

Student's Assessment Number .....



**THE UNITED REPUBLIC OF TANZANIA**

**PRESIDENT'S OFFICE**

**REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**

**MBOZI DISTRICT COUNCIL**



**FORM TWO MOCK ASSESSMENT**

**033**

**BIOLOGY**

**TIME: 2:30 Hours**

**YEAR. 2023**

**Instructions**

1. This paper consists of sections A, B and C with a total of **ten (10)** questions.
2. Answer **all** questions in the space provided.
3. Section A and C carries **fifteen (15)** marks while section B carries **seventy (70)** marks.
4. All writing must be in blue or black ink **except** drawings which must be in pencil
5. All communication devices and any unauthorized materials are **not** allowed in the assessment room
6. Write your **Assessment Number** at the top right corner of every page.

<b>FOR ASSESSOR'S USE ONLY</b>		
<b>QUESTION NUMBER</b>	<b>SCORES</b>	<b>ASSESSOR'S INITIALS</b>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
<b>TOTAL</b>		
<b>CHECKER'S INITIALS</b>		

**SECTION A (15 MARKS)**

Answer **all** questions in this section

1. For each of the items (i)- (x), choose the correct answer from among the given alternatives and write its letter beside the item number in the table provided.
  - (i) One of the easily recognizable fungi is the edible mushroom called *Agaricus bisporus*. In which phylum is this organism found?
    - A. Ascomycota
    - B. Zygomycota
    - C. Basidiomycota
    - D. Filicinophyta
  - (ii) Imagine you have been selected to give a morning speech to your fellow students on the ways of preventing the spread of cholera. Which of the following points will you include in your speech?
    - A. Killing mosquitoes.
    - B. Covering nose when sneezing
    - C. Eliminating rats and fleas.
    - D. Boiling drinking water
  - (iii) Mwajuma's daughter has swollen abdomen, thin limbs, reddish-brown hair and a dry cracked skin. As a biologist which of the following foods will you recommend to her in order to correct these symptoms?
    - A. Oranges, yams and eggs
    - B. Eggs, potatoes and animal fats
    - C. Meat, groundnuts and wheat
    - D. Milk, eggs and fish
  - (iv) The major function of blood is to transport materials in the body. Which of the following is **not** transported in blood?
    - A. Hormones
    - B. Nutrients
    - C. Indigestible food materials
    - D. Oxygen
  - (v) What is the aim of doing experiments when conducting a scientific investigation?
    - A. Testing whether the hypothesis is correct or not
    - B. Establishing the aim of the investigation
    - C. Finding a solution to the problem
    - D. Gathering information
  - (vi) One of the best ways of waste management is to change them into usable products. This practice is called:
    - A. Incinerating.
    - B. Re-using
    - C. Recycling.
    - D. Landfill
  - (vii) Suppose you want to help car accident victims who have bleeding wounds and you do not have gloves. Which of the following items will you use to protect yourself from touching the blood?
    - A. Socks
    - B. Plastic bags
    - C. A piece of cloth
    - D. Papers



(b). Suppose there is construction of biology laboratory at your school. Suggest any four features that the constructor should observe to make the laboratory suitable for biological experiments.

- (i) .....
- (ii) .....
- (iii) .....
- (iv) .....

4. (a) Use the terms below to identify the form of interaction among organisms represented by the following cases;

**(Predation, commensalism, parasitism, neutralism, competition, mutualism)**

- (i) Lions and leopards both hunt gazelle and zebras for food \_\_\_\_\_
- (ii) Hawks capture, kill and eat other birds in order to get nutrients \_\_\_\_\_
- (iii) Plasmodium lives in the body of human beings and cause malaria infection to the human being. \_\_\_\_\_
- (iv) Rhizobium bacteria living in the root nodules of legumes convert nitrogen into nitrates which are used by the plant and in turn the bacteria get protection and nutrients from the plant. \_\_\_\_\_

(b) Identify the four components of blood and state one function of each:

(i) Component \_\_\_\_\_

Function

.....  
.....

(ii) Component \_\_\_\_\_

Function

.....  
.....

(iii)Component \_\_\_\_\_

Function

.....  
.....

(iv)Component \_\_\_\_\_

Function

.....  
.....

5. (a) Using your knowledge of biology on waste disposal, suggest the proper methods that can be used to dispose the following wastes:

(i) Plastic bottle.....

(ii)Expired drugs .....

(iii) Human feaces .....

(b) Suppose you are among the students who have been selected to conduct a scientific study on why a large number of girls in secondary schools do not continue with science subjects up to higher education levels. Suggest the seven steps you will follow to accomplish the task.

- (i) .....
- (ii) .....
- (iii).....
- (iv).....
- (v) .....
- (vi).....
- (vii) .....

6. (a). (i) Which enzyme is responsible for breaking down ugali in the mouth ?.....  
 (ii) Into which form is Ugali converted in 6a (i) above?

.....  
 .....

(iii)Which enzymes are responsible for breaking down fish and milk in the stomach?

..... and .....

(iv)Into which form are fish and milk converted in 6(a)(iii)above?

.....  
 .....

(b). One of the interesting things you have studied in biology is the concept of personal hygiene and good manners. Suggest any four benefits of observing personal hygiene and good manners.

- (i).....
- (ii.).....
- (iii).....
- (iv).....

7. (a). Classification of organisms can be natural or artificial. State any four differences between these classification systems;

<b>Natural classification</b>	<b>Artificial classification</b>
i.....	i.....
ii.....	ii.....
iii.....	iii.....
iv.....	iv.....

(b). Catherine observed a mass of greenish plant-like organisms growing on the wall of their house during the rainy season. As a biologist;

(i) Suggest the name of those organisms which Catherine observed.  
 \_\_\_\_\_

(ii) In which division do the organisms belong?  
 \_\_\_\_\_  
 \_\_\_\_\_

(iii) State any three characteristics of the organism

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8. (a). One of the care and support needed by people living with HIV/AIDS (PLWHA) is to be free from all kinds of discrimination and stigmatization against them. Suggest any three ways in which we can avoid discrimination and stigmatization against PLWHA.

- i. ....
- ii. ....
- iii. ....

(b). Biology has been a compulsory subject to all secondary school students because its knowledge is applied in various fields. Briefly explain how the knowledge of biology is applied in the following fields

(i) Agriculture

.....  
.....

(ii) Nutrition

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.....

(iii) Medicine

.....  
.....

9. (a). We are advised to eat proper diet because the food we eat play various roles in our bodies to make us healthy. What is the major role played by the following nutrients in our bodies;

- (i) Carbohydrate .....
- (ii)Roughages .....
- (iii) Minerals,.....
- (iv)Vitamins .....

(b) Mainda complains of having painful burning sensation around the middle of her chest whenever she eats spicy foods. She also has a problem of passing out very hard stool.

(I) What are the possible digestive disorders she is facing ?.....

( II ) What would you advise her in order to alleviate the problem ? any four points

- i,.....
- ii.....
- iii,,.....
- iv,.....

**SECTION C ( 15 Marks)**

10. Your father who is a fisherman caught many fish. Some fish were sold others were given to his friends and neighbors and some remained. What would you advise him in order to preserve the remained fish bearing in the mind that there is no electricity in his area? ( any six points)