

Name.....Centre/Index No.....

Signature

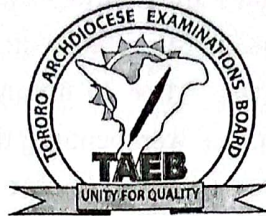
553/2

BIOLOGY

Paper 2

July/August 2024

2 Hours



TORORO ARCHDIOCESE EXAMINATION BOARD

Uganda Certificate of Education

MOCK EXAMINATIONS 2024

BIOLOGY PRACTICAL

PAPER 2

2 Hours

INSTRUCTIONS TO CANDIDATES

*This paper consists of **two** examination items.*

*Answer **all** the 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 will **not** be scored.*

Turn Over

Item 1.

Alicia is a vegetable vendor in Tororo market. She sells green leafy vegetables and has many customers since her vegetables are always fresh because she keeps them dipped in water. However, one day she dipped her vegetables in two separate water samples A and B collected from two different sources. After 30 minutes, she observed that the leaves of vegetables in one of the water samples were bending downwards and rolled while the ones in the other sample the leaves were upward and not rolled. This affected her sales that day since most customers did not buy the vegetables with rolled and bent leaves considering them not fresh.

You are provided with plant organ **X** whose tissues are similar to those of the vegetables, and water samples **A** and **B** that Alicia used.

Task.

Carryout a scientific investigation to determine the effect of water samples A and B on the tissue of plant organ X, and use your results to advise Alicia.

This image shows a single sheet of white paper with horizontal blue or grey 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.

Item 2

In a certain village, residents dump animal wastes in gardens near their homes to improve the fertility in order for them to grow vegetables like tomatoes and egg plants. However, an outbreak of cholera has been reported in the same village. The residents suspect that a certain organism is responsible for the outbreak because it is very common in and around most homes. They decided to spray and kill the organism as one of the solutions to end the outbreak.

You are provided with specimen **M** which is the organism common in and around most homes.

(a) Classify the specimen into its phylum and class using suitable features.

(b) Explain how the structural adaptations of the specimen makes it responsible for the outbreak.

(c) Draw and label one leg of specimen M.



2024
mod Biology 552/2 New Curriculum
(7/04/2024) Wednesday Morning

20cm³ of distilled water labelled A
20cm³ of 20% NaCl sodium chloride labelled B
prepared by dissolving 20g of table salt in distilled water to make 100cm³ of soln.

Fresh medium sized Irish potato labelled X
Fresh killed housefly labelled Specimen - M
Access to:

Reagents for food test

Heat source

Hand lens

2 measuring cylinder of either 10ml/25/50ml

5 test tubes

test tube holder

test tube rack

dropper

cocker

A knife/razor

petridishes

labels

Stop clock