

NYAKATONZI SEED SECONDARY SCHOOL

END OF TERM II 2019

SENIOR ONE BIOLOGY

TIME: 2 HOURS

NAME:.....STREAM.....

INSTRUCTIONS:

- This paper consists of three sections A,B and C
- Use blue or black pen, attempt all questions in section A and B, plus any one from section

SECTION A

1. Which one of the following parts of a cell act as a fully permeable membrane?
A. cell vacuole
B. tonoplast
C. cell membrane
D. cell wall
2. Which process takes place in the chloroplast?
A. osmosis
B. excretion
C. photosynthesis
D. aerobic respiration
3. Vein, arteries and heart are components of
A. digestive system
B. circulatory system
C. respiratory system
D. nervous system
4. Which one of the following is not a class?
A. protozoa
B. insecta
C. ciliate
D. reptilia
5. Which one of the following organisms is an echinoderm?
A. beetle
B. sand dollar
C. millipede
D. spider
6. Which of the following soils is **best** for growing crops?
A. Silt
B. Clay
C. Sand
D. Loam
7. The efficiency of a housefly to transmit diseases is attributed by
A. feeding in dirty places
B. being a liquid feeder
C. flight
D. hairy body
8. Which of the following plants is agymnosperm?
A. mosses
B. fern
C. horse tail
D. conifer
9. Spirogyra belong to kingdom
A. plantae
B. monera

- C. protista
D. animals
10. Which kind of skin do amphibians have?
A. dry with scales
B. moist with out scales
C. dry without scale
D. moist with scale
11. Which of the following features is limited to dicotyledonous plants only?
i. leaves with sheath
ii. a tap root system
iii. embryo with one seed leaf
iv. leaves with network venation
A. (i) and (iv)
B. (i),(ii) and (iii)
C. (iv) only
D. (i) and (iii)
12. The main function of mechanical tissue in plants is;
A. provides strength in plants
B. store food and water
C. transport water and mineral salts
D. carries out photosynthesis
13. Fibrous root system is found in;
A. dicotyledonous plants
B. monocotyledonous plants
C. trees
D. strubs
14. Which one of the following organisms improves on aeration and drainage of soil?
A. snails
B. bacteria
C. termites
D. fungi
15. A sample of soil was poured into a measuring cylinder containing water and the mixture stirred. The readings taken were as follows
Volume of water in the measuring cylinder = 21.5cm³
Volume of water + Soil = 26cm³
Volume of water + soil after stirring = 25cm³
What was the percentage of air in the soil sample?
A. 1
B. 3.5
C. 22.2
D. 4.5
16. To which of the following groups of plants do a coffee plant belong?
A. conifers
B. pteridophytes
C. angiosperms
D. bryophytes
17. Which one of the following is a modified tap root?
A. Irish potato
B. carrot
C. onion bulb
D. cassava tuber
18. Which one of the following phyla consists of human parasites?
A. nematode
B. mollusca

- C. echinodermata
D. coelenterate
19. Which one of the following is not used for gaseous in a frog?
A. lungs
B. nostrils
C. skin
D. mouth
20. The mammals are distinguished from the reptiles by possession of
A. two pairs of limbs
B. tails
C. mammary glands
D. scales

SECTION B (30 MARKS)

21. . To 100cm³ of soil samples A, B and C in large measuring cylinders, 100cm³ of water was added. After stirring, the mixture was left to settle for 10minutes. The volume of the contents of the measuring cylinders was taken and recorded as shown in the table below.

Soil sample	Volume / cm ³
A	175.0
B	185.0
C	150.0

(a) What was the purpose of?

(i) Stirring (01 mark)

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(ii) Leaving the mixture to settle for 10 minutes after stirring. (01 mark)

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(b) (i) Calculate the volume of air in each soil sample A, B and C. (06 marks)

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(ii) Calculate the percentage of air in soil sample C. (03 marks)

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(c) Which soil sample is likely to be?

(i) Clay..... (01 mark)

(ii) Sandy..... (01 mark)

(d) With reasons in each case, which soil sample is likely to have?

(i) Medium sized particles (02 marks)

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(ii) Low capillarity (02 marks)

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(e) (i) Which of soil samples is good for agriculture in dry areas? (01 mark)

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(ii) Give a reason for your answer in (e) (i) above (02 marks)

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22(a). What is a flowering plant? (1mks)

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b). Classify simply the flowering plant under the following taxa. (4mks)

Kingdom:

Super division:

Division:

Class:

c). Identify two systems that make up a flowering plant. (1mks)

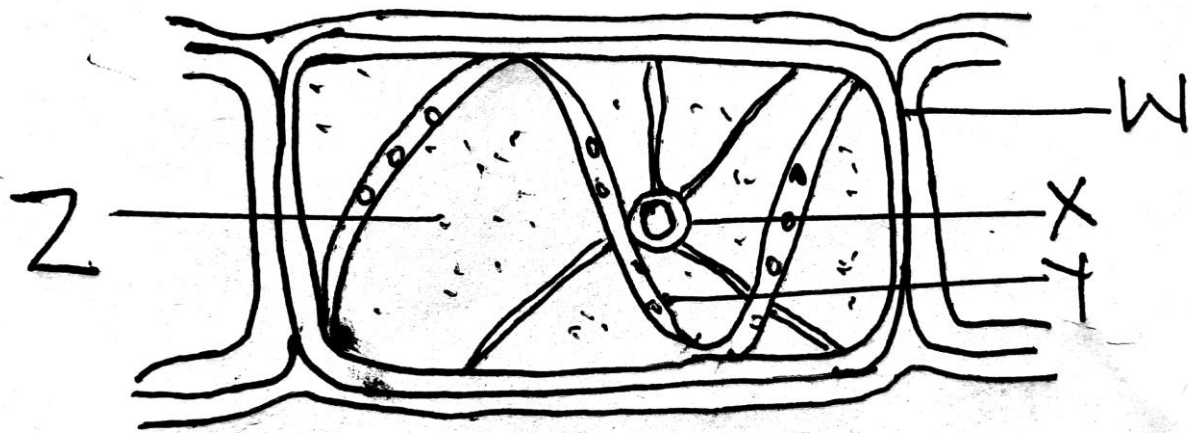
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d). Giving two examples in each case, Define the following terms. (4mks)

i). monocotyledonous plants.

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ii). Dicotyledonous plant
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23. The drawing below is that of spirogyra, study it carefully and answer the questions that follow.



a). Name the parts labeled on the drawing below. (4mks)

W.....
X.....
Y.....
Z.....

b). State one function of each of the parts you have named above. (4marks)

W.....
X.....
Y.....
Z.....

c). Name the habitat and mode of feeding of spirogyra. (2mks)

Habitat.....
Feeding.....

SECTION C (15 MARKS)

Answer only one question in this section

24(a). State any three differences between a toad and a frog. (6mks)

b). Identify the habitat of fish and state how they are adapted to live that habitat. (9mks)

25(a). State four economic importance of insects. (4mks)

b). Outline six characteristic features of a n adult housefly. (6mks)

c). How would you minimize disease spread by houseflies. (5mks)

END

BY NATUGONZA WISELY KYABOONA.