

Student's Name.....
Signature.....Index Number.....

553/2
BIOLOGY
(PRACTICAL)

Paper 2

July/Aug. 2024.

2½ hours

BUIKWE DISTRICT JOINT MOCK EXAMINATIONS BOARD (BUSSHA)
MOCK EXAMINATIONS 2024

Uganda Certificate of Education

553/2
BIOLOGY
PRACTICAL

Paper 2

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

This paper consists of two 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 this booklet.

Work on additional sheets will not be scored.

For Examiner's Use Only		
Item	SCORES	Examiner's Signature and No.
1		
2		
Total		

Item 1.

Organisms need different materials for their metabolism. Such materials are acquired from the environment and moved by different mechanisms until they reach the different cells within their bodies. The mechanism and speed of transport of the materials in an organism may depend on its size and so the distance to be moved by the materials.

In an attempt to understand clearly this concept, Opio asked the teacher to clarify; *“Of the large and small organisms, which group shows a higher speed of movement of materials and why? How could the other group of organisms overcome such challenges?”*

The teacher responded by providing Opio with specimen K.

Task:

Design and carry out a scientific investigation on specimen K and use your findings to answer Opio's queries.

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.

[illegible]

[illegible]

[illegible]

An agriculturalist from the ministry of Agriculture, Animal industry and fisheries (MAAIF) visited residents of Akollo village as the chief guest when giving out the Parish Development Model funds. He encouraged the citizens to have specimens P, Q, and R due to their nutritional and monetary value. Citizens wondered how they could multiply the specimens for every citizen to have enough seeds for commercial farming.

Task:

(a) (i) Cut the specimens so as to expose the seed attachment to the placentae. Describe the identity of each specimen.

[illegible]

(ii) How do the features on each of the specimens enable them to be spread from one area to another?

(iii) How would you compare specimens P and Q

