

*Candidate's Examination Number .....*

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

**033**

**BIOLOGY**

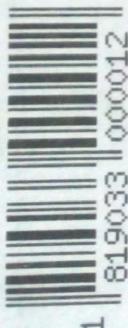
**Time 2:30 Hours**

**Wednesday, 14<sup>th</sup> November 2018 a.m.**

**Instructions**

1. This paper consists of sections A, B and C with a total of **eleven (11)** questions.
2. Answer **all** questions in section A and B and **one (1)** question from section C.
3. All writing must be in blue or black ink **except** drawing which must be in pencil.
4. Calculators, cellular phones and any unauthorized materials are **not** allowed in the examination room.
5. Write your **Examination Number** at the top right corner of every page.

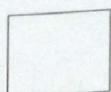
<b>FOR EXAMINERS' USE ONLY</b>		
<b>QUESTION NUMBER</b>	<b>SCORE</b>	<b>EXAMINER'S INITIALS</b>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
<b>TOTAL</b>		
<b>ENTERER'S INITIALS</b>		
<b>CHECKER'S INITIALS</b>		





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- (x) Why bats and birds are **not** placed in the same species while they are closely related organisms?  
A They cannot interbreed to produce a fertile offspring  
B They can interbreed to produce a fertile offspring  
C One lay egg and another can give birth  
D One possesses feathers and another short beak.
2. For each of the items (i) – (x), write **True** if a statement is correct or **False** if a statement is not correct in a space provided.
- (i) People living with HIV/AIDS should be isolated from the community.....
- (ii) A microscope is an instrument that is used to magnify large objects.....
- (iii) Kingdom is the highest rank of classification.....
- (iv) In ecosystem herbivores feeds on carnivores.....
- (v) Inhaled air contains more oxygen than exhaled air.....
- (vi) Liverwort is a representative member of Kingdom Fungi.....
- (vii) Ventricles have thicker walls than the auricles.....
- (viii) Colon is a special site for absorption of digested food materials.....
- (ix) Unicellular organisms are made up of one cell only.....
- (x) Poor waste disposal may cause accidents at home and school.....



3. Match the phrase in **List A** with responses in **List B** by writing the letter of the correct response in **List B** below the corresponding phrase number of **List A** in a table provided.

<b>List A</b>	<b>List B</b>
(i) The process by which solvent molecules move from a region of high solvent concentration to a region of low solvent concentration through a selectively permeable membrane.	A Diffusion.
(ii) The process by which particles move from a region of high concentration to a region of low concentration.	B Root hair
(iii) An extended epidermal cell in plants which absorb water and mineral salts from the soil.	C Plasmolysis
(iv) The tissue which transports manufactured food from the leaves to the other plant parts.	D Xylem
(v) A process by which red blood cell burst due to water gain by osmosis when placed in hypotonic solution.	E Phloem
	F Haemolysis
	G Capillarity
	H Osmosis

**Answer**

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

4. Complete each of the following statements by writing the correct answer in the space provided.

- (i) A temporary treatment carried out to a sick person before arriving to hospital is termed as.....
- (ii) Turning waste into useful products is termed as.....
- (iii) A place where solid waste is buried in the ground is called.....

- (iv) An involuntary ejection of substances from the stomach through the mouth is called.....
- (v) The combustion of waste at high temperature is known as.....

### **SECTION B (50 Marks)**

Answer **all** questions in this section.

5. (a) State the meaning of the following terms as used in Biology.

(i) A cell

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

(ii) System

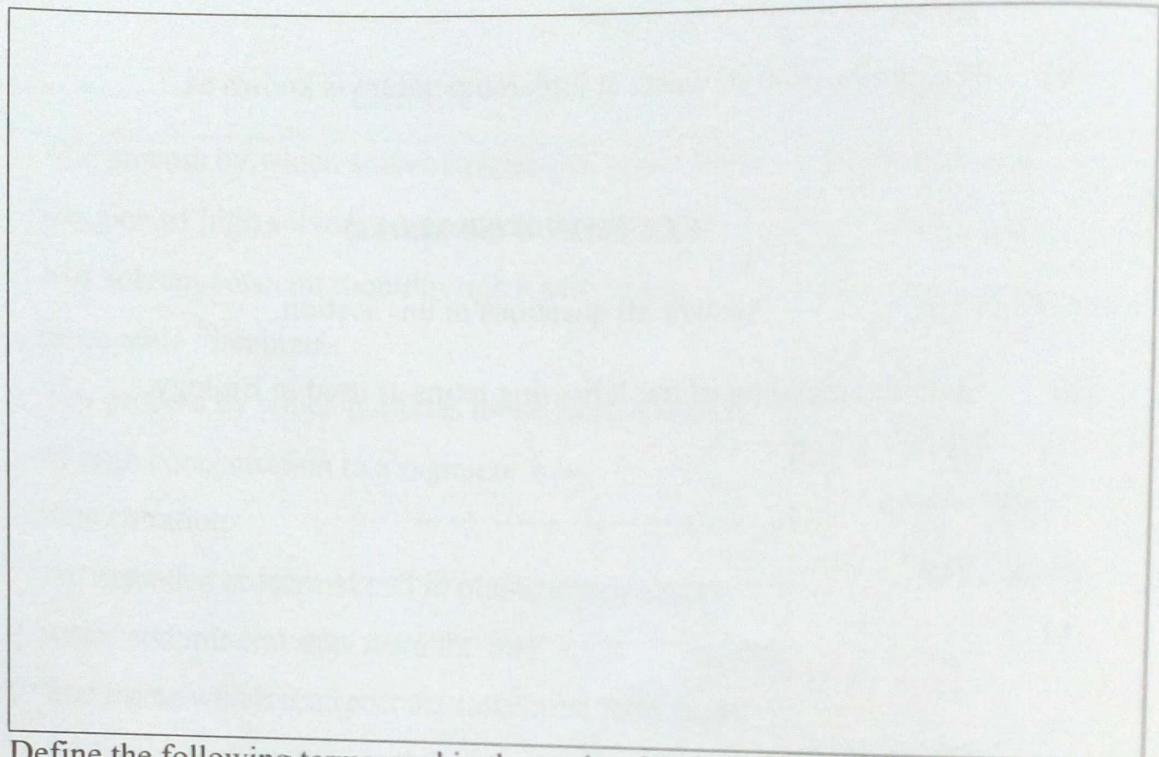
.....  
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(iii) Organ

.....  
.....  
.....  
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.....  
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- (b) Draw a large diagram of an animal cell and label two parts.



6. (a) Define the following terms used in the study of Balance of nature.

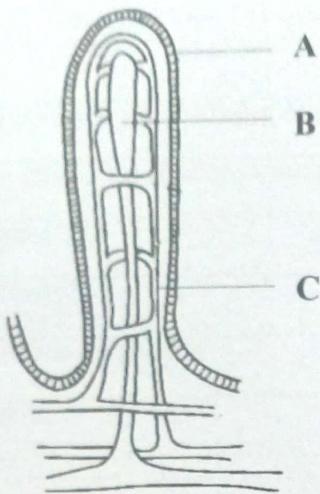
(i) Biotic component

(ii) Abiotic component

- (b) Give two examples of each of the following group of organism in trophic levels:

S/N	Producers	Primary Consumers	Decomposers
(i)			
(ii)			

7. Study the structure of a villus shown below and then answer the questions that follow:



- (a) In which part of the alimentary canal is villus found?.....
- (b) Name the parts labeled with letter A, B and C
- A.....
- B.....
- C.....
- (c) State three adaptations of the villus for the absorption of food in the alimentary canal.
- (i) .....
- (ii) .....
- (iii) .....
8. If you put a piece of bread in a wet cupboard after a few days the bread will be covered with organisms called Fungi.
- (a) Give the common name of these fungi which grow on bread.  
.....
- (b) Outline three Phyla of the Kingdom Fungi.
- (i) ..... ; .....
- (ii) .....
- (iii) .....

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(c) Outline five advantages of the Kingdom Fungi.

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

9. (a) Define the following terms:

(i) Aerobic respiration.

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

(b) Mention three products of anaerobic respiration in yeast cell.

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

(c) Write a balanced equation that summarizes the process of aerobic respiration.

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

**SECTION C (20 Marks)**

Answer **one (1)** question from this section.

10. Explain the importance of studying Biology. Give six points.
11. Gonorrhoea is a bacterial disease caused by *Neisseria gonorrhoea*. Elaborate
  - (a) its transmission
  - (b) six symptoms
  - (c) six preventive measures
  - (d) its treatment.

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