

SMZ**ZANZIBAR EXAMINATIONS COUNCIL****FORM ONE ENTRANCE EXAMINATION****129****SCIENCE****TIME: 2:30 HOURS****WEDNESDAY 27TH OCTOBER, 2021 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 only two (2) questions in section C.**
- 3. Write your answers in the space provided.**
- 4. Write your examination number on each page.**
- 5. Use a blue or black pen in writing and drawing must be in pencil.**
- 6. Cellular phones and unauthorized materials are not allowed in the examination room.**

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

This paper consists of 10 printed pages

SECTION A: (30 Marks)

Answer ALL questions in this section.

1. Choose the correct answer from the given alternatives and write its letter in the table below.
 - i. It is thicker at the edge than at the middle
 - A. Convex lens
 - B. Concave lens
 - C. Plane mirror
 - D. Convex mirror
 - ii. Impulses of the image from the eye to the brain are sent by
 - A. Olfactory nerve
 - B. Auditory nerve
 - C. Optic nerve
 - D. Cardiac nerve
 - iii. The common STI disease is
 - A. Malaria
 - B. Bilharzias
 - C. Cholera
 - D. Syphilis
 - iv. Chemical substance that can supply nutrients to plant is called
 - A. Manure
 - B. Green manure
 - C. Fertilizer
 - D. Compost manure
 - v. Which of the following is called direct current generator?
 - A. Generator
 - B. Dynamo
 - C. Motor
 - D. Transformer
 - vi. It is used to pick a piece of iron from the sand
 - A. Magnet
 - B. Voltmeter
 - C. Ammeter
 - D. Machine
 - vii. Examples of monocotyledon seeds are
 - A. Millet and beans
 - B. Beans and peas
 - C. Maize and beans
 - D. Rice and maize
 - viii. Pollination is the process of transferring the pollen grains from
 - A. Anther to stigma
 - B. Anther to ovary
 - C. Anther to filament
 - D. Anther to ovules
 - ix. Pinna receives the sound waves and direct them to the
 - A. Auditory canals
 - B. Oval window
 - C. Ear drum
 - D. Cochlea

- x. One of the following is the chamber of the human heart
 A. Right auricle B. Septum C. Aorta D. Vena cava

ANSWERS

i	ii	iii	iv	v	vi	vii	viii	ix	x

2. Match the item in **LIST A** with a correct response from **LIST B**. Write its letter in the table below.

LIST A	LIST B
i. Sense of vision	A. Fight against infection in the body
ii. Energy transfer in solid materials	B. Fluid found in the cochlea
iii. Voluntary counseling	C. Hard water
iv. Fruits and vegetables	D. Male gamete of the flower
v. White blood cells	E. Conduction
vi. Easily forms lather with soap	F. Eye
vii. Anther	G. Duct that joins the kidney to the urinary bladder
viii. Gulley erosion	H. Remove
ix. Endolymph	I. Occur in steeps slope area
x. Ureter	J. Provided before and after HIV/AIDS testing
	K. Soft water
	L. Breaking
	M. Stone
	N. Source of vitamins
	O. Stigma

ANSWERS

i	ii	iii	iv	v	vi	vii	viii	ix	x

3. Write **TRUE** if the sentence is right and **FALSE** if the sentence is wrong in the given spaces.
- i. The pancreatic juice has enzymes that digest protein food into amino acid and carbohydrates into glucose. _____
 - ii. Ileum is short and much coiled small intestine. _____
 - iii. The sun is an artificial source of light. _____
 - iv. Virtual image cannot be formed on a screen. _____
 - v. Herpes simplex virus causes genital herpes. _____
 - vi. Two terminals of a cell are positive and negative. _____
 - vii. Magnetic materials cannot be attracted by magnet. _____
 - viii. Presence of air spaces in a body helps it to float in water. _____
 - ix. Endocarp is a part of fruit which cover the seed. _____
 - x. Peas and ground nuts are fleshy fruits. _____

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) Temperature is the degree of _____ or _____ of the body.
 - b) The inability of a person to bear _____ is called _____.
 - c) The common herbivorous aquatic animals are _____ and _____.
 - d) Water vapour in the atmosphere is the results of _____ and _____.
 - e) Material that allows electricity to pass through is called _____ while material that control the size of current flowing in a circuit is known as _____.

hotness, sardines, conductor, evaporation, children, condensation, osmosis, tilapia, sterility, coldness, resistor, insulator, fertility.

5. a) What is air?

b) Mention two (2) uses of air.

c) List four (4) causes of air pollution.

6. a) Define soil.

b) Write three (3) activities that lead to soil degradation.

c) Mention three (3) agents of soil erosion.

7. a) What is nervous system?

b) Write the function of the following parts of human ear.

i. Semicircular canals

ii. Cochlea

iii. Hairs and mucus

8. a) Briefly explain one (1) importance of machine in our daily life.

b) Write four (4) examples of simple machine.

c) Mention simple machine that magnify speed.

9. a) Write the long form of the following abbreviations on body health.
- i. STI _____
 - ii. STDs _____
- b) List two (2) examples of pathogens.
- _____
- _____
- c) Mention four (4) precautions to be taken when dealing (care) with people living with HIV/AIDS.
- _____
- _____
- _____
- _____
- _____
- _____

SECTION C: (20 Marks)

Answer any two (2) questions from this section.

10. a) With example differentiate between solute and solvent.
- _____
- _____
- _____
- _____
- _____
- b) Complete the following word equations by writing the name of solution formed.
- i. Water + soap _____→
 - ii. Water + sugar _____→

- c) Explain briefly why a stone sink in water while a piece of wood float in water

11. a) Draw the diagram to show the structure of the human brain and label fore brain, spinal cord and the skull.

- b) Explain briefly the structure of human tongue.

12. a) i. Explain the term omnivorous animals.

ii. Give one (1) example

b) Explain four (4) threats to aquatic animals.

13. a) Define the term electric circuit.

b) Mention four (4) components of a simple electric circuit.

c) Given two resistors, R_1 and R_2 . Write the formula for total resistance, if

i. Resistors connected in series.

ii. Resistors connected in parallel.

d) Mention two (2) causes of electric hazards.

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