

NAME.....

INDEX NO.....

SCHOOL.....

SIGNATURE.....DATE.....

231/3

BIOLOGY

PAPER 3

JULY/AUGUST 2016

TIME 2HOURS.

BUSIA SUB-COUNTY FORM FOUR JOINT EXAMINATION 2016

Kenya certificate of secondary school

BIOLOGY

PAPER 3

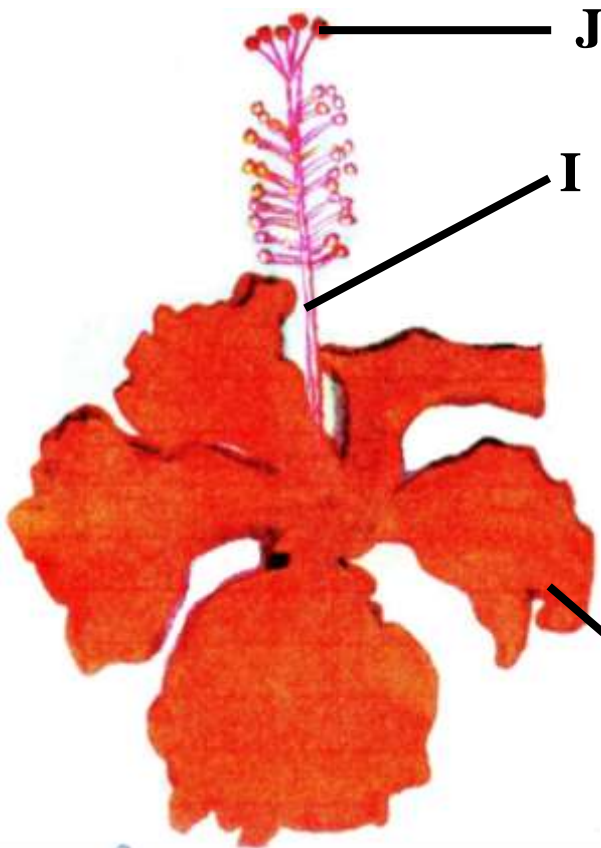
JULY/AUGUST 2016

TIME 2HOURS.

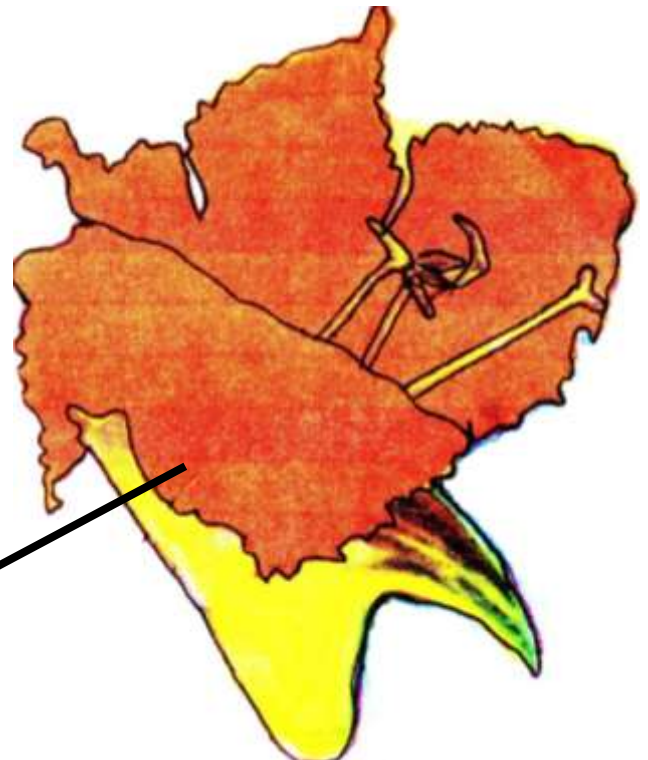
Instructions to candidate

- a. Write your name, school, index number in the space provided at the top of the paper.
- b. Sign and write the date of examination in the space provided above.
- c. Answer **ALL** the questions in the space provided.

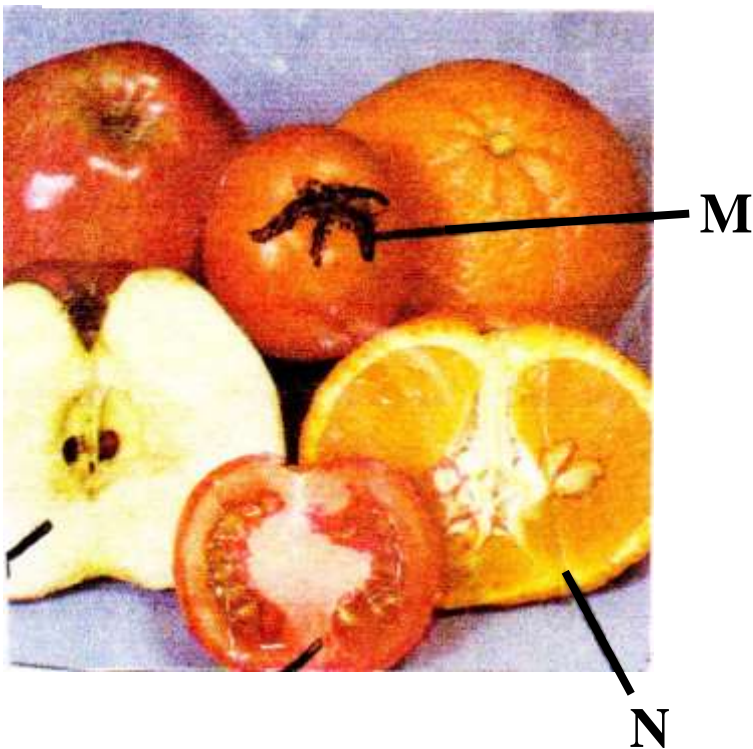
1) Below are photographs of specimen obtained from plants. Examine them and answer the questions that follow.



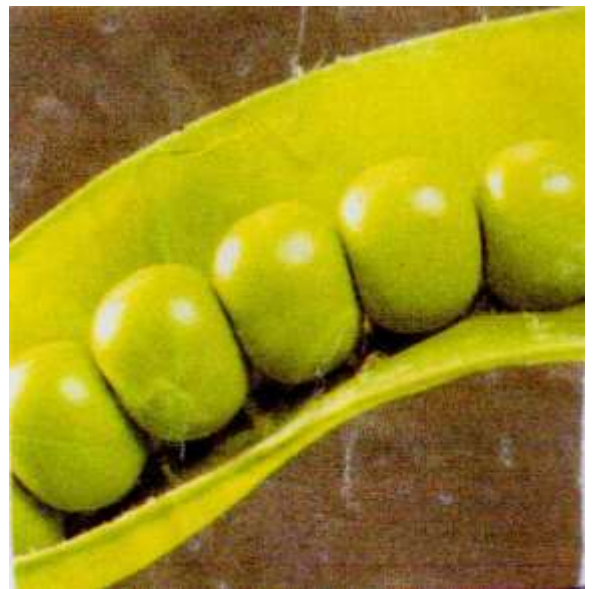
SPECIMEN K



SPECIMEN L



SPECIMEN P



a) Name the part labelled Q on specimen K and L. (1 mk)

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.....

b) State one difference between the part labeled Q in specimen K and the same part in Specimen L. (1 mk)

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c) Describe Specimen labeled N (4 mks)

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d) Name the class to which Specimen L belongs. (1 mk)

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e) Give a reason [for your answer in (d) above. (1 mk)

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f) What is the function of the part labelled J on Specimen K? (1 mk)

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g) Briefly explain what happens between part labelled J to part labelled I in the reproductive cycle of a flowering plant. (5 mks)

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2) You are provided with liquid oil, liquids labelled Q1 and Q2, iodine solution label two test tubes A and B. place 2 cm³ of water in both A and B.

Then add 3 drops of oil in each test tube.

a) To test tube A, add 3 drops of solution Q1.

Shake both test tubes and allow to stand for 15 minutes.

Record your observation.

i) Test Tube A (1 mk)
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ii) Test Tube B (1 mk)
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iii) Name the process that has taken place in test tube A. (1 mk)
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iv) State the significance of the process named in a (iii) above. (1 mk)
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v) Why was test tube B include in the experiment? (1 mk)
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vi) Name the digestive juice in humans that has the same effect on oil as liquid Q1. (1 mk)
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b) Label two test tubes C and D.

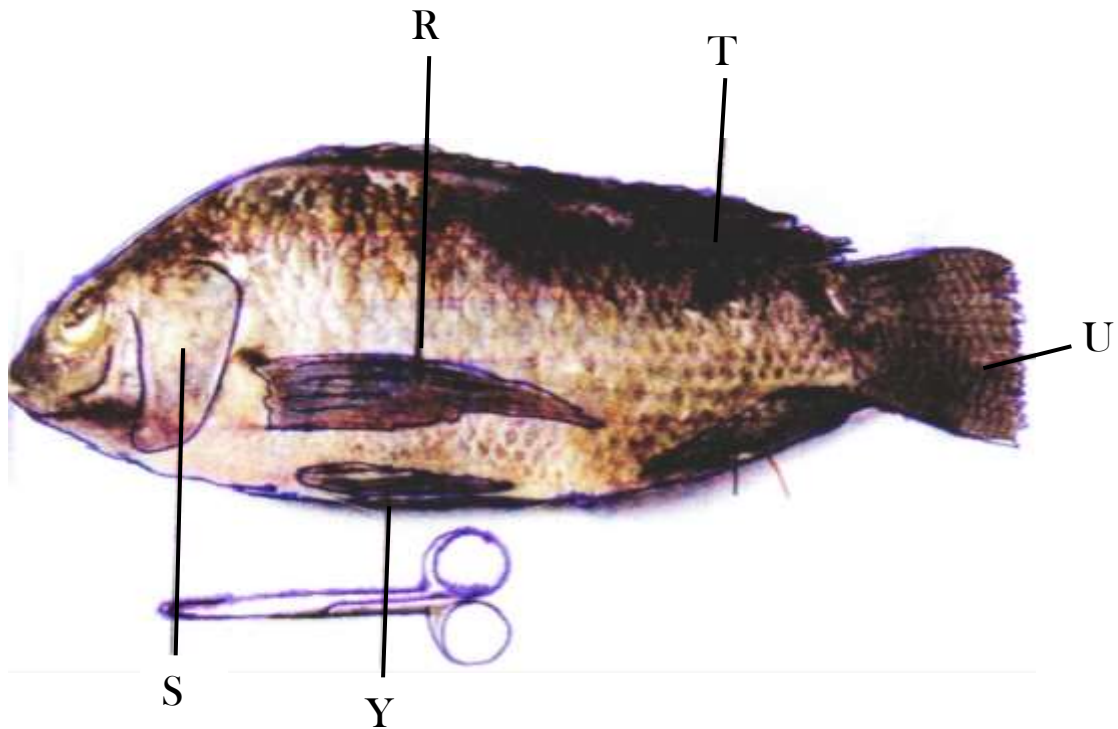
- To each test tube, put 2 cm³ of starch solution.

i) To test tube C add 3 drops of iodine solution and observe. Record your observation. (1 mk)
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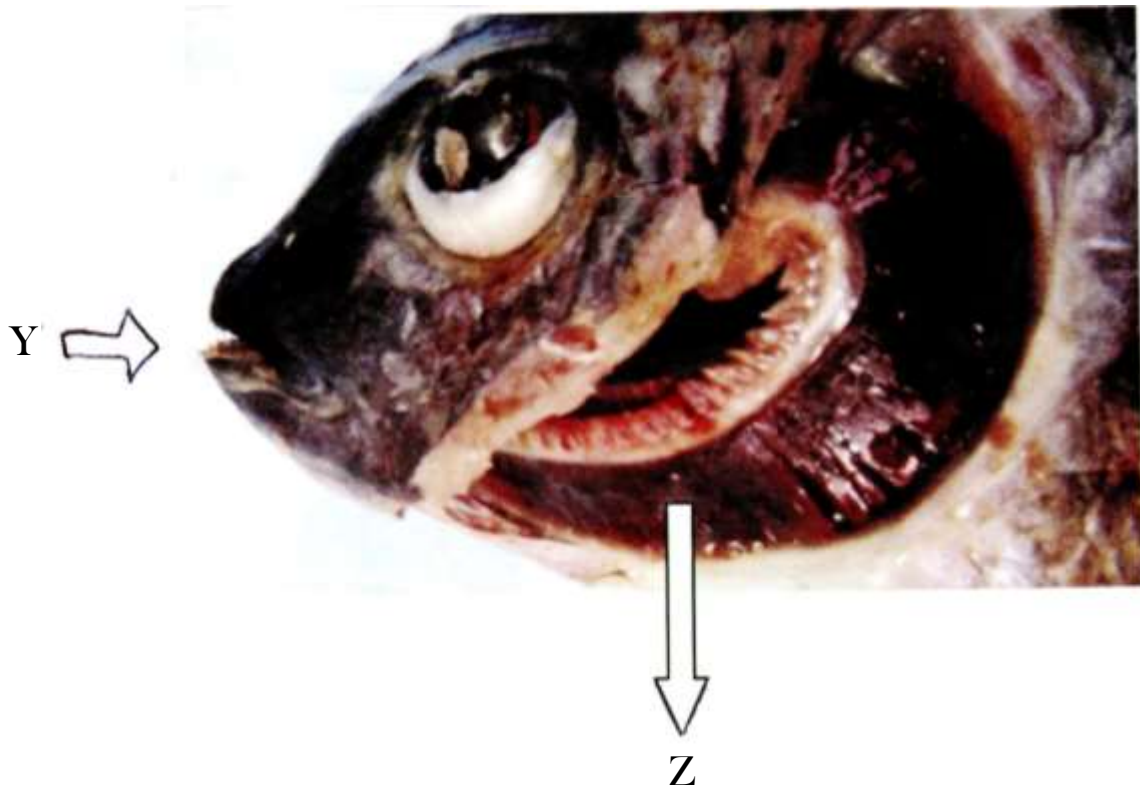
ii) To test tube D, add 2cm³ of solution Q₂ and leave the set up for 10 minutes. Then add 3 drops of iodine solution and record your observations. (1 mk)
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iii) Accounting for the observe in b (ii) above. (3 mks)
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3) Below is a photograph of a fish. Examine it and answer the questions that follow.



The photograph below shows structure on the fish above after removing the part labelled S.



a) Name the parts labelled R and T. (2 mks)

R

T

b) The actual length of the pair of scissors next to the fish is 12.5 cm. using this information calculate the actual length of the fish. (4 mks)

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c) What is the function of the parts labled U and V. (2 mks)

Function of U

Function of V

d) Explain the events which lead to water moving from point labelled Y to point labelled Z. (5 mks)

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e) Label the respiratory surface on the second photograph of the structures of a fish above. (1 mk)

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