

THE UNITED REPUBLIC OF TANZANIA  
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA  
FORM TWO NATIONAL ASSESSMENT

033

BIOLOGY

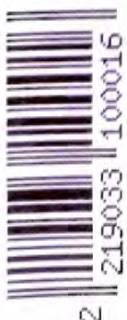
Time 2:30 Hours

Year: 2022

Instructions

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

FOR ASSESSOR'S USE ONLY		
QUESTION NUMBER	SCORE	ASSESSOR'S INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		
CHECKER'S INITIALS		







Match the descriptions of warning signs in **List A** with the corresponding warning sign label in **List B** by writing the letter of the correct response below the item number in a table provided.

List A	List B
(i) Substances which are dangerous and may cause death.	A Corrosive
(ii) Substances which can catch fire easily.	B Explosive
(iii) Substances which emit harmful radiation.	C Toxic
(iv) Substances which can damage the skin and other tissues.	D Irritant
(v) Substances containing microbes which can cause disease.	E Fragile
	F Flammable
	G Biohazard
	H Radioactive

**Answer**

List A	(i)	(ii)	(iii)	(iv)	(v)
<b>List B</b>					

**SECTION B (70 Marks)**

Answer **all** questions in this section.

3. (a) Identify the organs which are used for gaseous exchange in the following organisms:

(i) Cow

.....

(ii) Frog

.....

(iii) Maize leaf

.....

(iv) Fish

.....

(b) Plants cannot survive without carrying out the process of gaseous exchange. In three points, justify this statement.

- (i) .....
- .....
- .....
- .....

(ii)

.....  
.....  
.....  
.....

(iii)

.....  
.....  
.....  
.....

4. Draw the following apparatuses which are found in the Biology laboratory and state the use of each.

<p>(a) Spatula</p>	<p>(b) Tripod stand</p>
<p>(c) Test tube holder</p>	<p>(d) Filter funnel</p>

5. Two people visited the hospital complaining of general body weakness. The doctor diagnosed them with sickle cell anaemia.

(a) Outline six symptoms of such disorder.

(i) .....

(ii) .....

- (iii) .....
- (iv) .....
- (v) .....
- (vi) .....

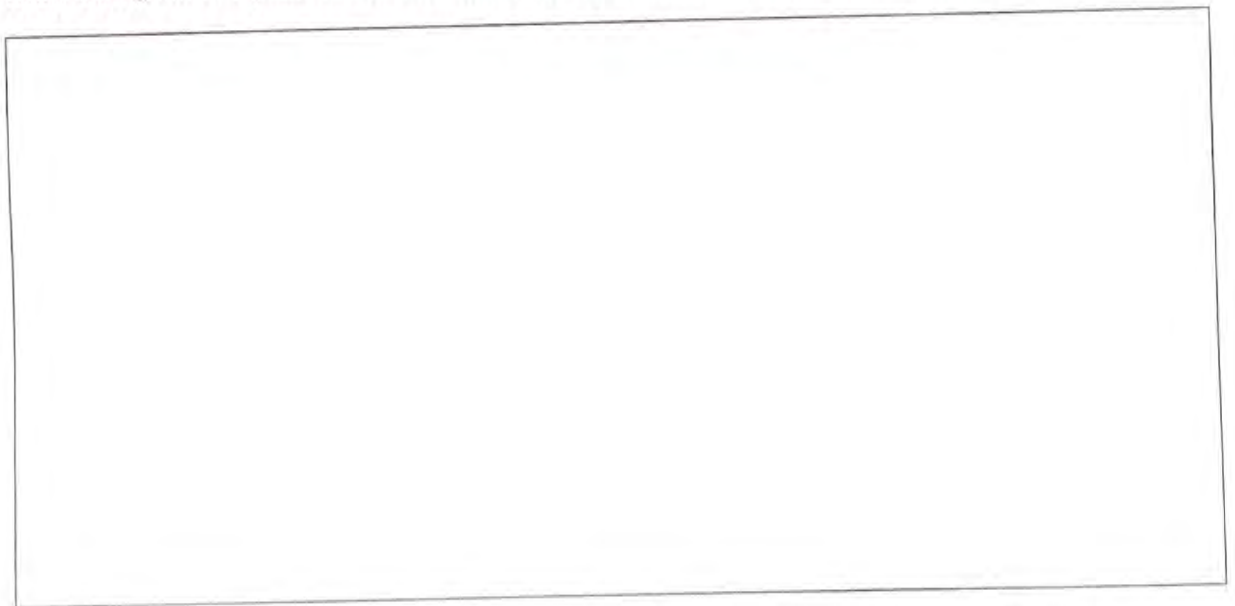
(b) State two ways you would recommend to the patients so as to control the disorder.

- (i) .....
- (ii) .....

6. (a) Outline three similarities between plant and animal cells as seen under the light microscope.

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

(b) Draw a diagram of a plant cell as seen under the light microscope and label six parts.



7. Form Two students classified mosses and ferns into the same Division simply because they have chlorophyll for photosynthesis.

(a) Which classification system did they use?

- .....
- .....



(b) Briefly explain four demerits of the classification system used in 7 (a).

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

8. Form Two students entered the biology laboratory and were provided with water, a tea bag, match box, beaker and a Bunsen burner.

(a) Using the materials and apparatuses given, outline four procedures they would follow to demonstrate the process of diffusion.

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

(b) In two points, briefly explain the importance of the named process in 8 (a) to living organisms.

- (i) .....

(ii)

9. The school Baraza, selected you to become the chairperson for cholera prevention campaign in the neighbouring community. Briefly explain five ways you will use to educate the community about the prevention of the disease.

(i)

(ii)

(iii)

(iv)

(v)

