



ST. ANN VOCATIONAL SECONDARY SCHOOL BUSOWA-BUGIRI

BEGINNING OF TERM TWO EXAMINATIONS 2023

SENIOR THREE BIOLOGY

DURATION: 1HRS 30MINS

NAME: SIGNATURE:.....

INSTRUCTION:

- *This paper consists of only one section with each number carrying equal marks.*
- *The paper consists of only 8 questions and so should be marked out of 80*
- *Attempt all questions*

1. (a) At St. Ann vocational secondary school, Mr. Emmar the biology teacher gave research work to students about photosynthesis. Group A found out that the term photosynthesis originates from two Greek words photo meaning.....and synthesis meaning..... they therefore defined photosynthesis as
-Group B discussed different factors which affect that process. Assume you were part of group B Explain how those factors affect the process. (10 marks)

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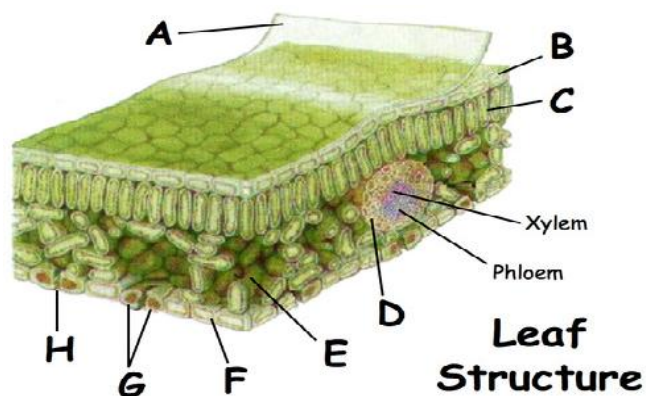
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2. A s.2 student was interested in understanding leaf anatomy. He picked a fresh leaf and cut through it to analyze its internal structure. Under the microscope, he was able to view and scan the figure below using a microscope. He didn't know the names of the parts and decided to label them as below. How would you help him do it?



- | | |
|--------------|--------------|
| (i) A..... | (v) E..... |
| (ii) B..... | (vi) G..... |
| (iii) C..... | (vii) H..... |
| (iv) D..... | |

(b) How is the figure observed under the microscope above adapts the leaf to carry out the process of photosynthesis

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3. Soil erosion is one of the great causes of strange famine in Kate village. Farmers are no longer having good yields to be used for food. Roads have developed gullies and transport of food from nearby towns is at a hold. Water runs through rills from highlands to lowlands and poor visibility due to dusty environment.



- (a) Explain 5 causes of the process that leads to all these circumstances in that village.

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(b) Explain 5 methods you can advice these people in Kata village to reduce on that process that is severely affecting their community.

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4. A biology teacher had an argument with a CRE teacher whether there are differences and similarities between the organisms shown below. Biology teacher was saying that there are both similarities and differences where as CRE teacher was saying that there exists only similarities



As a biology student give the differences you would give to support biology teacher and the similarities to support CRE teacher.

Organism	X	Y
(i)		
(ii)		
(iii)		
(iv)		

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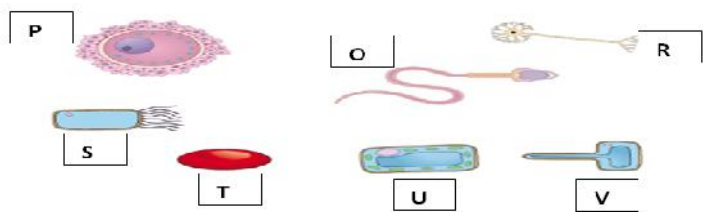
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5. (a) A block is made up of small units called bricks, in living organisms, theses smallest units are called..... These units are grouped together to form tissues which perform particular functions. Tissues are also grouped together to form..... which are also grouped together to form.....and finally an organism is formed.
- (c) Some cells in living organisms are said to be specialized. A sample of them were researched by s.1 students of St. Ann 2023 and the figure is shown below

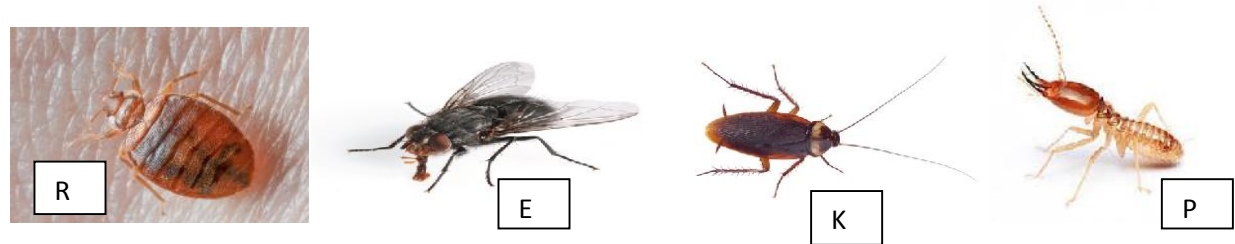


Explain the meaning of the underlined term and fill in the table below

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Cell name	Function

6. Students of S.1 were doing general cleanliness on Sunday at the school. James in his case found organism K in his bag which had books. Denis found specimen R in his bed. Behind the door of their dorm was a developing hill which was dismantled and inside it was organism P. Fahad and Adidas were cleaning the latrines and organism E was seen.



- (a) Identify the phylum to which those organisms belong. Ensure to give a reason for your answer.

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(b) Describe three characteristics common to all these organisms

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(c) Choose any of the organisms and classify it as a scientist who studied taxonomy.

(d) Design a dichotomous key of the organisms seen by those students

7. In 2020, the world faced a serious pandemic where the citizens were found ill of a strange viral disease. One patient was admitted in the hospital and analysis done on his blood sample. In the eye piece of a an electron microscope was figure T. then another patient was also admitted but his blood was viewed to have both figures T and K(bacterial infection cause)

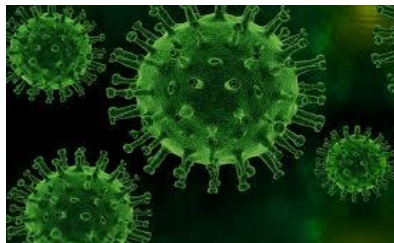


Figure T

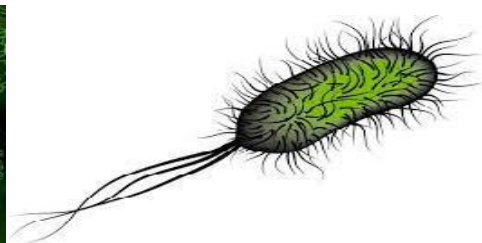


Figure K

Basing on the doctors observations under microscope, describe three characteristics of each organism he made in the microscope

- (i)
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- (ii)
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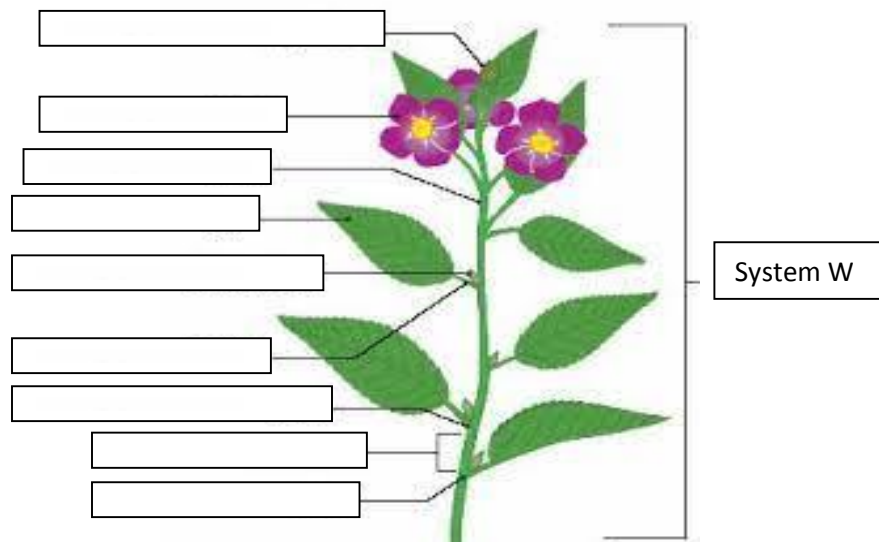
(b) Explain four ways in which the transmission of the organism observed in figure K can be prevented.

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8. The organism below is a picture taken from St. Ann vocational sec. school compound. This picture was used during a class lesson activity and students were able to name all the parts during discussion. If you were part of group A. which names would you give those parts



The organism above has two systems. System W is shown and another system is missing. What are those two systems?

- (i) System W.....
- (ii) System Missing.....

"The world cannot exist without Biology"