

Candidate's Name:

Signature:

Random No.					Personal No.		

(Do not write your School/ Centre Name or Number anywhere on this booklet.)

553/3
BIOLOGY
Paper 3
(Practical)
Oct./Nov. 2024
2½ hours



UGANDA NATIONAL EXAMINATIONS BOARD

Uganda Certificate of Education

BIOLOGY

Paper 3
(Practical)

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

This paper consists of two examination items. Answer all the examination items in the spaces provided.

Drawings should be made in the spaces provided. Use sharp pencils for your drawings. Coloured pencils or crayons should not be used.

No additional sheets of writing paper are to be inserted in the booklet.

Work on additional sheets of paper will not be scored.

Item 1

Hamza is a better swimmer than Fred. In preparation for a swimming competition that would take place in three months' time, Fred visited a nutritionist to find out a suitable diet to feed on and Hamza continued with his usual diet. Both of them continued with normal training. During the competition, Fred emerged the winner. Hamza was disappointed and wondered why he did not win.

Solution **R** is a sample from the nutritionist's recommended diet for Fred.

Solution S is a sample of the usual diet of Hamza.

Task:

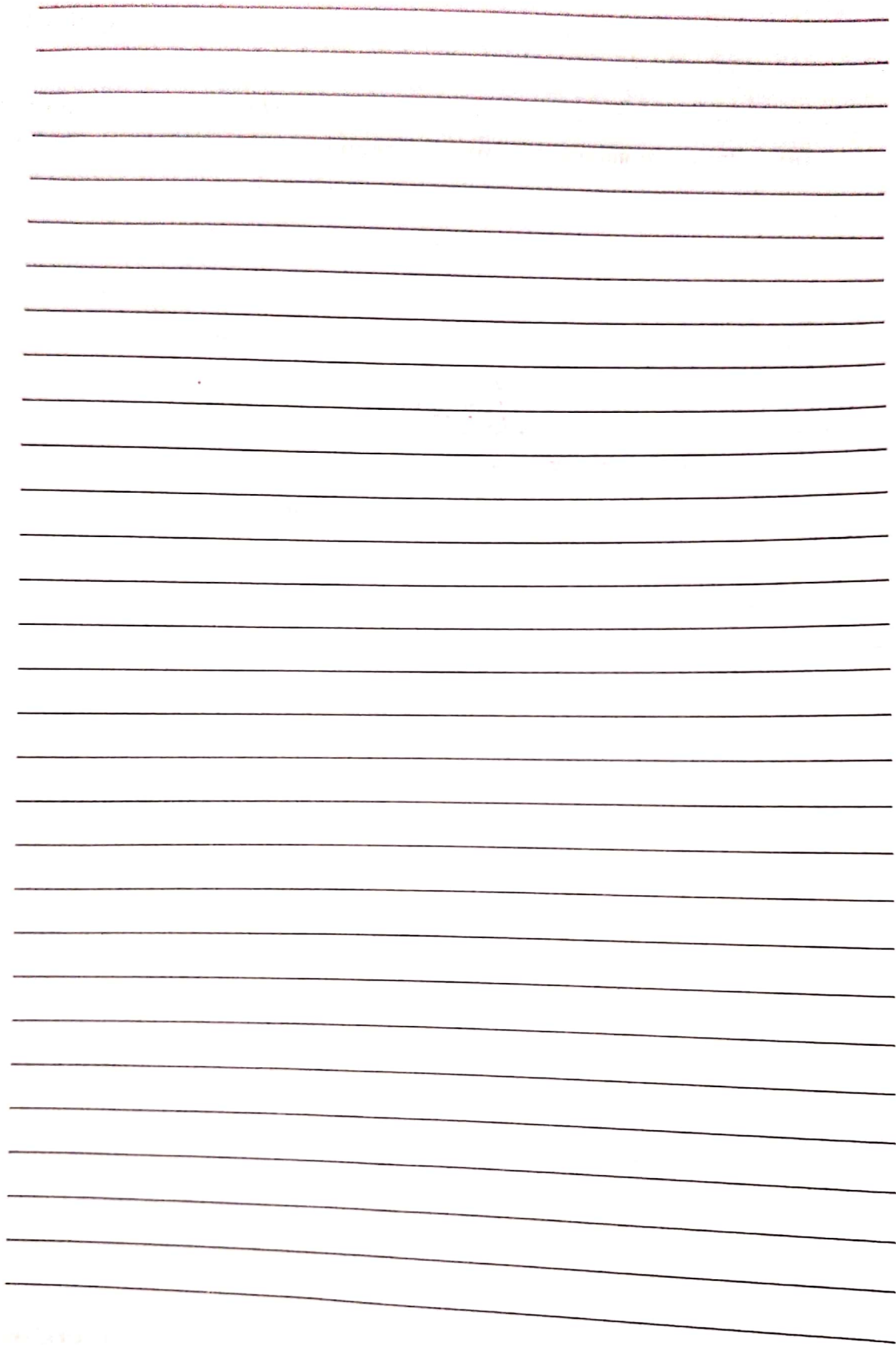
Design and carry out an investigation on solutions **R** and **S**. Use your results to explain to Hamza why he did not win.

Your design and investigation should include the following:

- (a) (i) Aim, hypothesis, variables and apparatus/requirements.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

(ii) Procedure and results of your experiment.



(b) Using your results, explain to Hamza why he did not win.

Item 2

Jane and Shakirah are farmers whose gardens are located 100 metres apart. Immediately after weeding her overgrown bushy banana plantation, Jane went to help Shakirah plant maize in her garden. At harvest time, Shakirah observed other mature plants in her garden some of which she had seen in Jane's banana plantation. Shakirah wondered how the other plants reached her garden.

Specimens W, X and Y are plant parts collected from the mature plants in Shakirah's garden.

Task:

- (a) (i) Using observable features, identify specimens W, X and Y.

- (ii) State the specimen(s) most likely to have been brought to Shakirah's maize garden unintentionally. Give reason(s) for your answer(s).

Ten horizontal wavy lines, slightly curved upwards in the middle, providing a space for drawing a specimen.

(b) Draw and label specimen X.



UGANDA NATIONAL EXAMINATIONS BOARD
UGANDA CERTIFICATE OF EDUCATION
OCTOBER – NOVEMBER, 2024

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Candidate's Name:

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Subject: Paper Code/.....

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FOR SCORERS' USE ONLY

Item _____

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