Name…… **Index No. …….**

School ……...

231/1
BIOLOGY
PAPER 1
THEORY
JULY / AUGUST 2007
TIME : 1 ½ Hours

NAROK DISTRICT MOCK EXAMINATION – 2007

Kenya Certificate Of Secondary Education (KCSE)

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BIOLOGY
PAPER 1
THEORY
JULY / AUGUST 2007
TIME : 1 ½ Hours

INSTRUCTIONS TO CANDIDATES

- Answer ALL questions in the paper in the spaces provided

For Examiner's Use Only

Question	Maximum Score	Candidate's Score
1 – 32	80	

This paper consists of 8 printed pages.
Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing

1. How are the anthers of insect pollinated flowers suited to their function. (2mks)

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2. State two effects of adrenaline hormone in a human body. (2mks)

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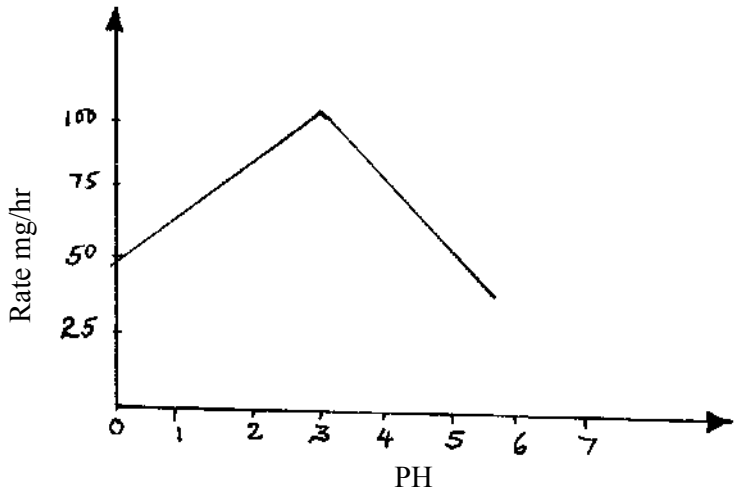
3. The graph below show the effect of pH on the rate of activity of a digestive enzyme found in human.



a) What is the optimum pH for the enzyme? (1mk)

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b) Name the part of the alimentary canal the enzyme would be active. (1mk)

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c) Suggest the name of the enzyme. (1mk)

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4. A student caught an animal with the following characteristics. Two body parts simple eyes four parts of legs.

a) To which class does the animal belong. (1mk)

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b) Name the type of skeleton found in the animal. (1mk)

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5. Name two mechanical support tissues in higher plants. (2mks)

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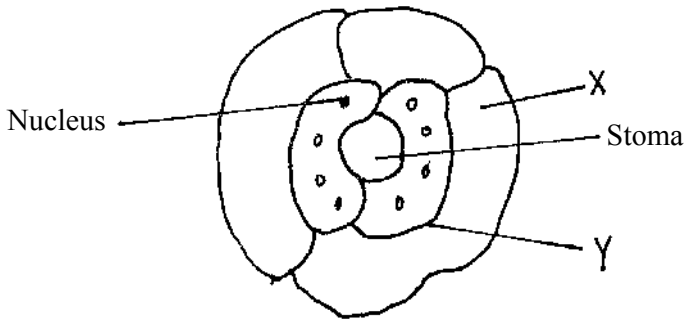
6. The diagram below represents a part of the lower epidermis of a leaf



a) Name the cells labelled X and Y. (2mks)

X ……

Y ……..

b) State the function of the cell labelled Y. (1mk)

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7. State two kinds of materials that would be used in cleaning dirty lenses in the care of microscope. (2mks)

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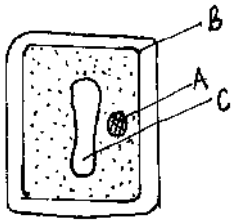
8. The diagram below shows the generalised structure of a cell. Study it and answer the questions that follow.



(i) Identify the parts labelled B and C above. (2mks)

B ……

C ……....

(ii) State one role of the part labelled A (1mk)

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9. State two properties of a cell membrane. (2mks)

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10. Mention three animal structures which are used as surfaces of gaseous exchange. (3mks)

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11. State the differences between open and closed circulatory systems. (2mks)

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12. Name the method of feeding shown by Amoeba. (1mk)

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13. In four O'clock flower a pure breed red flowered plant was crossed with a pure breed white flowered plant. All the F_1 plants had pink flowers.

Show how the pink flowered plants were obtained. (Use punnet square) (3mks)

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14. (i) Define the term "eye accommodation". (1mk)

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(ii) State adaptations of the following parts of the mammalian eye. (2mks)

(a) Iris ……..

(b) lens ……

15. Name three applications of genetics. (3mks)

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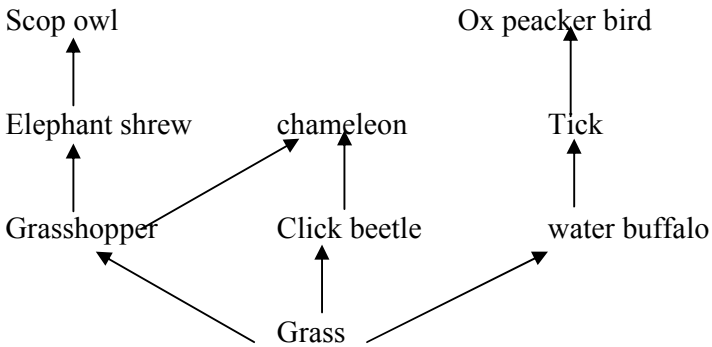
16. The figure shows a food web which includes some organisms in the African grasslands.



a) Draw a food chain consisting of four organisms. The organisms must be part of the food web. (1mk)

b) Using examples from the food web explain the difference between producers and consumer. (2mks)

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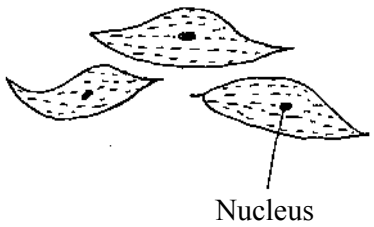
17. The figure below represent type of muscles.



a) Identify the type of muscle. (1mk)

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b) Name two parts of the human body where this type of muscle can be found. (2mks)

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18. State two ways in which plants compensate for lack of movement. (2mks)

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19. Give two advantages of natural selection. (2mks)

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20. (i) Name the gland that secretes juvenile hormone. (1mk)

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(ii) Name two characteristics of Meristems. (2mks)

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21. Give two reasons why the bark is important in plant. (2mks)

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22. (i) Other than corpus luteum, name another site for the secretion of hormone progesterone. (1mk)

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(ii) Name the two components of the pollen tube. (2mks)

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23. Describe how you can use the belt transect to estimate the size of a plant population. (3mks)

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24. (i) Identify the process through which intercellular fluid is formed in the body. (1mk)

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(ii) Name the end products of the following processes in the liver (2mks)

a) Deamination

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b) Destruction of worn out red blood cells.

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25. (i) Explain how vasodilation increases heat loss through the skin. (2mks)

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26. Give two effects of lactic acid accumulation in the muscles. (3mks)

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27. Give two reasons why diffusion alone is able to meet the gaseous requirements of protozoans. (2mks)

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28. State the role of carbon (IV) oxide in the blood. (3mks)

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29. A certain food is suspected to have proteins. What chemical would you use to confirm the presence of proteins. (1mk)

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(ii) Describe the procedure you would use to give the expected results. (2mks)

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30. Define the following terms. (2mks)

(i) a synapse.

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(ii) Synapsis

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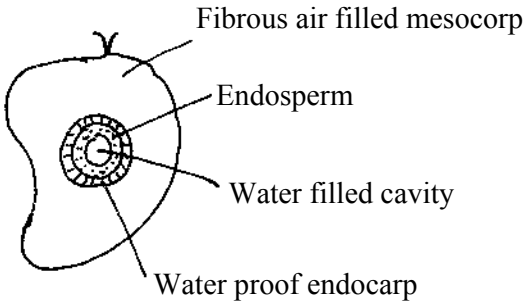
31. The diagram below represent a vertical section of a fruit.



a) Suggest the possible agent of dispersal of the above fruit. (1mk)

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b) Give features that adapt it to the agent of dispersal named in (a) above. (2mks)

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32. State two reasons why scientific names of organism are preferred to common names. (2mks)

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