

Name:.....Index Number...../.....

231/3
BIOLOGY
Paper 3
(PRACTICAL)
July/ August 2014
2 hours

Candidate's Signature

Date.....

THE LAMU COUNTY MOCK EXAMINATIONS 2014

Kenya Certificate of Secondary Education

BIOLOGY PRACTICAL

Paper 3

2 hours

Instructions to Candidates

- a). Answer **ALL** questions in the spaces provided
- b). Use the first 15 minutes of the time allowed to read the question paper and make sure you have all the chemical and apparatus.
- c). Be neat. Remember that marks are given for a clear record of observations actually made, for their suitability and accuracy, and for the use made of them.
- d). Candidates may be penalized for recording irrelevant information and wrong spelling of technical terms.
- e). To obtain an overall grade B and above in Chemistry candidates must perform exceptionally well in this practical paper.
- f). *This paper consists of 7 printed pages.*
- g). *Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing*

For Examiners use

QUESTION	MAX SCORE	CAND SCORE
1	10	
2	15	
3	16	
TOTAL		

1. You are provided with a solution labeled K. starch solution and sodium chloride in two different concentrations 0.1% and 1.4%.

Place 3ml of starch solution in test tube labeled 1, 2 and 3. Add 3drops of 0.1% sodium chloride to the test tube labeled 2 and 3 drops of 1.4% sodium chloride to the test tube labeled 3.

Add 3ml of solution L to each of the test tubes labeled 2 and 3.

- a) Place a drop of the contents from each test tube 1, 2 and 3 on a white tile. To each drop, add iodine solution and record your observations. After this place the test tubes in a water bath maintained at 37°C. Allow to stand for 30 minutes. Then place a drop of the contents from each test tube on a white tile. To each drop, add iodine solution. Record your observations in the table below. (6 marks)

Test tube	Observation at start of expt.	Observation at end of expt.
1		
2		
3		

- b) Add equal amounts of Benedict's solution to the test tubes labelled 1, 2 and 3. Heat to boil and record your observations in the table below. (3 marks)

Test tube	Observations
1	
2	
3	

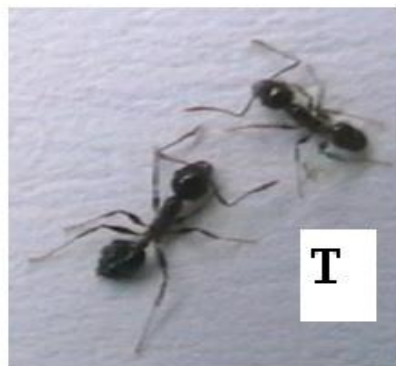
- c) Why was the water bath in a) above maintained at 37°C? (1 mark)

d) Why was the test tube labeled 1 included in the experiment? (1 mark)

e) What is the identity of L? (1 mark)

f) Account for the results in test tubes 1, 2 and 3 at the end of the experiment. (3 marks)

2. Below are photographs of animals labeled R and T. Study them carefully and answer the questions that follow.



a). i) Label the three major body parts on photograph R. (3 marks)

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ii) Name the phylum to which the animal in photograph R belongs. (1 mark)

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iii). List **three** characteristics found in members belonging to the phylum of specimen R only. (3 marks)

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iv). Which class does the animal in photograph R belong. (1mark)

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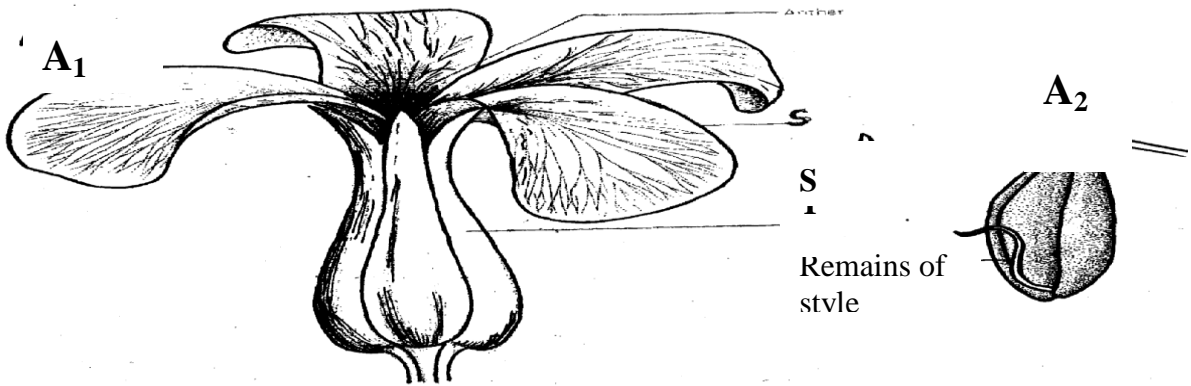
b). Using observable features only, state three differences between animals in photograph R and T (3marks)

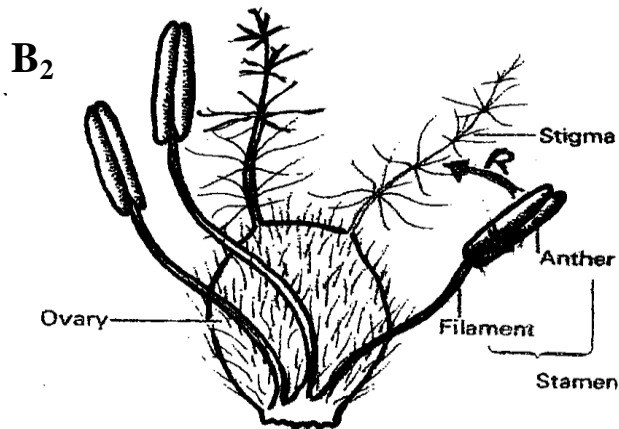
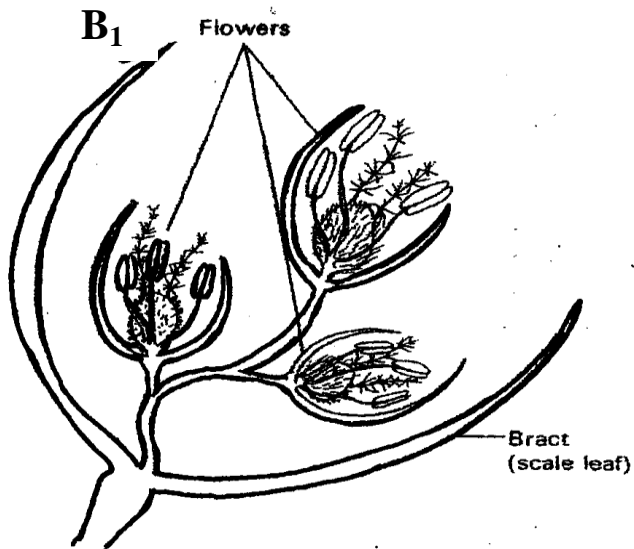
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c). On the photograph T name the parts labeled 2 and 3. (2 marks)

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3. Study the photographs below and use them to answer the questions that follow;





- a) Using the number of flowers arising from the shoot of each plant, state the flowers labelled **A₁** and **B₁** (2 marks)

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- b) Name the class of the plant from which each of the flowers was obtained. Give a reason for your answer in each case (4 marks)

Flower	Class	Reason
A1		
B1		

c) Name the parts labelled **S** and **T** (2 marks)

S.....

T

d) What type of ovary is shown in flower **B₁**? Give a reason for your answer. (2 marks)

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e) i) Name the agent responsible for the process represented by the arrow labelled **R** in **B₂** (1 mark)

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ii) Give a reason for your answer in **e (i)** above (1 mark)

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iii) List **two** other features (not shown in the photograph) expected of such flowers as **B₁** (2 marks)

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f) (i) Name an agent that brings about a similar process as the one shown by the arrow in **B₂** for **A₁** (1 mark)

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ii) Give a reason for your answer in **f(i)** above (1 mark)

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g) What is the likely agent of dispersal of the specimen labelled **B₂**? (1 mark)

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This is the last printed page

ANSWERS:

Order a copy of answers from www.schoolsnetkenya.com/order-e-copy

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