

Candidate's Examination Number _____

School's Name _____

Region _____

District _____

**THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
PRIMARY SCHOOL LEAVING EXAMINATION**

05E

SCIENCE AND TECHNOLOGY

Time: 1:30 Hours

Year: 2024

Instructions

1. This paper consists of sections A, B and C with a total of **eight (8)** questions.
2. Answer **all** questions in the spaces provided.
3. Section A and B carry **twenty (20)** marks each and section C carries **ten (10)** marks.
4. All writings must be in **black** or **blue** pen.
5. Communication devices and any unauthorised materials are **not** allowed in the examination room.
6. Write your **Examination Number, School's Name, Region** and **District** at the top right corner of every page.

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	SCORES	EXAMINER'S INITIALS
1		
2		
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4		
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7		
8		
TOTAL		
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SECTION A (20 Marks)

Answer **all** questions in this section.

1. For items (i) – (x), choose the correct answer then write its letter in the box provided.

(i) Which animal has three chambered heart?

- A Human B Rat C Frog
D Cow E Cat

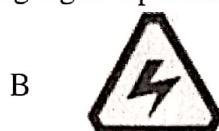
(ii) Plants manufacture their own food using raw materials available in the environment. Which materials are those?

- A Water, carbon dioxide and sunlight
B Water, oxygen and sunlight
C Oxygen, carbohydrate and sunlight
D Oxygen, carbon dioxide and sunlight
E Water, carbohydrate and sunlight

(iii) A pupil was given a plant to observe its roots. After the observation, he concluded that the plant was in dicotyledon family. What features did he use to reach the conclusion?

- A The presence of fibrous roots B The presence of main root
C The presence of few roots D The presence of many roots
E The presence of thin roots

(iv) Which among the following signs represents strong radiation?



(v) Why is it advised to use more renewable energy than other sources of energy?

- A It does not destroy cooking utensils
B It gives out oxygen gas
C It has no great effect to the environment
D It has low initial investment cost
E It is used in small amount

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- (vi) During cold weather, people warm their bodies using sunlight energy. In which way does the heat reach their bodies?

A Circulation B Radiation C Convection
D Conduction E Vaporization

☐

- (vii) When Baraka suspended a bar magnet the N pole of the magnet pointed to the S pole of the earth and the vice versa. What attracted the magnet towards that direction?

A The attraction force of earth and the magnet
B The attraction force of the magnet and the sun
C The attraction force of the moon and the magnet
D The attraction force of the magnet and the stars
E The attraction force of the wind and the magnet

☐

- (viii) During rainy season, Musa wondered to see the light then heard the sound of thunderstorm. What causes this phenomenon?

A Sound waves travel faster than light rays
B Sound waves are reflected by clouds but light penetrates
C Light travel faster than sound waves
D Light is lighter than sound waves
E The red colour of light is seen easily

☐

- (ix) Mtwaze served her friend who was hit by an electric shock. Which device did she use to serve her?

A A fresh piece of wood B A piece of iron
C A dry piece of wood D A piece of wire
E A long piece of fresh wood

☐

- (x) Larva is a stage of butterfly growth. Which is the characteristic of this stage?

A Laying fertilized eggs and hatch them
B Ability to destroy crops
C To fertilize eggs in butterfly's body
D Ability to pollinate flowers
E A body enclosed in cocoon

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2. Match the functions of human nervous system in **List A** with the corresponding name of the system which perform those functions in **List B**.

List A	Answers	List B
(i) To identify clothes with different colours.	()	A The tongue
(ii) To differentiate salty from sugary food.	()	B Ears
(iii) To discover that, the cooking beans are burning as they lack water.	()	C A leg
(iv) A sudden removal of a leg from fire.	()	D Nose
(v) To identify and distinguish echo from normal voice.	()	E The eyes
		F The brain
		G The skin

3. Complete the following sentences by choosing a correct word from the box and write it in the space provided.

Ammeter	Tape measure	Clock
Measuring cylinder	Beam balance	Eureka can

- (i) A standard apparatus for measuring sugar in the shop.

- (ii) It is used by an entrepreneur to sell sunflower oil to his customers.

- (iii) An apparatus used to measure a piece of cloth from shop for making dress.

- (iv) A standard apparatus used to measure time.

- (v) A device for measuring a quantity of electricity in a circuit.

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SECTION B (20 marks)

Answer **all** questions in this section.

4. Reshaa placed cow milk into a cup and stored in a cupboard. After two days he found the milk was soured.

(i) The milk sourness is considered as what type of change of matter?

(ii) Give one reason for your answer in part (i).

(iii) What other example can be used to explain the change mentioned in part (i)?

5. Answer item (i) – (iii) by writing the correct answer in the space provided.

(i) Explain briefly why it is easy for a person with sexually transmitted disease to contact HIV?

(ii) Why people living with HIV/AIDS are advised to feed on a balanced diet?

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- (iii) How HIV/AIDS infections can affect the Nation? Give one point.

6. Observe Figure 1 and answer the questions in items (i) – (iv).

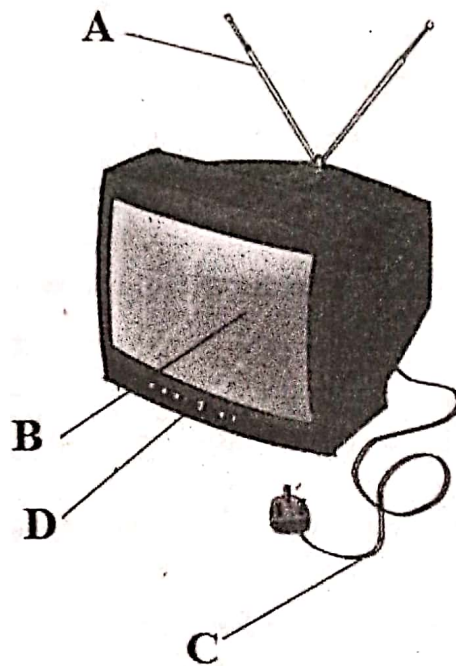


Figure 1

- (i) What is the name of the device?
- _____
- (ii) What is the name of the part labeled by letter B?
- _____
- (iii) What is the function of the part labeled by letter A?
- _____
- _____

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- (iv) What is the importance of the device in Figure 1 in our daily life?

SECTION C (10 Marks)

Answer all questions in this section.

7. Chiku did an experiment to investigate the relationship between heat and the time taken to dissolve 10g of sugar in water, and presented the results as seen in the Figure 2.

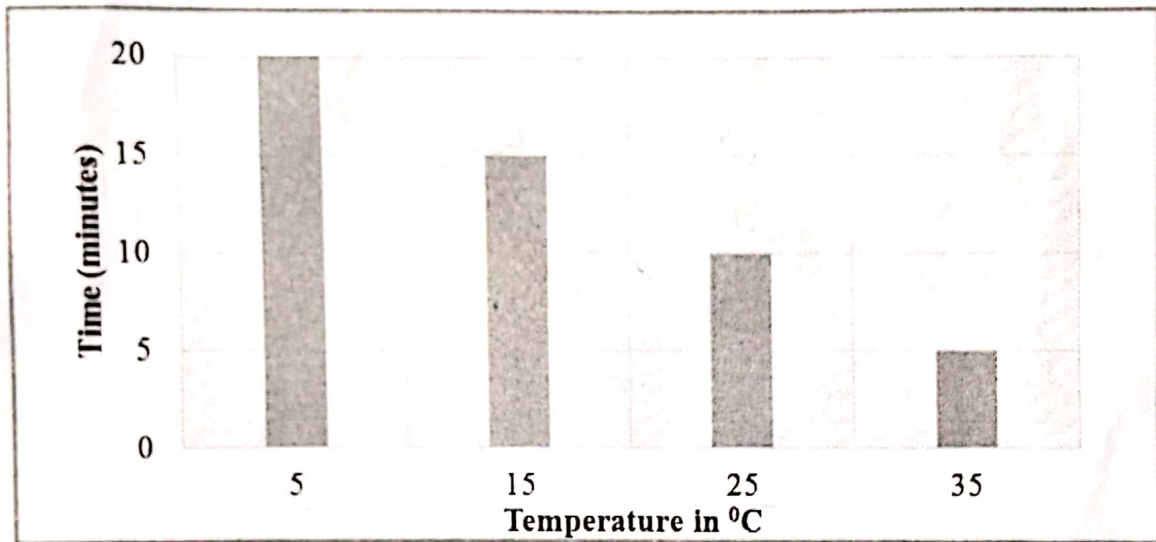


Figure 2

- (i) What time did it take to dissolve some sugar at 25°C?

- (ii) At what temperature did some sugar took longer to dissolve?

- (iii) Based on the result in Figure 2, explain the relationship between the time and temperature in dissolving some sugar.

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8. (a) What is the value of velocity ratio of the pulley system shown in Figure 3 if the distance moved by effort is 9 metres and the distance moved by load is 3 metres?

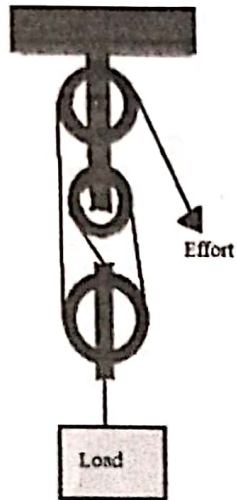


Figure 3

- (b) What is the function of simple machines of pulley system in daily life?
