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# THE UNITED REPUBLIC OF TANZANIA NATIONAL EXAMINATIONS COUNCIL OF TANZANIA A SAMPLE OF 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 (08)** questions.
- 2. Answer **all** the questions in the space provided.
- 3. Section A and B carry twenty (20) marks each and section C carries ten (10) marks.
- 4. All writing must be in **blue** or **black** pen, **except** drawings which must be in pencil.
- 5. Communication devices and any unauthorized materials are **not** allowed in the examination room.
- 6. Write your **Examination Number** and all other important information at the top right of every page.

FOR EXAMINER'S USE ONLY				
QUESTION NUMBER	SCORES	EXAMINER'S INITIALS		
1				
2				
3				
4				
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7				
8				
TOTAL				
CHECKER'S INITIALS				

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#### **SECTION A (20 Marks)**

Answer **all** questions from this section.

- 1. For each of the items (i) (x), choose the correct answer then write its letter in the box provided.
  - (i) After a fire outbreak in the industry, the firefighter unit used gas cylinders to extinguish it. Which type of gas did the cylinders contain?
    - A Chlorine
    - B Oxygen
    - C Hydrogen
    - D Carbon dioxide
    - E Nitrogen
  - (ii) A pupil wanted to learn about diseases through the internet. Which web browser would be appropriate for obtaining the information needed?
    - A DMZO
    - B Google chrome
    - C Yandez
    - D Bing
    - E dr.yahoo.com
  - (iii) The Science and Technology teacher assigned Standard Seven pupils to make an antenna. What is the first step to consider before they start making it?
    - A Choose the type of antenna
    - B Collect different antenna
    - C Identify the uses of antenna
    - D Choose the devices to be used
    - E Testing the antenna
  - (iv) A boy pushed a wall for 7 minutes, the wall did not fall down. His friends said he didn't do any work. Why did they say that?
    - A He used little force to push the wall
    - B He did not follow scientific procedures of pushing the wall
    - C He used little time to push the wall
    - D He stood very close to the wall while pushing
    - E He pushed the wall that did not move any distance

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1		
1		

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- (v) A sports and games teacher prepared a budget for sports tour for her school by using spread sheet program. Why did she use this program?
  - A Cannot be easily erased
  - B Easy to use
  - C Saves time
  - D Needs few information
  - E It stores a lot of information
- (vi) A teacher assigned Class Seven pupils to grow a seed in a closed box with a hole on one side. After a week a plant grow and bent towards the hole. This action explains which characteristic of plants?
  - A Growing well outside
  - B Growing towards light
  - C Need an open space to grow
  - D Growing by bending
  - E Growing slowly
- (vii) Standard Seven Pupils learnt several examples about physical and chemical changes. Which example was used to explain chemical change?
  - A Rotting of plants
  - B Melting of candle
  - C Freezing of water
  - D Warming an ice block
  - E Dissolving salt in water
- (viii) Teacher brought different tools in the classroom, and asked a pupil to choose a tool that belongs to second class lever. Which tool did he choose?
  - A Wheel barrow
  - B A pair of scissors
  - C Claw hummer
  - D Spade
  - E Broom

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- (ix) Sayuni saw her brother painting iron frame windows. What is the advantage of doing that?
  - A Prevent them from damage
  - B Make them clean
  - C Prevent them from dust
  - D Prevent them from rusting
  - E Make them strong
- (x) Which property of light is represented by the appearance of rainbow in clouds with several coulors?
  - A Shinning
  - B Absorption
  - C Bending
  - D Diverging
  - E Reflection
- 2. Match the function of plant parts in **List A** with the parts in **List B** and write the letter of the correct answer in the space provided.

List A		Answers		List B	
(i)	The part used to synthesize its food.	(	)	Α	Upper epidermis
(ii)	The tissue for transporting food.	(	)	B C	Stomata A flower with
(iii)	It is a tissue which transports water and minerals in the plant.	(	)	D	beautiful colour Xylem
(iv)	A site for gaseous exchange in leaves.	(	)	E F	Leaf Phloem
(v)	Stores and protects stomata found in upper part of the leaf.	(	)	G	A fruit with seeds

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3. Complete the items (i) - (v) by choosing the correct word given in the box and write it beside the item in the space provided.

Oesophagus	Stomach wall	Large Intestine
Rectum	Small Intestine	Mouth
Pancreas		

- (i) Digests and absorbs food nutrients in the body.
- (ii) A part of large intestine which stores faeces before removing it from the body.
- (iii) Transports chewed food from the mouth.
- (iv) Produces an acid to kill the germs brought in the stomach with food.
- (v) Absorbs water and minerals from undigested food.

### **SECTION B (20 Marks)**

Answer **all** questions from this section.

- 4. Industries affect the environment from the wastes they produce. Mention two waste products which can be produced from those industries.
  - (i) \_\_\_\_\_
  - (ii) \_\_\_\_\_
  - (iii) What is the general effect caused by the wastes you have mentioned in part (i) and (ii)?

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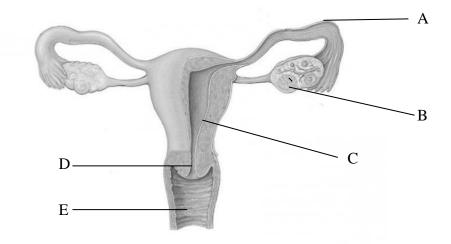
- 5. Answer item (i) (ii) by writing the correct answer in the space provided.
  - (i) Why it is important to apply lubricants to the bicycle chain, wheel and axle, and pedals?
  - (ii) When a milling machine is connected to electric supply and turned on, what causes the axle with blades to rotate?
  - (iii) A barber decided to shave his customer by using a shaving machine instead of razor blade. What is the advantage of his decision?
- 6. Tausi saw her uncle lighting a wastes of papers and dry leaves using his spectacles. He placed the wastes under the spectacles until it lite.
  - (i) What type of lens did her uncle's spectacles have?
  - (ii) How did the lens light wastes?
  - (iii) What eye defect does Tausi's uncle have?
  - (iv) Mention another type of lens used to correct eye defects apart from that of Tausi's uncle.

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### SECTION C

Answer **all** questions in this section.

7. Observe the following drawing then answer the questions that follows.



- (i) What will happen if a part represented by the letter **C** in the drawing is inflamed?
- (ii) What is the role of a part represented by letter **B** in the drawing?
- (iii) What will happen if a part labeled A will be cut?

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8. Observe Figure 1 and answer the questions that follows:

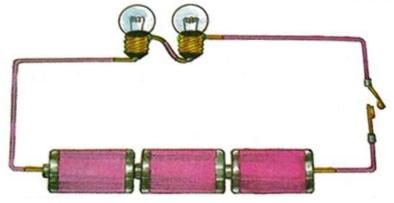


Figure 1

- (i) Rafii created a simple circuit as seen in Figure 1. Which type of circuit did he create?
- (ii) If the circuit that is created by Rafii had a total of 12 volts and the current of 6 amperes, what is the value of total resistance in bulbs connected?