

SMZ**ZANZIBAR EXAMINATIONS COUNCIL****FORM ONE ENTRANCE EXAMINATION****129****SCIENCE****TIME: 2:30 Hours****FRIDAY, 29th NOVEMBER 2019 a.m.****INSTRUCTIONS TO CANDIDATES**

1. This paper consists of **THREE (3)** sections A, B and C.
2. Answer **ALL** questions in section A and B, and any **TWO (2)** questions in section C.
3. Write your answers in the space provided.
4. Write your examination number on each page.
5. Use blue or black pen in writing and drawings must be in pencil.
6. Cellular phones are not allowed in the examination room.

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	MARKS	SIGNATURE
1.		
2.		
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11.		
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13.		
TOTAL		

This paper consists of 11 printed pages

SECTION A: (30 MARKS)

Answer **ALL** questions

1. Choose the correct answer from the given alternatives and put its letter in the box below the questions.
 - i. It is an STI infection
A: Cholera B: Malaria C: Gonorrhoea D: Cold
 - ii. Ribs and lungs are organs in
A: Respiratory system B: Digestive system
C: Nervous system D: Skeletal system
 - iii. An attractive part of a flower
A: Filament B: Stalk C: Sepal D: Petal
 - iv. A liquid has
A: Fixed shape B: High boiling point
C: Changing meniscus D: Fixed volume
 - v. The cochlea is found in
A: Inner ear B: Outer ear C: Middle ear D: Semi circular canals
 - vi. The drugs for an HIV positive person is
A: VCT B: ARV C: AIDS D: ICT
 - vii. Nitrogenous waste products are removed from the body by
A: Heart B: Nose C: Liver D: Kidney
 - viii. The first leaf of a seed is
A: Testa B: Cotyledon C: Plumule D: Radicle
 - ix. A submarine can float or sink because
A: It is lighter than water B: It is heavier than water
C: It is designed to float or sink D: It can fill air or water in its tank

x. The role of an iris in an eye is

A: To reflect the light

B: To change the size of a pupil

C: To direct the light rays

D: To keep the image

Answers

i	ii	iii	iv	v	vi	vii	viii	ix	x

2. Match the sentences in **LIST A** with a correct response from **LIST B**. Write the letter in the box below the questions.

LIST A	LIST B.
i. Blood fluid	A. Cells in series
ii. Omnivorous	B. Water ,light, carbon dioxide, chlorophyll
iii. Pollination	C. Plasma
iv. Electric current	D. Sore throat and dark skin
v. $V=V_1+V_2+V_3+.....$	E. Thicker at the middle
vi. Effort	F. Thinner at the middle
vii. Photosynthesis	G. Condensation
viii. Diptheria	H. Eat grasses and meat
ix. Convex lens	I. Eat meat
x. Rainfall formation	J. Conservation
	K. Ammeter
	L. Pollen to anther
	M. Pull or push
	N. Pollen to stigma

Answers

i	ii	iii	iv	v	vi	vii	viii	ix	x

3. For each statement write **T** if the sentence is **TRUE** and **F** if the sentence is **FALSE**
Write the answers in the table below the questions.

- i. The sun is an artificial source of light.
- ii. Marasmus is caused by lack of protein.
- iii. Puberty is the change from child hood to adult hood
- iv. The oviduct produces ova.
- v. The process of photosynthesis takes place in the plant leaf.
- vi. The current flows only when there is a closed circuit.
- vii. Duodenum is the first part of small intestine.
- viii. Image in human eye is formed in the iris
- ix. Dynamite is the best method of fishing.
- x. Ureter transports urine from kidneys to urinary bladder.

Answers

i	ii	iii	iv	v	vi	vii	viii	ix	x

SECTION B: (50 Marks)

Answer **ALL** questions in this section

4. Choose the correct answers from the box below and fill in the blanks.
- a) The _____ is a pumping organ of blood.
 - b) The blood is purified in the _____.
 - c) A blood vessel that carries blood from the heart is _____.
 - d) A blood vessel that carries blood towards the heart is _____.
 - e) The _____ are the smallest blood vessels.
 - f) Blood in the pulmonary artery has much _____ and lacks _____.
 - g) The upper chambers of the heart are called _____.
 - h) The lower chambers of the heart are called _____.
 - i) The adult human has an average of _____ beats per minute.

Auricles, ventricles , kidney , artery , vein, , 92 , carbon dioxide, , capillaries , lungs , aorta , septum , oxygen , heart , 72

5. a) Define the terms:

i) Air _____

ii) Combustion _____

b) The gas which is used in breathing in human is _____.

c) i) Fill in the amount of the composition of the given gases in air

Gas	Composition in air
Nitrogen	
Carbon dioxide	
Rare gases	

ii) The gas which is missing in the table is _____.

iii) The gas which is used to put off the fire is _____.

6. a) Mention the two (2) main parts of the nervous system.

i) _____

ii) _____

b) List two (2) functions of the brain.

i) _____

ii) _____

- c) Draw the structure of the human brain. On it show

Fore brain , hind brain , mid brain and spinal cord

7. a) What are aquatic animals?

- b) In the given aquatic animals, fill in the table below the ones with backbone and without backbone.

Turtle, crab, whale, dolphin, shark, octopus

With backbone	Without backbone

- c) List four (4) economic importances of aquatic animals

i) _____

ii) _____

iii) _____

iv) _____

8. a) What is germination?

- b) Identify the type of germination in the following seeds. Fill the answers in the table below.

bean, maize, pea, groundnut, rice, millet, mango, orange

Seeds of epigeal germination	Seeds of hypogeal germination

- c) Write in the table below a difference between epigeal germination and hypogeal germination.

Epigeal germination	Hypogeal germination

9. a) Draw the two (2) types of lenses

- b) Identify the part of the eye below which is described in the following:

- i) It is made of elastic tissue. It constricts or dilates _____.
- ii) A small dark opening in the centre of the iris muscles _____.

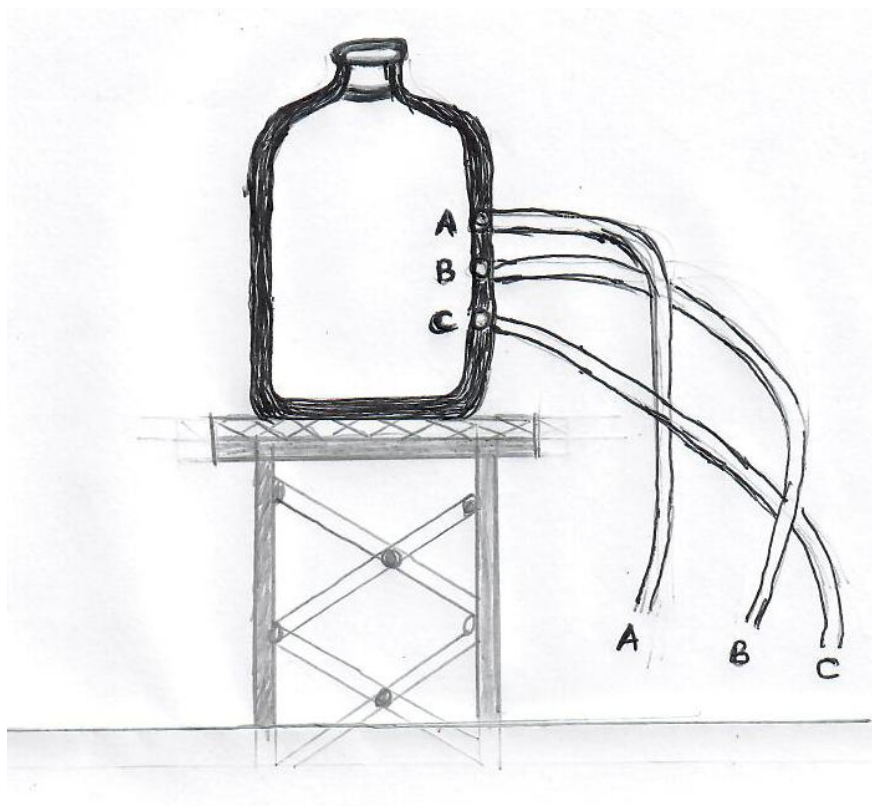
- iii) It is made of transparent fluid that fills the first chamber_____.
- iv) It is a transparent outer part of the eye_____.
(cornea, pupil, iris, aqueous humour, lens)

SECTION C: (20 Marks)

Answer any **two (2)** questions

10. a) what is pressure?

- b) The diagram below shows the effect of height in pressure, study it and then answer the questions.



i) The hole which sends the longest jet from the tank is _____.

ii) The reason in (i) is _____.

iii) The hole which sends the shortest jet from the tank is _____.

iv) The reason in (iii) is _____.

v) Outline two (2) applications of pressure in water.

_____.

_____.

vi) Why is the supplying water tanks placed above the ground level?

_____.

_____.

11. Draw the longitudinal section of a flower, on it show the following

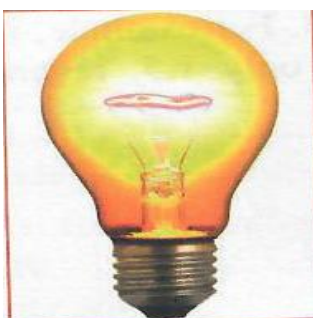
i. Stigma ii. Style iii. Ovary iv. Anther v. Petal

vi. Sepal

12. a) What is electricity?

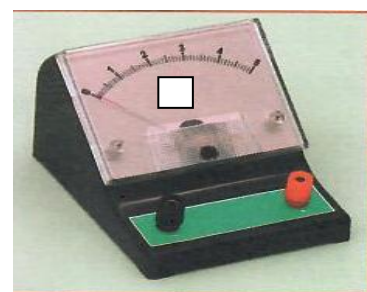
b) Study the pictures of electrical devices below. Write the symbols used in these pictures.

A



B





C



D

13. a) Define magnet.

b) Name two (2) substances that can be attracted by a magnet.

i) _____

ii) _____

c) State the two (2) laws of magnet.

i. _____

ii. _____

d) Mention any four (4) devices that use magnet.

i. _____

ii. _____

iii. _____

iv. _____
