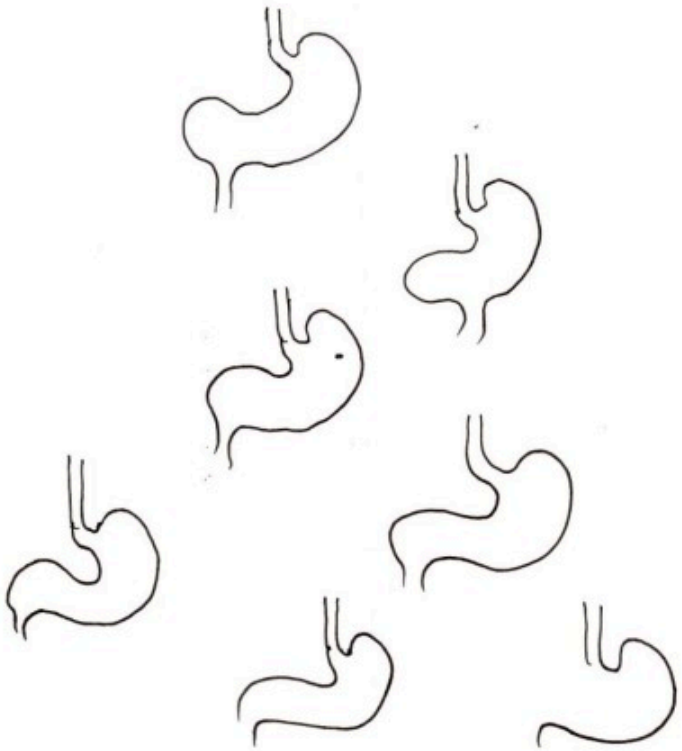






Use for rough work

Q. No. 2 Part (i) {Answer:i}

Stimulus:

Stimulus is reaction given by the body when enviroment changes. Stimulus sends signal to receptors & then sensory neuron than towards the brain brain intercept signal & give motor neurons that release effectors.

"Any change in body due to change in enviroment"

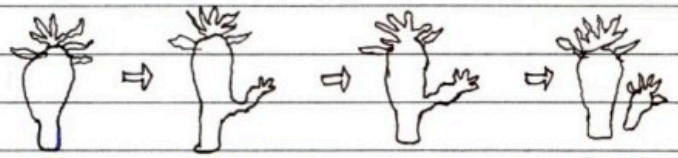
Examples: 1) If we toch a hot object our fingers burn this is stimulus.

2) If wheater is to hot our brain signal us to drink water by making us thirsty.

Q. No. 2 Part (ii) {Answer:ii}

HYDRA: Hydra goes under Asexual reproduction this process is called budding in which one parent is involved a bud grows and start growing they after it gets mature is leaves parent hydra.

Asexual Reproduction (Budding)



Hydra Bud formed Bud grows Bud deattaches.

Q. No. 2 Part (iii) {Answer:iii}

A monohybrid cross is taken with P_1 generation TT & tt

P_1 (TT) x (tt)

P_1	T	T
t	Tt	Tt
t	Tt	Tt

$F_1 = Tt$

F_1 (Tt) (Tt) (Tt) (Tt)

So the F_1 generation has all heterozygous Tall trees so ratio will be

Genotype: All heterozygous tall

Phenotypic: Tall: 4 4:0

dwarf: 0

Q. No. 2 Part (iv) {Answer: iv}

Liver: Liver is most important organ it has many function, it is reddish brow in colour & wedge shaped.

Role of liver in digestion:

The main function of liver in digestion that that It produce bile that emusifies fats. & Secondly it store glucose in form of glucogon when glucose in food is low it produces glucose for maintaince of sugar level.

Q. No. 2 Part (v) {Answer: v}

Myocardial Infaction: It is a heart disease in which the Artery is blacked & blood cannot pass. due to Artheriscloriis.

Treatment:

It can be treated by opening of the artery or by replacing the dead artery.

Prevention:

1) Doing excersice for cardiovascular healt.
2) Quit Smoking
3) Drink water & healty lifestyle.
4) Diet should be balanced.

Q. No. 2 Part (vi) {Answer:vi}

Bronchitis: It is a respiratory disease in which the person caint breath properly It is inflammation of bronchus wall.

Causes:

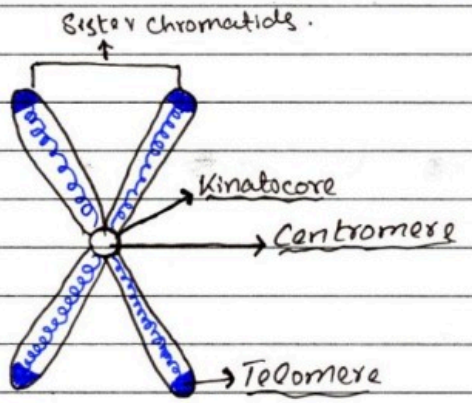
1) Caused by Air pollution
2) Smoking

Symtoms:

1) Coughing
2) Difficulty in breating.

Q. No. 2 Part (vii) {Answer:vii}

Chromosome:



Q. No. 2 Part (viii) {Answer: viii}

BLOOD CLOTTING.

→ Contriction of Injured artery : It prevent the flow of blood.

→ Release of Platelets: Platlets are released towards the location.

→ Platlet plug formation A plug is formed for healing the would & stop the blood flowing out.

→ Activation of fibrinogen: fibrigen is released to form a fibrin clot.

→ fibrin clot is formed & blood stops flowing.

Q. No. 2 Part (ix) {Answer: ix} (B) OR

(a) Solution

$$\text{Mean} = \frac{\Sigma x}{n}$$

$$\text{Mean} = \frac{\text{Total Number values}}{\text{No. of months.}}$$

$$\text{Mean} = \frac{100}{6}$$

$$\text{Mean} = 16.66\ldots$$

And mode is the repeated value so it is 22.

1) Viruses like SAHRS Covid-19 disease Covid-19.

2) fungal like dermatocytes by ring worm

3) Parasite like malaria cause by plasmodium.

Q. No. 2 Part (x) {Answer:x}

Inspired	Expired	Substances
21%.	16%.	Oxygen
0.04%.	4%.	Carbondioxide
79%.	79%.	Nitrogen

And water, minerals & temprature are Varriable.

Inpired	Expired	Substances
Variable	Variable	Water(vapours)
Variable	Variable	temprature
variable.	Variable	Mineral

There ~~also~~ are also dust particles.

Q. No. 2 Part (xi) {Answer:xi}

Red Blood Cells Are biconcave disc shaped they are also called erythrocytes They have no nucleus & 120 days life span.

Role: They are transport for many substance

1) Transport of Oxygen by blood
2) Transport of horomones in the body.
3) Transport CO_2 & wastes
4) They provide us insulation
5) Transport of Glucose (for respiration), minerals & some vitamins.

Q. No. 3 (Page 1) Answer:3

LONG QUESTION

MASTER GLAND:

Pitutary gland is known as master gland because it regulates & maintain other glands It is about size of a Pea It connects Nervous System with endocrine System. It is an endocrine gland.

Pitutory gland is divided into two lobes.

1) Anterior Lobe 2) posterior Lobe.

1) Anterior Lobe

It produces thyroid Stimulating hormone which is responsible for maintaince of thyroid gland. It also produces growth hormone. In some cases the growth horomone secreated is less this condition is called "Pitutory drawf". this causes short height hands & legs & Sometimes it is secreated excessively this condition is called "Pitutory Grant". this causes excessive height This disease is called "acromegaly" in which imbalance growth hormone is

Q. No. 3 (Page 2)

Secreated.

2) **Posterior Lobe**

Posterior Lobe produces two main horomones Oxcylocin & Antidiuretic hormone. Oxytocin is produced during birth & causes egection of milk. While Anticleuretic hormone this causes reabsorption of water from urine in nephron which results in dilute urine. This disease is called diabetes Insipidus.

Q. No. 4 (Page 1)

Answer: 4

BREATING:-

Breathing is the most Important process in which two process are Involved

1) Inhalition 2) Exhalition.

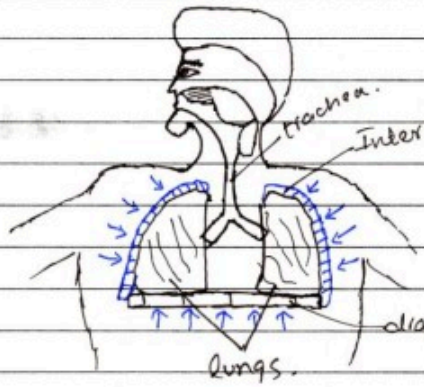
Inhalition:

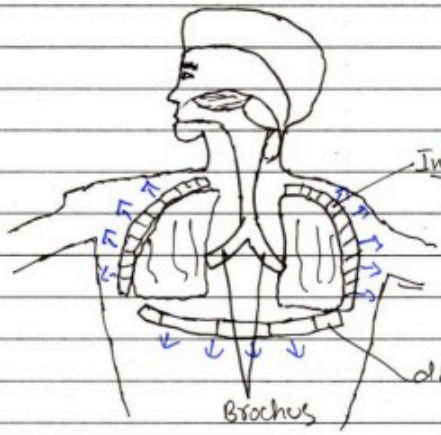
1) Air is taken in by nose.
2) The diaphram moves downwards
3) The volume of the lungs increase & pressure decreases
4) The ribs & Intercostal muscles are moved upward & outward.
5) This causes change in pressure & air fill in our lungs.

Exhalition:

1) Air is moved out by nose & mouth.
2) The diaphram returns to it orignal position.
3) The ribs & Intercostal muscles are moved inword & downward
4) Pressure inside becomes high so Air is exhaled out.

Q. No. 4 (Page 2)


Trachea.
Intercostal muscles
EXHALITION
diaphram
lungs.


Intercoastal muscles
INHALITION
diaphram.
Brochus

Q. No. 5 (Page 1) Answer: 5

STOMACH:

Structure:

Stomach is a J-Shaped roughy Organ it is after the Oesophagus It has Its 2 ends that are guarded by cell. The opening from Oesophagus to Stomach known as Cardia opening guarded by Cardia Spincter. The opening from Stomach to duodenum is known as pyloric opening guarded by pyloric Spinchter.

function: Stomach has many functions in process of digesion. Stomach produces gastric Juice which Countains Mucous, HCl, Renin, Pepsin these enzymes are produced by Stomach.

-> **Mucous:** Mucous forms a layer on the wall of Stomach to Avoid contact with HCl.

-> **HCl:** 1) HCl Stops reaction of Salivary amylse,

2) Kill microorganism & bacteria

3) Covert inactive form of pepsinogen into pepsin.

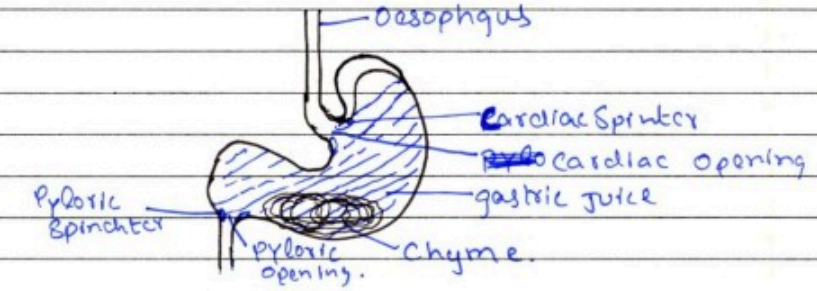
-> **Pepsin:** Pepsin Converts polypetide &

Q. No. 5 (Page 2)

& peptides into amino acids.

→ Renin:- It is produced in infants and digest milk proteins

After the all process the food is called "chyme".



Stomach

Q. No. 6 (Page 1)

Answer:6

WHITE BLOOD CELLS:- They are also called leucocytes. They are found in blood are irregular shaped have nucleus & life span 3-4 day. white blood cells are divided into three types.

1) Monocytes 2) Granucytes 3) Agranular.

Monocytes:-

Are of three types.

1) NK Cells Natural killer fight against cancer cells

2) B cells plasma cell & B cells kill microorganism that enter blood.

3) T cells:- Cytotoxic T cell help defend against virus Helper T cell Helps cell to fight against diseases. Memory T cells they store information for future.

Granular:-

1) Neutrophills:- They engulf pathogen & kill them.

2) Basophills:- They protect agamst parasites, allergens & pathogens.

3) Eosnophills:- They kill bacteria & fight against allergies.

Q. No. 6 (Page 2)

A Granulocyte

1) Macrophages: They ingest & engulf pathogens through phagocytosis.

2) Dendric cells: They instruct helper T cell & are also called antigen presenting cells.