

Student's Name: ..... Stream: .....

What do you want to be after school.....

Class	Stream
S. 1	

(Write your Name, Class Stream and School in the spaces provided.)

553/1  
BIOLOGY  
(Theory)  
Paper 1  
November 2022  
2 hours



**EDUCAN EXAMINATIONS BOARD**  
**Uganda Lower Secondary Certificate of Education.**  
**(U.L.S.C.E)**

**S.1 END OF YEAR ASSESSMENT EXAMINATIONS**  
**BIOLOGY**  
**(THEORY)**  
**Paper 1**  
**2 Hours**

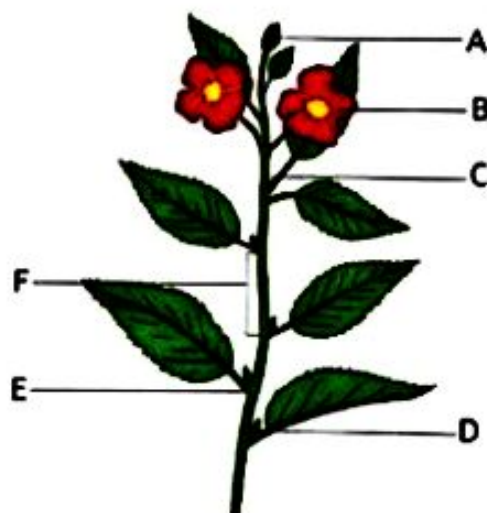
**INSTRUCTIONS**

- This paper consists of two sections A and B
- Answer all questions in section A in the spaces provided.
- Attempt any two questions in section B, in the answer booklet provided
- Illustrations in form of drawings should be made where necessary, with a sharp pencil.
- Drawings where necessary should be neatly made using sharp HB pencil

For Examiner's use only								
Question	Qn.1	Qn.2	Qn.3	Qn.4	Qn.5	Qn.6	Qn.....	Qn.....
Score:								

## SECTION A (60 marks)

1. Plants are everywhere in our compounds, serving different roles in our life. They are so important to an extent that our life would almost not be possible without them. The figure below shows a diagram of a flowering plant. Study it carefully and answer the questions appropriately.



- (a) Name the parts of the plant labelled; A to F. write your answers in the table below;

*(06 marks)*

A	B	C	D	E	F

- (b) There has been worldwide sensitization of masses about the conservation of plants especially trees, to ensure our environment remains a good place to live in. using your knowledge about plants, clearly describe for reasons why it is such important for us to ensure plants in our environment are conserved.

*(04 marks)*

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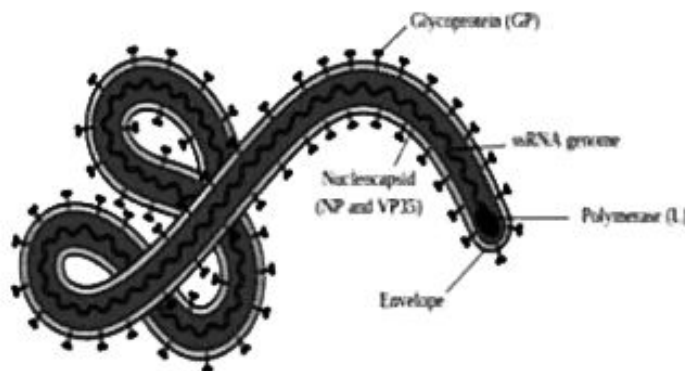
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2. In November 2022, the government of Uganda issued a circular to all Head teachers in primary and secondary schools, instructing them to ensure early closure of schools before the stipulated date in the education Calendar. This was due to outbreak of *Hemorrhagic fever* caused by **Ebola virus** in the districts of Kasanda and Mubende, that had begun spreading to different parts of the country. Figure below shows how Ebola virus looks like.



(a) Suggest one way how the Ebola virus differs from an animal cell. *(01 mark)*

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(b) (i) Explain why it was important for the government to direct early closure of schools. *(02 marks)*

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(ii) State any three signs and symptoms of Hemorrhagic fever caused by Ebola virus. *(03 marks)*

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(c) State four other ways how the spread of Ebola virus can be prevented in our community. *(04 marks)*

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3. For an organism to maintain its life, it must carry out some activities. These activities are basic and essential for its continued existence. The picture below shows life processes being carried out by different organisms.



- (a) With evidence from the picture, identify any three different life processes being carried out. Write your answers in the table below. (06 marks)

<i>Life process</i>	<i>Evidence from the picture</i>

- (b) Both plants and animals carry out life processes to sustain their continuity. They are however carried out differently both the plants and animals. How are life processes carried out differently in plants and in animals? (04 marks)

<i>Life process</i>	<i>How it is carried out in animals</i>	<i>How it is carried out in plants</i>



4. Leaves are plant structures found on the shoot system, that carry out both primary and secondary functions.

(a) Identify any two primary functions of leaves to plants.

(02 marks)

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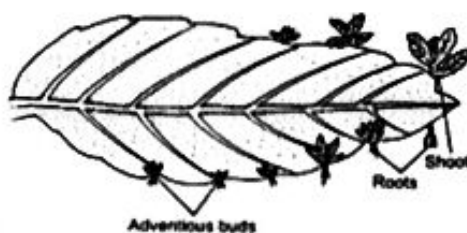
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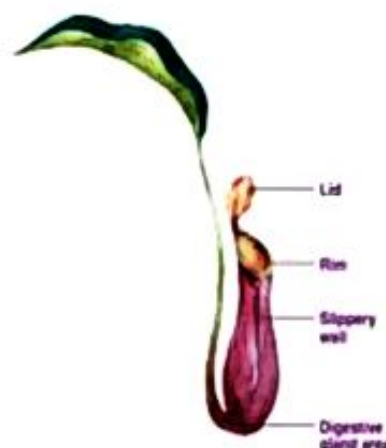
(b) Leaves can also be modified to perform secondary functions, and these are called **modified leaves**. Below are some examples of modified leaves. Study them carefully and answer questions that follow;



A



B



C

(i) Identify the secondary function performed by each of the leaves shown A, B and C in each case, state one way how the leaf is adapted to perform the function.

(06 marks)

Leaf	Secondary function	Adaptation
A		
B		
C		

- (ii) Outline any two differences between leaves of dicotyledonous plants and those of monocotyledonous plants. (02 marks)

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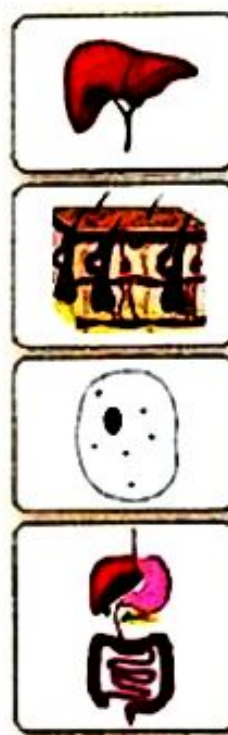
5. (a) Match each structure to the level of organisation in the body. (04 marks)

System

Cell

Organ

Tissue



- (b) Identify the body system(s) that work together when the person is carrying out the following activities; (06 marks)

Activity	Body system(s) involved
Dancing	
Playing foot ball	
Reading novel	

6. Senior one students of EDUCAN SCHOOL, collected some specimens, A and B around the school during their Biology lesson. They are shown in the pictures below;



- (a) With reasons, identify the phylum of specimens A and B. (02 marks)

Phylum: .....

Reason: .....

- (b) One of the specimens is a vector, that spreads *Vibrio cholerae* bacteria, that causes cholera to man.

- (i) Identify which specimen is the vector. (01 mark)

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- (ii) Identify four ways how the specimen is adapted to spreading disease germs.

(04 marks)

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- (iii) Suggest three possible ways you can reduced the spread of cholera at your school.

(03 marks)

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## SECTION B (20 marks)

*Attempt any two questions from this section*

7. Mr. Bagoole Daniel, a teacher of Biology has introduced **Biology** as a subject to you in his very first lesson and many learners have developed a lot of interest in the subject. He begun by talking about living things in the environment, and some of the features that are possessed by things that have life, as you talk a walk around the school compound.



### Task

Maria, a fellow classmate did not understand very well the features that really make up life but she already understands some examples of living things.

Write a simple essay explaining to Maria what exactly life processes are and how they are carried out by different animals. **(10 marks)**

8. In primary Education, you were introduced to what *science* is, as the study of living and non-living things. In Secondary education, we have expounded science and looked at it in a broader perspective; and looked at divisions of science among which included Biology, Chemistry, Physics and astronomy. Your school is organizing a science symposium and you have been chosen by your class teacher to make a presentation to the rest of the students in the school auditorium.



### Task

Using the knowledge, you have so far acquired about science, write a speech you would give as part of your presentation to clearly show how the different branches of science relate to one another. **(10 marks)**



9. Abigail and her mother attended a health campaign organised by EDUCAN at Katosi landing site, in Mukono district with a theme; “*Healthy living*”. It involved HIV blood testing and a message about viral diseases affecting the community living at the landing site, especially the fishermen that usually come from the islands of Koome and Lwaajje. To raise awareness and fight further spread of the diseases among the locals, the EDUCAN team organised a competition which involved making posters about viral diseases.



### Task

Using your knowledge and understanding of viruses, help Abigail to design a poster she can submit in order to help raise awareness about viral diseases in the community living at the landing site.

(10 marks)



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Contact Mr. **BAGOOLE DANIEL** (Project manager) 0701706589 / 0784652712

**END**