

NAME.....ADM.....

STREAM.....

## MARANDA HIGH SCHOOL

FORM TWO BIOLOGY  
CYCLE 2 EXAM -2018  
TIME: 2 HRS

### INSTRUCTION TO CANDIDATES

- Write your name, admission and class in spaces provided above
- Answer all the questions in the spaces provided.
- Additional pages **MUST** not be provided.

### FOR EXAMINERS USE ONLY

| QUESTION | MAXIMUM SCORE | CANDIDATES SCORE |
|----------|---------------|------------------|
| 1-29     | 80            |                  |

1. State three roles of active transport in animals. (3mks)

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2. Give a reason why blood does not clot in an unwounded blood vessel (1mk)

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3. Name two structures for gaseous exchange in aquatic plants (2mks)

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4. A leaf of a potted plant which has been kept in the dark for 24 hrs was smeared with white petroleum jelly on its lower surface and exposed to sunlight for 6 hrs. Starch test on the leaf was negative. Account for the observation. (2mks)

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5. Name the tissue in plants responsible for

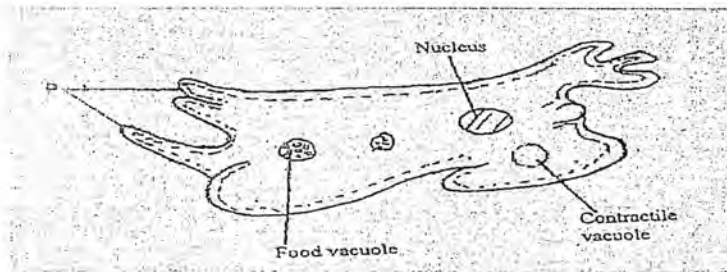
a) Transport of water and mineral salts.

(1mk)

b) transport of carbohydrates

(1mk)

6. A student observed the following organism using a light microscope



a) To which kingdom does the organism belong?

(1mk)

b) State the function of part labeled P.

(1mk)

c) Give one role of contractile vacuule.

(1mk)

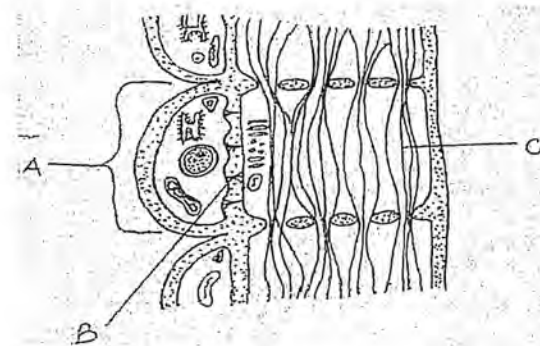
7. Explain why pepsin in the stomach is secreted in inactive form

(1mk)

8. State how the presence of inhibitors affects enzyme activity.

(1mk)

9. Study the diagram below and answer the questions that follow



a) Name the parts labeled A, B and C.

(3mks)

A.....

B.....

C.....

b) What is the function of part A.

..... (1mk)

10.State two advantages of double circulation of blood in organisms (2mks)

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11.A patient died of a circulatory disease ,postmortem checks revealed a severe

clot in the vessels supplying blood to the heart tissues

a) What was the likely disease that he was suffering from? (1mk)

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b) State three likely causes of the disease. (3mks)

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12.a) An accident victim of blood group A requires blood transfusion for survival.

a) suggest blood groups of the possible donors (2mks)

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b) What causes Hemolytic disease of the newborn (2mks)

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c) state one remedy for the above disease (1mk)

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13.Below is the dental formula of a mammal

$i \ 0/4, c \ 0/0, pm \ 3/3, m \ 2/3$

a) What is the total number of teeth (1mk)

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b) What is the type of dentition of the animal (1mk)

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c) Give a reason for your answer. (1 mk)

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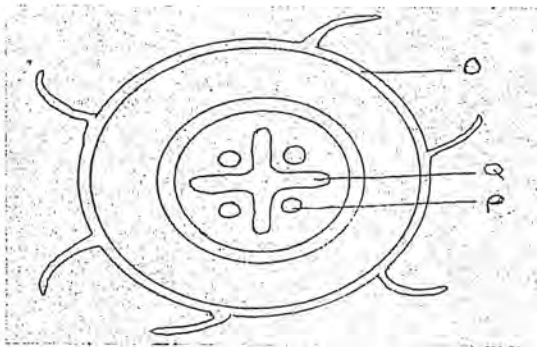
14.State two roles of mucus in the stomach. (2mks)

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15. The diagram below represents a transverse section of a plant organ



a) From which plant organ was the section obtained.

(1mk)

b) Give two reasons for your answer in a) above

(2mks)

16. Name the parts labeled O, P and Q.

(3mks)

O.....

P.....

Q.....

17. Calculate the magnification power of the objective lens of a microscope if the magnification obtained was X200 while the eye piece lens used had a magnification of X10.

(2mks)

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18. State three structural characteristics of arteries

(3mks)

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19. How do people living in areas of high altitude respond to low oxygen concentration.

(1mk)

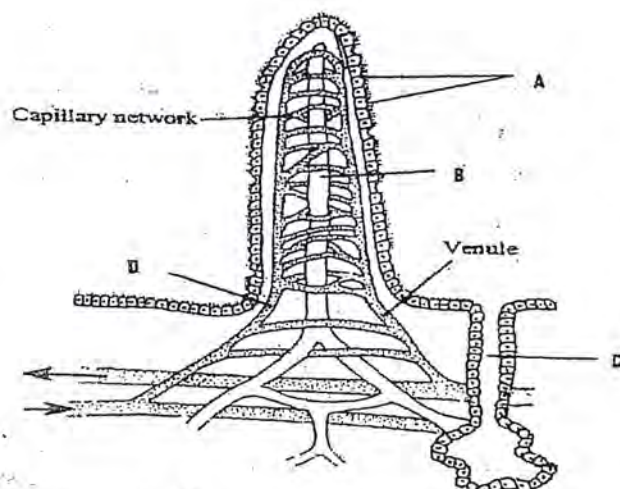
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20. State three tissues found within the cortex of the stem of plants

(3mks)

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21. The diagram below represents a section of inner lining of the ileum



a) Identify the structure

(1mk)

b) State three adaptations of the structure to its function.

(3mks)

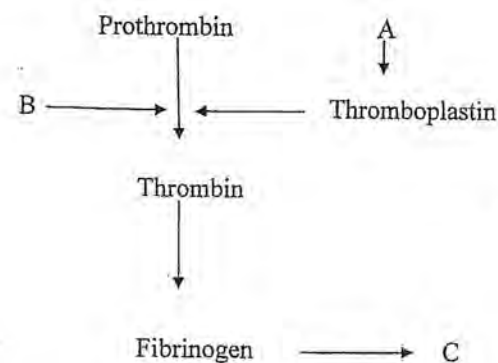
c) Name the excretory product produced in the liver and used in the intestine

(1mk)

d) State two functions of the product named in (a) above

(2mks)

22. The scheme below illustrates the blood clotting process. Use the chart below to answer the questions that follow



a) Name the blood cell represented by A

(1 mk)

b) Metal ion represented by B

(1mk)

c) End product represented by C (1mk)

d) State two importance of blood clotting (2mks)

23. Name two forms in which carbon (IV) Oxide is transported in blood (2 mks)

24. State three factors that increase the rate of photosynthesis. (3 mks)

25. Explain three adaptations of the red blood cells to their function (3mks)

26. State two importance of gaseous exchange to living organisms (2 mks)

27. Mention three characteristics of respiratory surfaces (3mks)

28. State three ways in which antibodies produced by lymphocytes protect the body from infections (3 mks)

29. State two functions of Golgi bodies. (2mks)