

BIOLOGY FORM THREE ENTRANCE EXAM ZANZIBAR 2015

Solutions from: [Maktaba by TETEA](#)

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1.

i	ii	iii	iv	v	vi	vii	viii	ix	x
D	B	C	C	A	B	D	C	A	D

2

i	ii	iii	iv	v	vi	vii	viii	ix	x
K	O	F	N	J	B	D	P	G	E

3.

a	b	c	d	e	f	g	h	i	J
Biologist	Microorganisms	Microscope	First aid kit	Sensitivity	Excretion	Unicellular	Multicellular	Poor conductors	Sensitivity

4.(a)Cell is the basic unit of life.

(b)Cell structures common to both plants and animals are

- cell membrane
- nucleus
- cytoplasm
- mitochondria.

(c)parts found in only plant cell

-cell wall

-chloroplast

(d)

-nucleus

-cytoplasm

5.(a)

Vitamin	Deficiency
A	Night blindness
B ¹	Beriberi
C	Scuvy
D	Rickets
K	Blood not clotting(haemophilia)

(b)

Vitamin	Deficiency
A	Vegetables
B1	Fish,whole grains food
C	Fruits
D	Oily fish,egg york
K	Green leaf vegetables.

6.(a)Nossal cavity,Trachea, bronchus, bronchioles, alveoli.

(b)Features of respiratory surface.

-they are moisture

- they have cillia

- they have large surface area.

(c) importance of breathing through nose

- air is moistured

- dust are removed by hairs in the nose.

7(a)kingdoms

- animmalia

- monera

- plantae

- protocista

- Fungi

(b)-K is moss plant

- division bryophyta

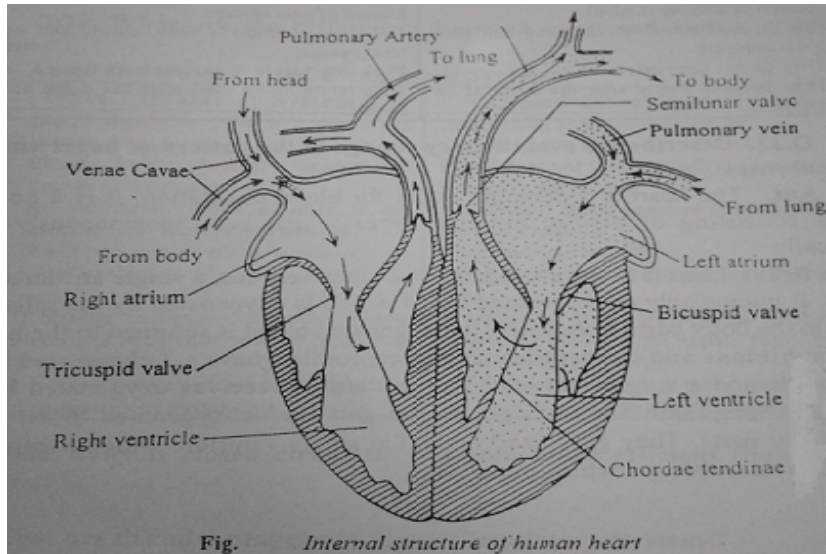
- sporophyte and gametophyte

- habitat is wet places

- advantage has fibrous rooted that hold soil particles together.

- disadvantage, can cover the whole water bodies.

8(a)

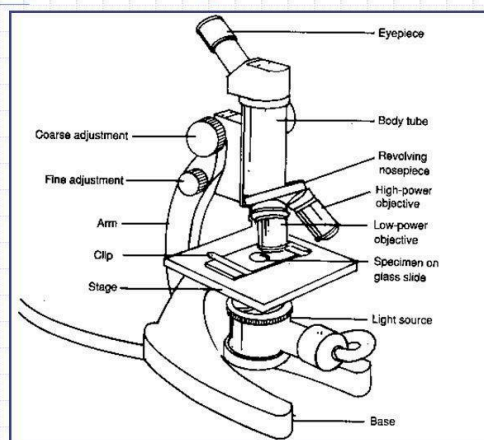


(c) Chambers of the heart

- right atrium
- left atrium
- right ventricle
- left ventricle

9.

Light Microscope



(ii)magnification =50x15

=X750

(iii)size of object $1.5 \div 6$

=2.5

(b)(i) A is plasma

(ii)B is hematocrit

(iii) component in A

-water,proteins,nutrients, hormones.

component in B

-red blood cell, carry oxygen

-white blood cell, to fight pathogens

- platelets. In blood clotting.

-colour in A is yellowish

-colour in B is Red

-function of A is to dissolve substances.

10.(a)Non communicable diseases are

-Cancer

-pressure.

(b)Schistosoma is a genus of trematodes, commonly known as blood flukes. They are parasitic flatworms responsible for a highly significant group of infections in humans termed schistosomiasis,

Symptoms

- blood in the urine

-painful urination

-higher risk of bladder cancer

-diarrhea and constipation

-blood in the feces

- intestinal ulcers
- liver fibrosis
- portal hypertension, or high blood pressure around the digestive system.

EFFECTS.

Depending on the type of worm, bilharzia can affect:

- the intestines
- the urinary system, increasing the risk of bladder cancer
- the liver
- the spleen
- the lungs
- the spinal cord
- the brain

Prevention.

-People should take care when:

- swimming unless in seawater or a chlorinated pool
- drinking water
- eating food washed in water
- bathing.

11.(a)

Modern Methods of Home Food Preservation

- Canning
- Freezing
- Drying
- Pickling
- Sugar concentrates
 - jams, jellies, butters, preserves, etc.
- Curing, smoking

(b)-Advantages of modern food preservations.

Reducing in food waste is being its greatest advantage and ample of technologies are available to keep your food fresh and shelf stable for longer time.

Fortification (adding nutrients to food from other source) which helps in curing deficiency diseases is the result of modern food processing.

Modern food processing makes availability of food for all age groups and even customisation is possible for people who are allergic to particular ingredients like gluten, lactose, celery, etc.

The health supplements are available as per requirements of consumer.

Meal replacers, sugar free, sugar reduced and much more are in trend just because of modern food processing.

-Disadvantages of Processed Foods

-Food processing removes some of the nutrients, vitamins and fiber present in the food.

-Processed foods are obtained from laboratories and not nature. The foods are genetically modified and may cause gastrointestinal disorders, infertility and can damage your organs.

-Frequent intake of processed foods can make people become angry and irritable. -Consumption of natural whole foods can help level out your mood, sustain energy levels and leave you feeling content and relaxed.

-The trans fats and sugar present in processed items can cause inflammation, an unhealthy condition that leads to asthma.

