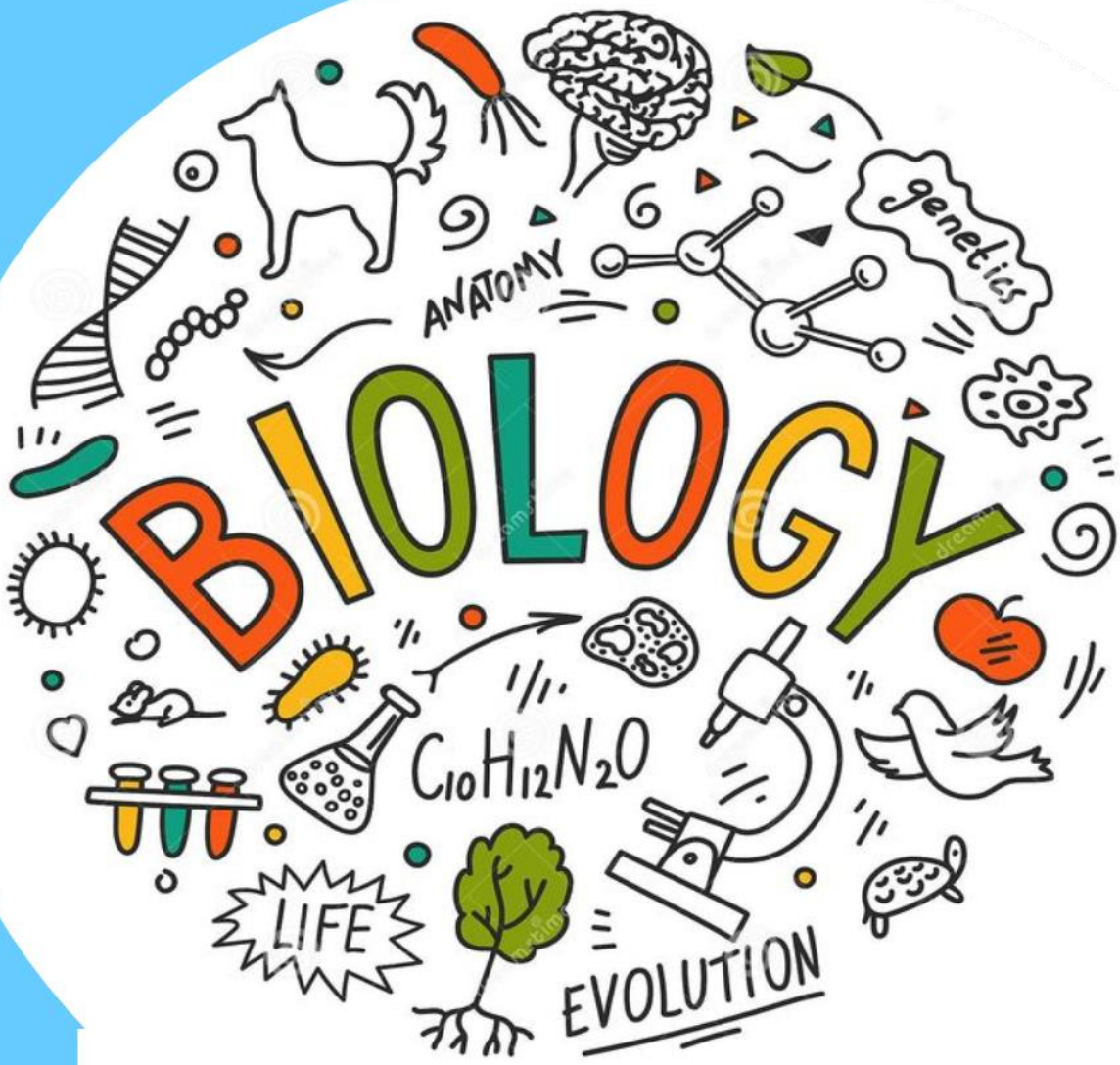


Q &A

REVISION GUIDE COMBINED SCIENCE 4003

TOPIC BY TOPIC

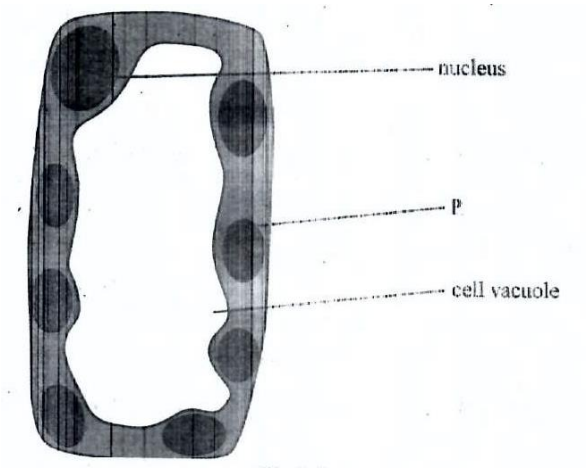
ZIMSEC NOV 2018 — JUN 2023

Compiled by Ndou.T, Masita S, Maphosa A

CELLS AND LEVELS OF ORGANISATION

N2018

Q1. Fig1 shows a palisade cell.



(a)(i) Identify structure P [1]

Ans: -Chloroplasts

(ii) Explain how the palisade all is adapted for its function [4]

Ans: - column shaped for exposure to sunlight

-numerous chloroplasts for maximum absorption of light

N2020

8(b) State any 2 processes through which energy is lost in food chains and food webs [2]

Ans: excretion, egestion, respiration/combustion.

1(a) Define the term ecosystem [2]

Ans: Self-contained system of interdependent organisms and their physical environment.

(b) State any 2 physical components of an ecosystem [2]

Ans: - air; water

- light, heat energy.

- soil

(c) Draw a food chain with 3 tropic levels involving **named** organisms. [3]

Ans: _____ → _____ → _____

NOV 2022

9(b)(i) Describe any 3 effects of an increase in human population. [3]

Ans: *- degradation of environment.*

- increase in the spread of diseases

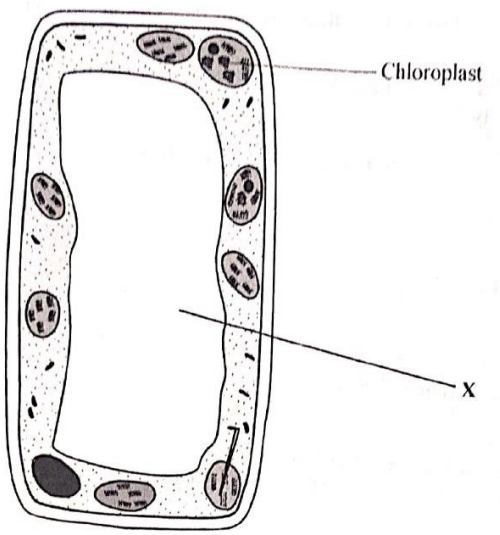
- Increase in demand for space/water

- increased pollution.

- quick depletion of natural resources.

N2022

Q1. Fig 1.1 shows a diagram of a specialized cell.



(i) Identify the cell in fig 1.1 [1]

Ans:- *palisade cell*

(ii) State the function performed by cell shown in fig 1.1 [1]

Ans:- *photosynthesis/ manufacture food*

(iii) Name part X [1]

Ans:- *vacuole*

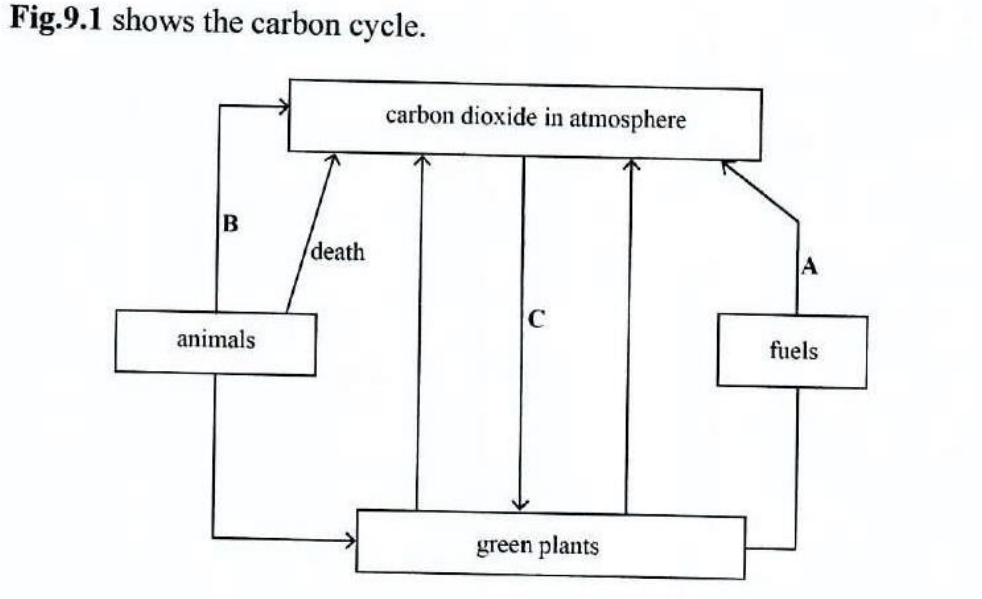
N2019

Q2(a) Describe a natural ecosystem [2]

Ans: *-Community of organisms and their physical environment not controlled by human activities*

J2019

Q9(a) **Fig.9.1** shows the carbon cycle.



(i) Identify the process labelled A and B [2]

Ans: *A – burning/combustion*

B – respiration

(ii) Describe process C

Ans:- *process is photosynthesis. CO_2 combines with water to form carbohydrates.*

(b)(i) State one process which increases the amount of nitrogen in the atmosphere [1]

Ans:- *Denitrification*

- *if aeration is poor, denitrifying bacteria use oxygen in the nitrates releasing nitrogen gas into the air.*

(ii) State 2 processes which reduce the amount of nitrogen in the atmosphere [2]

Ans: *- lighting*

- nitrogen fixation by bacteria.

- *High temperature of a lightning bolt can break the bonds of atmospheric nitrogen molecules free nitrogen atoms in the air bond with oxygen in the air to create nitrogen oxide which dissolves In moisture to form nitrates that are carried to the earth by precipitation.*
- *Nitrogen fixation by bacteria is a result in the air being converted into nitrates by nitrogen Fixing bacteria which lives in root nodules of leguminous bacteria.*

(c)(i) State any 2 problems caused by limited biodiversity [2]

Ans: *- soil infertility*

- pests and diseases

- *ecosystem becomes unstable and unbalanced*

- *little/no recycling of nutrients*

- *overgrazing*

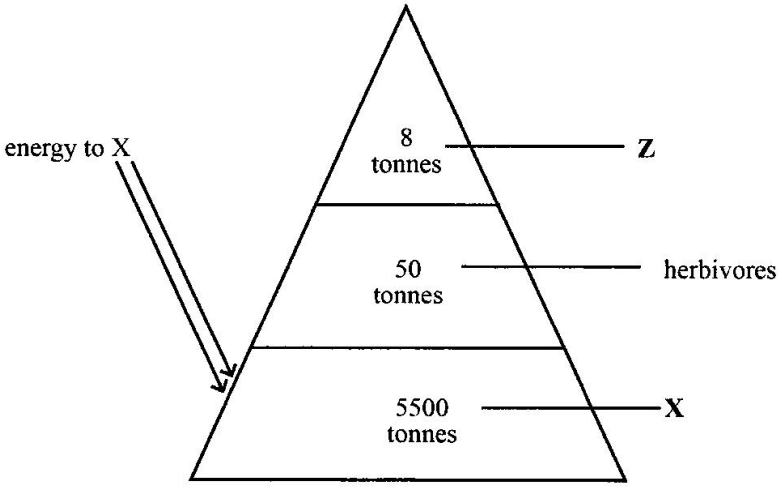
- *pollution*

(ii) Give any one advantage of biodiversity [1]

Ans: wide variety of food/self-sustenance of an ecosystem/interdependence/less spread of diseases.

N2021

Q1(a) Fig1 below show a pyramid of biomass.



(i) Define the term biomass [1]

Ans: total mass of living matter in a given area/total mass of organisms in a given area.

(b) identify the trophic level represented by X [1]

Ans: X – producers.

(ii) Explain the shape of the pyramid [1]

Ans: energy is lost at each trophic level, more at the bottom less at the top.

(iii) Name the form of energy received by X [1]

Ans: sunlight/light energy

(iv) State giving a reason the effect of decreasing the biomass of X on Z [2]

Ans: the number of Z will increase.

J2020

Q8(c) Give any 3 examples of ecosystem [3]

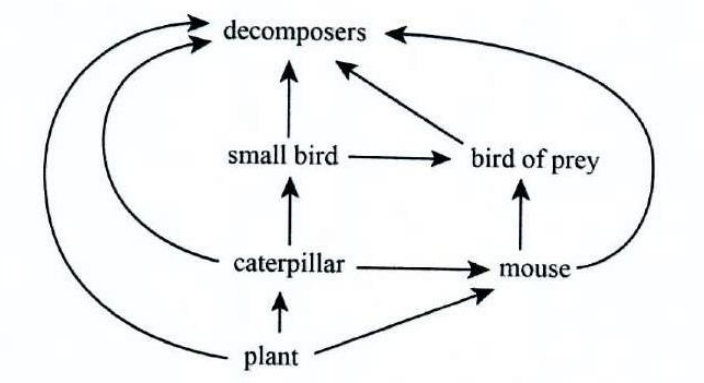
Ans: - garden

- pond

- plantation

N2018

Q9(a) Fig below shows a food web in an ecosystem



(i) State what is represented by arrows between organisms [1]

Ans:-energy flow

(ii) State the organism that feeds on all other organisms in the web. [1]

Ans: decomposes/fungi/bacteria.

(iii) State with reason an organism in the web which could exist in small number

Ans: birds of prey occupy the highest trophic level

- numbers decrease up trohic levels due to loss of energy and nutrients.

(b) Explain how a food web is a better presentation of what happens in an ecosystem that a food chain [1]

Ans: an organism depends on several sources of food in real life, this can be shown on food webs and not in food chain.

(c) State any 2 activities of man that can be harmful to an ecosystem [2]

Ans: - use of pesticides/herbicides

- poor farming methods

- deforestation

- waste disposal

- industrial activities

NUTRITION IN HUMANS

N2019

Q2b(i) Define the term balanced diet. [2]

Ans: correct type of nutrients in required proportion/quantities

- a diet contains all types of nutrients in their correct proportions i.e carbohydrates, proteins vitamins fats, mineral salts, water and fiber roughage.

(i) Describe the importance of calcium to a pregnant woman. [2]

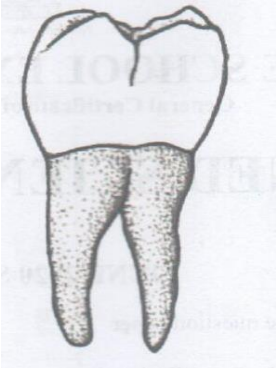
Ans: fetus requires the calcium for bone formation.

(ii) State the advantage of eating liver [1]

Ans: provides iron/vitamin A/D/E/K

JUNE 2020

Q1(a) Fig.1.1 shows a human tooth



(i) Name the tooth shown. [1]

Ans: molar/premolar

(ii) State the function of the tooth [1]

Ans: chewing/grinding/crushing

(b) Explain the importance of mechanical digestion. [2]

Ans: - increase surface area of food particles

- for increased solubility

- for increased enzyme action.

(c) State the end products of the digestion of

(i) proteins. [1]

Ans: amino acids

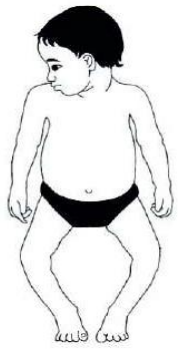
(ii) fats [2]

Ans: 1- fatty acid

2 – glycerol

N2019

Q8(a) Fig below shows a child suffering from deficiency disease



(i) Name the deficiency disease which the child is suffering from. [1]

Ans; Rickets

(ii) Describe the disease in (i) could be prevented.

Ans: provide food rich in calcium/vitamin D such as eggs/milk/fish/broccoli

Notes: *Rickets develop due to the softening and wakening of bones in children which makes them bend under the weight of the child due to lack of vitamin D or calcium.*

N2022

Q8a(i) Explain the difference between mechanical and chemical digestion [2]

Ans: Mechanical digestion is the physical breakdown of food into smaller pieces

(using teeth/muscles

- Chemical digestion is the use of enzymes to convert insoluble food to soluble nutrients.

(ii) Mention any two uses of amino acids in the body [2]

Ans: - repair of damaged /worn-out tissues

- production of hormones

- production of enzymes

b(i) Name any two types of teeth

Ans: - incisor

-canine

-molar

- premolar

(ii) State the function of each type of tooth named in b(i) [2]

Ans: incisor - cutting/biting

Canine - tearing/gripping

Premolar - grinding/chewing/crushing

Molar - grinding/chewing/crushing

(c) Describe an two ways of keeping teeth healthy [2]

Ans: - reduce/avoid eating sugary foods

- having dental check-ups

- brushing with toothpaste

N2021

Q9a(i) Define the term balanced diet [1]

Ans: a meal that consists of all food nutrients in their correct proportions

(ii) State any 1 function of fibre in the diet [1]

Ans: - prevents constipation

- assists in bowel movement

- helps in digestion

(iii) Name any 2 sources of proteins for a person who does not eat meat [2]

Ans: - green peas

- eggs

- milk

J2023

Q7(a) Name a part of the alimentary canal where bile is produced [1]

Ans: small intestine/duodenum

(b) Describe the importance in digestion of

(i) Saliva [2]

Ans: - contains enzymes (salivary amylase)

- softens food/ makes food easy to eat /swallow

(ii) Bile [2]

Ans: - nuetralise acid from stomach,

- emulsification of fats

N2018

Q1(b) State any two nutrient deficiency diseases in humans [2]

Ans: Kwashiorkor ; goiter; rickets; scurvy; anemia; night blindness

2(a) Name any two types of teeth and give one function for each [4]

Ans: 1. Incisor - cutting/bitting

2. canine - tearing/gripping

(b)(i) Explain the importance of chemical digestion [2]

Ans: increase food solubility for absorption into the blood stream.

(ii) State the enzyme that converts starch to maltose in the mouth [1]

Ans: salivary amylase

N2021

9(a) Plan a meal for a manual worker's lunch indicating the nutrients provided. [4]

Ans: - pap - carbohydrates

- beef - proteins

- green vegetables - fibre + iron

- fruit/fruit juice - vitamins

N2020

8(a) State any 2 components of a balanced diet and state one function for each [4]

Ans: - Carbohydrates - energy

- Fats - protect delicate organs

- Proteins - repair

- Vitamins - protects the body against diseases

- Minerals - enhances the body's general health

Roughage/fibre - prevents substances

(ii) Explain the term deficiency disease [1]

Ans: disease due to lack of a specific nutrients

(iii) Give any 3 deficiency diseases [3]

Ans: -anemia; scurvy; night blindness; kwashiorkor; marasmus; goiter.

NUTRITION IN PLANTS

N2022

Q1(b) Describe what happens to the glucose and oxygen made in a leaf [2]

glucose:

- is converted to sucose of starch for translocation to storage organs, for use in respiring cells to release energy.

Oxygen

- is released to the atmosphere, diffuses into cells to oxidize glucose.

(i) Give one function of guard cells. [1]

- forms the stoma/controls the opening and closing of the stomata.

(ii) Explain how guard cells are adopted for the function stated in (i) [1]

-Inner wall is thicker/inelastic

J2020

Q7(a) Write a word equation for photosynthesis [4]

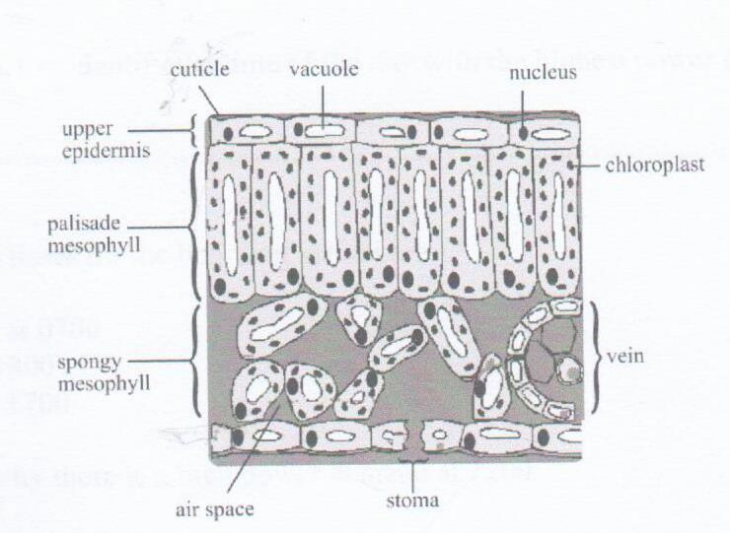
- carbon dioxide + water $\xrightarrow[chlorophyll]{sunlight}$ *glucose + oxygen*

(b) State one use for each product of photosynthesis [2]

- oxygen for respiration

- glucose for respiration/used as food.

(c) Fig shows internal section of leaf.



Explain how the leaf is adapted to maximize the rate of photosynthesis

- numerous chloroplasts in the palisade layer for maximum absorption of light.

- thick catide minimize water loss.

- vascular bundle supply water/transport manufactured food

- stomal air space for gaseous exchange

- transport epidermis allows light to pass through.

J2019

Q1b(i) Describe what happens to the glucose after its production. [2]

- translocated

- converted to starch/cellulose

- stored a starch

- used in respiration

- used to form other nutrients

- used in structure formation.

(ii) During photosynthesis, carbon dioxide and X react to produce glucose and oxygen [1]

Name X

Ans - water

(iii) State any one condition needed for photosynthesis to take place [1]

- sunlight/light

- chlorophyll.

RESPIRTORY SYSTEMS

N2021

Q2(a) Write a word equation for anaerobic respiration in mammals [2]

Ans: glucose → *lactic acid + less energy*

J2020

8(a) Define aerobic respiration

Ans: is the breakdown of carbohydrates in the presence of oxygen to release carbon dioxide, water and energy.

(b) A boy developed muscle fatigue while taking part in a soccer match, Explain what caused the muscle fatigue [4]

Ans: - muscles working hard, more energy needed, more oxygen to be supplied to the muscles.

- little oxygen supplied, anaerobic respiration/oxygen dept occurs, lactic acid produced causing muscle fatigue.

J2023

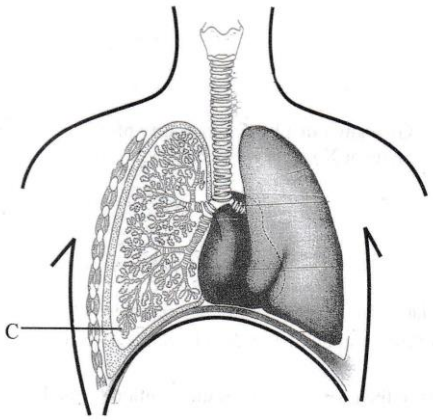
Q2(a)(i) Name a gas produced during respiration [1]

Ans: *CO_2*

(ii) Describe a test for the gas stated in C(i) [2]

Ans: *bubble through lime water test, turns lime water milky or use bicarbonate indicator, turns yellow*

(b) Fig below shows the human respiratory system



Name part C [1]

Ans: *alveolus /air sacs*

(ii) State the function of part C

Ans: *gaseous exchange*

(iii) Describe any 2 adaptations of part C to its function [2]

Ans: *- Large surface area*

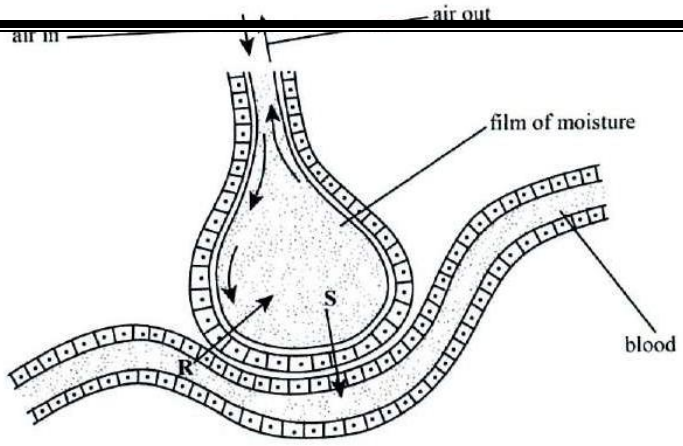
- thin layer of moisture.

- Large network of blood capillaries

- thin walls

NOV 2019

Q9(a) Fig below shows gaseous exchange in the alveolus of a mammal.



(i) Name the gases moving in the directions shown by the arrows R and S [2]

Ans: *R – Carbon dioxide*

S - Oxygen

(ii) Describe and explain how the alveolus is adapted for gaseous exchange, [4]

Ans: *- Well ventilated to maintain concertation gradient of diffusing gases*

- Dense network of blood capillaries to increase blood supply

- folded/large surface area for maximum diffusion.

- thin walled for gases to have short diffusion distance.

N2019

1(a) State any two differences between inhaled and exhaled air [2]

Inhaled	*exhaled*
More oxygen	*less oxygen*
Less CO_2	*more CO_2*
Cooler	*warmer*
Less water vapour	*more water vapour*

TRANSPORT IN HUMANS

N2021

2(c) Relate the structure of blood capillary to the function [2]

Ans: *- Thin walls for faster diffusion*

- permeable walls allow materials in and out/ allow exchange to take place.

- small lumen- resistance in the flow of substances

J2023

Q1c Blood is made up of different components

(i) Identify the liquid component of blood [1]

Ans: Plasma

(ii) State any one function of the component named in (i) [1]

Ans: transport medium; distribution of water, hormones, nutrients

(d) State the other function of blood [1]

Ans: - homeostasis; - defense

J2019

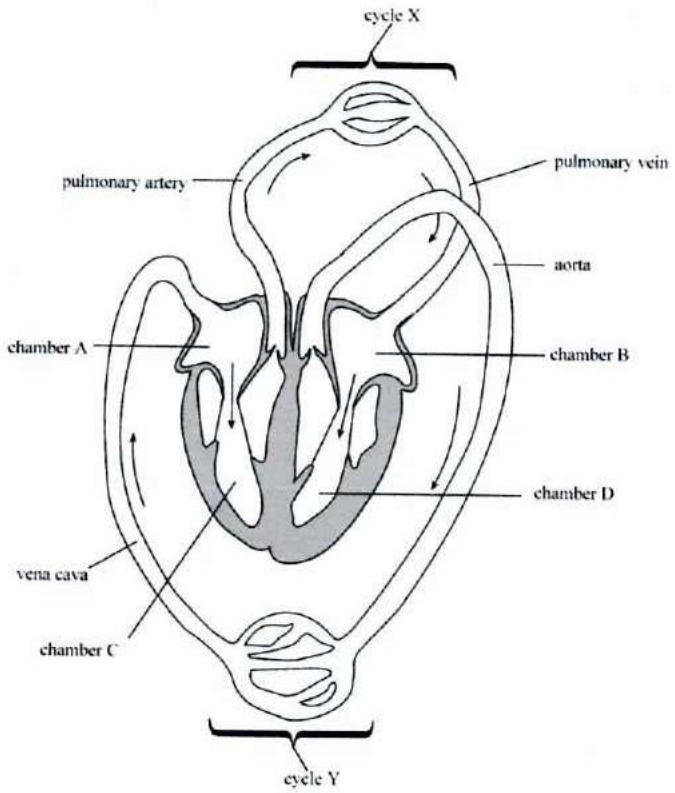
8a (i) Outline any 3 structural differences between arteries and veins. [3]

Ans:

Arteries	*Veins*
- narrow lumen	*large lumen*
No valves	*have valves*
Thick walled	*thin walled*

N2019

Fig below shows a sketch diagram to represent double circulation in mammals.



Q7(i) Deduce the type of circulation represented by cycles X and Y [2]

Ans: *X – pulmonary circulation*

Y – systemic circulation.

(ii) Suggest the reason for differences in thickness of the wall of chambers cord [2]

Ans:	*Chamber C*	*Chamber D*
	Pumps blood under a lower	*pumps blood under higher*
	Pressure over a shorter	*pressure over a large distance*
	Distance/to the lungs	*to the whole body*

N2020

Q2(b) Blood circulating around the body has plasma, water, platelets, glucose, red blood cells, CO_2, O_2 and white blood cells.

(i) Select 2 substances that are needed by respiring cells [1]

Ans: - glucose

- oxygen

(ii) State the component of blood responsible for clotting [1]

Ans; *platelets*

(c) Explain the importance of blood clotting [1]

Ans: *-prevent excessive bleeding*

- prevent entry of bacteria.

TRANSPORT IN PLANTS

J2023

Q1(a) Parts of a dicotyledonous plant's stem include the phloem and the cambium.

State the function of the:

(i) phloem *- transport manufactured food* [1]

(ii) cambium *- promote growth of secondary xylem and phloem.*

(b) Describe the method of water movement from the root hair cells across the cortex [2]

Ans: *the concentration of water molecules in the root hair cells is more that that of a cortex*

Hence water moved by osmosis.

N2019

Q1b Transpiration is the loss of water through plant leaves

(i) State any one advantage of transpiration to the plant [1]

Ans: enhances water/mineral uptake from soil

- maintaining pressure

- cools the plant.

(ii) State one disadvantage of excessive transportation

Ans: leads to wilting (if water loss exceeds water gain.)

(iii) State any 2 factors which increase the rate of transpiration

Ans: - High temperature

- low humidity

- large surface area

- high light intensity

- greater number of stomata

- high wind speed

J2019

Q8b Describe how plants are adapted to reduce water loss [4]

Ans: - leaf surface area reduced;

- less stomata on a leaf surface

- thick cuticle

- presence of hairs

- sunken stomata

N2019

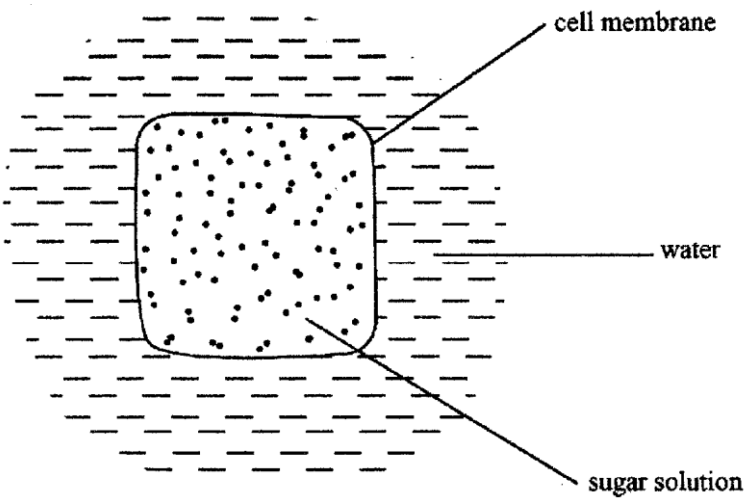
9(b) Define the terms plasmolysis and turgidity

Ans: plasmolysis is the shrinking /contraction of protoplasm due to osmosis

Turgidity is a state of fully expandedness/swollenness due to fullness with water.

N2020

Q2. Fig below shows a cell membrane separating water and sugar solution



(a)(i) Explain how osmosis occurs [2]

Ans: concentration difference between two side, selective membrane allows water molecules to pass through into sugar solution.

(ii) Define the term diffusion

Ans: is the movement of particles from a region of their higher concentration to region of their lower concentration down a concentration gradient.

N2018

9(a) Give any 2 factors that reduce the rate of transpiration

Ans: High humidity

- low light intensity

- reduced leaf size/fewer stomata

- low wind speed

- low temperature

REPRODUCTION (PLANTS)

J2019

1(a) State any two differences between the structure of an insect pollinated flower and a wind pollinated flower [2]

Ans:

Insect	*Wind*
- smaller anthers	*- larger anthers*
- have nectanes	*- no nectanes*
- have plants petals	*- no petals*

N2022

9(a)(i) Define the term asexual reproduction [1]

Ans: reproduction without sex cells/without gametes

(ii) Describe 4 advantages of asexual reproduction [4]

Ans: - desirsble characteristics are maintained

- one parent required/no sex cells needed

- plenty of food stored in the parent plant for use by the young plant/high chance of survival.

- high rate of propagation/new plants propogate quickly

- early maturity

J2019

2(a) State any differences between sexual and asexual reproduction.

Sexual	*Asexual*
- offspring developed from seeds	*- offspring develop from vegetative propagation*
- genetic variation	*- no genetic variation*
- fertilasation occurs	*- no fertilasation*

N2019

8d Define the term fertilisation

Ans: Fusion of male and female sex cells/nucleus to form a zygote.

N2018

7(a) Define the term pollination

Ans: transfer of pollen grains from anther to stigma.

(**b**) Explain the importance of colored petals, sticky pollen grains, and enclosed anthers of an insect pollinated flower

Ans: -colored petals attract insects which transfer pollen grains

- sticky pollen grains stick to the insect and are transferred to other flowers

- enclosed anthers brushes with insect to transfer pollen grains to insects

(c)(i) State any two conditions necessary for germination.

Ans: -moisture/water

-warmth/ suitable temperature

-air/oxygen

(ii) State any two advantages of reproducing plants using seeds over vegetative propagation

Ans: *- produce genetic variation*

- plants can be spaced

- reduced competition for resources

- propagation can be in large numbers

N2020

7b(i) Define the term rhizome

Ans: *- underground stem*

(ii) State any 3 advantages of reproducing plants by means of rhizomes

Ans: *-new plants identical to parent plant*

-maintains desirable characteristics

-greater chances of offspring survival

-quickly establish

-early maturity

REPRODUCTION IN HUMANS

N2022

2(a) Name 2 female sex hormones

Ans: *-estrogen*

-progesterone

- follicle stimulating hormone(FSH)

-luteinizing hormone (LH)

(b) Describe the roles of hormones named in (a) in the menstrual cycle

Ans *-estrogen controls the development and maturing ovum, causes thickening of the uterus lining in preparation for implantation*

-progesterone maintains the thickened uterus lining during pregnancy

-FSH causes maturity of the follicles

- LH causes ovulation.

(c)(i) Define ovulation?

Ans: is the release of the ovum from the ovary.

(ii) State the range of days of the menstrual cycle when sexual intercourse is most likely to result into Pregnancy

Ans: day 14

N2022

9(b) State any two mwthods of contraception [2]

Ans: *- abstinence*

- use of condoms

- use of IUD

- use of spermicide

- use of hormonal pills

- vasectomy

- tubal ligation

J2020

2(a) State any natural method of contraception [2]

Ans: *- abstinence*

- rhythm

- withdrawal

(b) Describe how the pill prevents pregnancy [3]

Ans: *artificial hormone suppresses ovulation, no fertilization*

JUNE 2023

9(a) A woman's menstrual cycle runs from day 1 to day 28

(i) Describe the process that takes place in the uterus between 1 – 4 day for a woman who is not pregnant [1]

Ans: *the lining of the uterus breaks down and menstruation occurs.*

(ii) Identify the process that take place in the ovary around the 14th day of the woman [1]

Ans: *Ovulation*

(iii) State any 2 female hormones [2]

Ans: *estrogen and progesterone*

(iv) State any one function of each hormone stated in (ii) [2]

Ans: *- estrogen helps stimulate the growth of the egg follicle*

(v) Describe the events that takes place within one month after an ovum has been fertilized [4]

Ans: *- develops into embryo*

- attaches into the walls of the uterus

- placenta is formed

- embryo is attached to the placenta by umbilical cord.

NOV 2021

Q8(a) State function of the 1. Testes [3

2. Sperm

3. Prostate gland

Ans: *- testes – produces sperms/sex hormones*

- sperm duct - passage of sperms from testis to urethra

- prostate gland - secrets nutrients/enzymes which activate sperms.

NOV 2019

Q8(b) Describe route of the sperm from the testis to the oviduct [4]

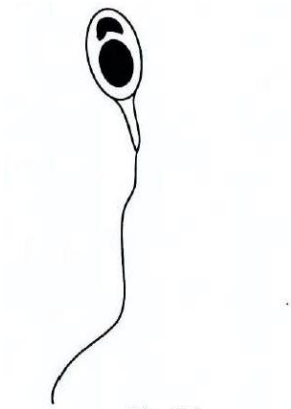
Ans: *- pass through the epididymis, ductus deferens, ejaculation duct, urethra, vagina, cervix Uterus and oviduct.*

(c) State one advantage of using condoms during sexual intercourse [1]

Ans: *reduced unwanted pregnancy/ reduce HIV transmission/reduces transmission of STI's*

N2018

Q8 (a) Fig below shows a sperm



(i) Explain how the structure of the sperm is related to its function [4]

Ans: *- tail helps it to swim in the female reproduction system.*

- reduced cytoplasm reduce weight for faster swimming

- acrosome helps to penetrate the ovum.

- nucleus at the front for quick entrance into the ovum

- haploid nucleus to prevent doubling of chromosomes after fertilization.

- *mitochondria for energy.*

(ii) Suggest why sperms needed to be produced in large numbers compared to female gametes [1]

Ans: Some of the sperms die in the female reproductive system/increased chances in fertilization

b(i) State any two phases of the muman menstrual cycle. [2]

Ans; - *menstrual/bleeding stage*

- *ovum by FSH/ovulation/follicular stage/development of follicle*

- *luteal stage*

(ii) State the part of the female reproduction system where implantation of the fertilized ovum takes Place [1]

Ans; uterus

(iii) Name any 2 substances which move from the mother to the foetus through placenta [2]

Ans: - *dissolved food nutrients eg glucose/amino acids.*

- *mineral salts/ vitamins/water/fatty acids glycerol*

- *antibodies*

- *oxygen*

7a(i) State any 3 methods of contraception [3]

Ans: - *abstinence*

- *rhythm*

- *withdrawal*

- *condom*

- *hormone/pill*

- *tubal ligation*

- *spermicides*

- *vasectomy*

(ii) Describe how each method stated in prevents fertilization [3]

Ans; - *abstinence* *no copulation*

- *rhythm* *sperm do not enter female*

- *withdrawal* *sperm do not enter female*

- *condom* *traps/collects sperms*

- *hormone/pill* *stops ovulation*

- *tubal ligation* *blocks oviduct*

- *spermicide* *kills sperms*

- *vasectomy* *blocks sperm ducts*

HEALTH AND DISEASES

N2020

9(a)(i) Define the term immunity [1]

Ans: resistance to infection.

(ii) State the 2 methods by which infants acquire immunity [2]

Ans: breastfeeding

- vaccination/immunization

(b) Describe the process of vaccination [4]

Ans: - introduction of attenuated/killed/weakened pathogens into the body

- the body reacts by producing antibodies, when antibodies attack, antibodies present

Or the body can make correct antibodies.

J2023

8(a) A person with HIV/AIDS may become infected with opportunistic diseases

(i) Explain what is meant by the term opportunistic diseases [2]

Ans: a disease that occurs more frequently in people with weakened system.

(ii) Give any 2 examples of opportunistic diseases [2]

Ans: TB; thrush/candidiasis;

cryptosporidiosis;

herpes simplex

b(i) Describe any 2 methods of mother to child transmission of HIV [2]

Ans; - virus cross placenta while foetus is inside womb

- cervical secretions during birth.

- through milk/during breastfeeding

(ii) State any 2 ways of reducing mother to child transmission of HIV [4]

Ans: taking HIV medicines during pregnancy

- cesarean delivery

- child taking medicines after delivery

J2020

9(a) Name any 2 body fluids through which the HIV virus can be transmitted [2]

Ans: *block*

- reproductive fluids

- breastmilk

N2019

7a(iii) State any 3 symptoms of malaria [3]

Ans; *- shaking chills/shivering*
- high fever
- excessive sweating
- headache
- nausea
- vomiting
- diarrhea
- muscle pain/aching joints
- convulsions
- bloody stool
- coma
- anemia

N2022

7(a)(i) Name the causative pathogen of malaria [1]

Ans: *plasmodium*

(ii) State any 3 symptoms of malaria [3]

Ans: *- vomiting*

- fever

- headache

J2020

9(b) Describe how the mosquito can be destroyed at any 2 staged of its life cycle

Ans: *- egg* *remove breeding places*

- larva *apply oil on stagnant water*

- pupa *drain stagnant water*

- adult *use of insecticides*

N2020

9(c) Describe any 3 methods of controlling mosquitoes [3]

Ans: *- draining swamps/stagnant water*

- cutting grass

- applying oil on stagnant water

- use of insecticides to kill adult mosquitoes

- introduce predator/correct named predator

J2020

2(c) State any 2 signs /symptoms of chancroid in males [2]

Ans: *- ulcer on genitals* *- pain when urinating*

- pis discharge *- ulcer that easily bleeds if touched*

- pain during intercourse *- swollen lymph nodes*

9(c)(i) Describe any 2 signs/sysptoms of cholera

Ans: *- acute diarrhea*

- fever

- vomiting

(ii) Explain any one method used in the treatment of cholera [2]

Ans: *salt and sugar solution/oral rehydration to replace lost fluids.*

- antibiotics to kill the bacteria (vibno cholerae)

- zinc supplement to reduce diarrhea

N2022

7(a) State any 2 effects of excessive alcohol consumption [2]

Ans; *- liver cirrhosis*

- weight loss

- financial problems

- family neglect

(ii) Explain why drinking alcohol while driving is not allwed in Zimbabwe [2]

Ans: *reduces reaction time*

- more likely to cause road accidents

(b) State any 2 diseases that may be caused by tobacco smoking [2]

Ans: *- emphysema*

- bronchitis

- *lung cancer*

- *heart disease*

J2019

2b(i) Distinguish between passive and active immunity [2]

Ans:

Passive immunity	*Active immunity*
- short lived	*- long lived*
- no antibody production by body	*- antibody production by body*

(ii) Explain the term natural immunity [2]

Ans: *- resistance to infection due to thr body processes independent of man's influence*

J2019

7(a) State any 2 sexually transmitted infections [2]

Ans: *- gonorrhea; syphilis ; chancroin; genital herpes; gernital warts; HIV/AIDS*

(ii) Give the causative agent for each sexually transmitted infection named in (ii) [1]

Ans:

- gonorrhea	*- bactiria*
- syphilis	*- bacteria*
- chancroid	*- bacteria*
- gernital herpes	*- virus*
- gernital warts	*- virus*
-HIV/AIDS	*- virus*

(b) Describe and explain how cholera is treated [4]

Ans: *- oral re-hydration/saline drip transfusion* *- replaces lost fluids*

- antibiotics *- kill the pathogen.*