

ST. CHARLES LWANGA INTERNATIONAL SCHOOL-KAKIRI

S.1 END OF YEAR EXAMINATION 2023

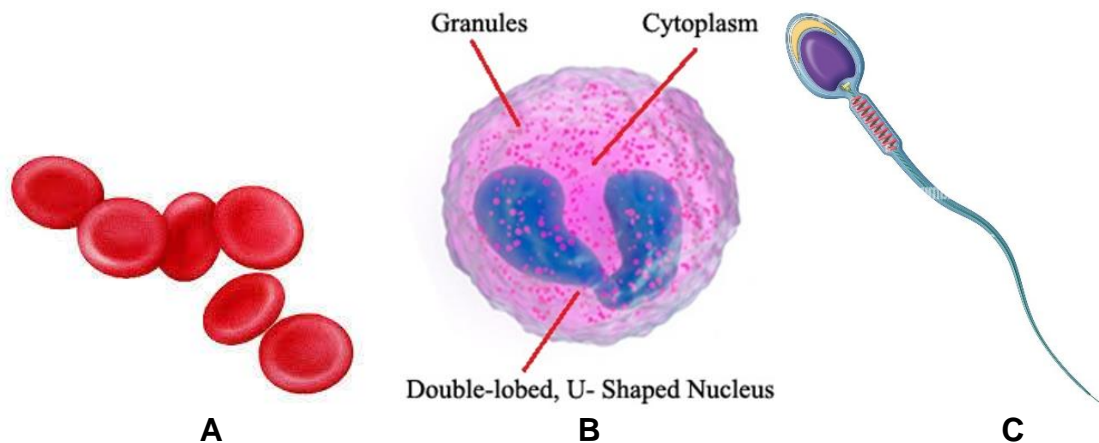
BIOLOGY

TIME ALLOWED: 1 HOUR 30 MINUTES

NAME.....STREAM.....

Instructions: Attempt all questions in this paper

1. You are appointed as the District Health Officer (DHO) of your home district. One day, you decided to visit one health center in the district and found one medical worker explaining to a patient about how to identify modified cells in human beings. As a DHO, you decided to display the chart below to help the patient to understand modified cells in animals.



- a) Using the chart, you have displayed above, identify the specialized animal cells above. (03 marks)
- A.....
- B.....
- C.....
- b) Explain to the patient how the cells are modified to perform their specific functions. (06 marks)

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- c) The patient goes ahead and asks you to explain to him what would to his body if his blood cells labeled **B** above are damaged in the body. Give a brief explanation of what would happen to the body of the patient. (02 marks)

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- d) The patient also tells you that both plant and animal bodies are made up of cells but he does not know how to distinguish between the cells found in the bodies of plants and animals. As a biologist, help the patient understand how the cells found in the bodies of plants and animals differ from each other. (04 marks)

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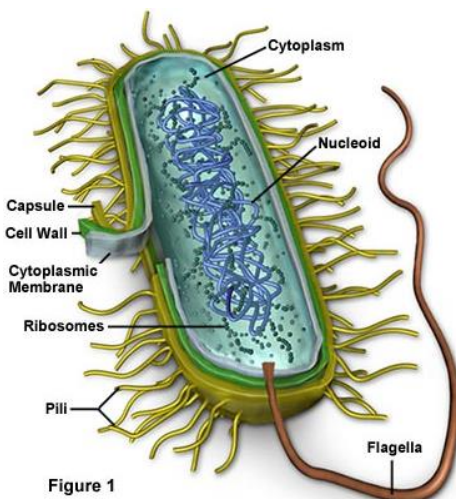
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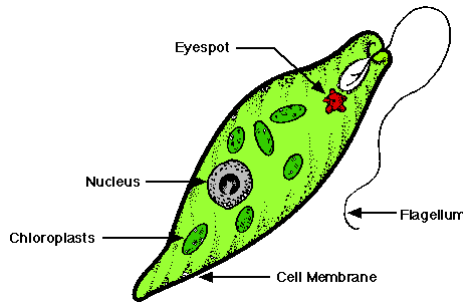
2. S.1 students went for an ecological study trip in Queen Elizabeth National Park. During the study, they encountered different organisms that belong to different kingdoms. The learners carried some experiments on the water and soil samples they collected during the study. Some of the organisms were seen by the learners when they used the microscope. Among the organisms collected by the learners include the following.



A (Bacterium)



B (Mushroom)



C (Euglena)



D (Antelope)

- a) Using the knowledge, you acquired from the study of the five kingdoms of living organisms, group the above organisms into their respective kingdoms giving one reason to support your answer. (08 marks)

Organism	Kingdom	Reason
A (Bacterium)		
B (Mushroom)		
C (Euglena)		
D (Antelope)		

- b) In your own opinion, are mushrooms of any economic importance to man? Support your answer. (02 marks)

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- c) Many people in our communities have suffered from infections resulting from bacteria. What advice can you offer to people in your community that can help them to control the infections from bacteria. (03 marks)

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- d) Kazibwe bought bread from the supermarket. He kept the bread in his cupboard for one week. On picking the bread, he saw there were some organisms growing on it.

- i) Try to suggest the organisms that you think were growing on the bread. (01 mark)
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 - ii) Identify the kingdom to which the above organisms belong. (01 mark)
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3. You successfully completed the topic of insects and understood that in our environment, there are a variety of different insects. One day, your biology teacher asked you to visit your school environment and collect several insects and you managed to collect the following insects.



A(Cockroach)



B(Termite)



C(Housefly)



D(Worker bee)

- a) Which observable characteristics did you consider to know that the above organisms are all insects. (03 marks)
 - i).....
 - ii).....
 - iii).....
- b) Carefully observe the above insects and study the structural observable features present on each insect. Using the features that you have clearly seen, construct a dichotomous key to identify the above organisms. (06 marks)

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- c) The above organisms are economically important to man. Give your views to support this statement. (04 marks)

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- d) It is very hard to catch a housefly. Basing on the features you have observed above, how true is this statement. (02 marks)

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4. Your agriculture teacher planted plants in the school garden which bear flowers. The plants include the following maize, spear grass, beans, nut grass, millet and soya beans.

- a) i) What general name do you give to plants that bear flowers? (01 mark)

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- ii) Put the above plants into their correct groups they belong by completing the table below. (06 marks)

Monocotyledonous plants	Dicotyledonous plants

- b) Using the bean plant above, explain how its structure suits it for,

- i) Making food (02 marks)

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- ii) Reproduction (02 marks)

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- iii) Absorption of water and mineral salts from the soil (02 marks)

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- c) Plants are generally important for the survival of other organisms in the environment. Is this statement true or false? Give reasons to support your answers. (02 marks)

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