Demage of the glossopharngial nerve can result in loss of test sensition to the posterior 1/3 of the tongue bin paired swelling