

Name:.....

Centre/ Index No.....

School.....

Signature:.....

553/3
BIOLOGY
PAPER 3
July/August 2024
2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

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 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.*

Item 1.

In many countries, kidney diseases are among the most common causes of deaths of people. Some of these diseases can be detected by simple urine tests. Some of the symptoms of kidney diseases include finding substances like proteins and glucose in urine samples collected from individual suspects.

You are provided with solutions **A₁** and **B₁** with corresponding chemical composition of urine samples collected from two individuals **A** and **B** but with different health conditions.

Task:

Carry out investigations on the solutions **A₁** and **B₁** and use your findings to advise the individual with kidney problems.

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.

Lined area for writing answers.

Lined paper for writing.

Item 2.

Many people grow some crops near their homes. However, due to ignorance, their children remove some of the plant parts resulting into poor yields. You are provided with a picture showing the children removing the plant parts. Study the picture and answer the questions that follow.

You are provided with specimens **P, Q, R** and **S** which are the parts found with the children.

Task

- (a) Using external observable features, how are the children's actions likely to affect the plant growth and species survival?

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.

- (b) How can the specimens provided be identified using a dichotomous key.

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.

- (c) Cut open specimen P longitudinally, draw and label one part of the specimen.

END