

Names:.....**Index. No:**.....

School Exam Number.....**Signature:**.....

*Candidates should **NOT** write their Centre Name
or Centre Number anywhere on this booklet*

553/2
BIOLOGY
(PRACTICAL)
Paper 2
August 2024
2½ hours



ENTEBBE JOINT EXAMINATION BUREAU

Uganda Lower Secondary Certificate of Education

BIOLOGY

Paper 2

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.

FOR EXAMINER'S USE ONLY		
ITEM	SCORE	EXAMINER'S INITIALS
1		
2		
TOTAL		

Item 1

John recently started working at the butchery and has difficulty in cleaning his overalls because most detergents are ineffective. A friend recommended **X**, an enzyme-based substance that removes protein-based stains, making washing easier.

X works best when clothes are soaked in warm water (35-40⁰ C) for 15 minutes but its effectiveness depends on the pH of water, which can vary from different sources. John has water from two sources, **Y** and **Z**, and he is not sure which one will work best with **X**.

You are provided with substance **X**, a protein stain sample from John's overalls labeled **W** and water samples **Y** and **Z** from sources **Y** and **Z** respectively.

Task

Conduct scientific investigations to determine which water sample John should use to remove stains from his overalls.

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[illegible]

[illegible]

Item 2

Mary sells vegetables *K* and *L* in Owino market. However, *L* usually dries up before the day ends if they are not all bought. She harvests them at the same time and keeps them under the same conditions but she is wondering why this happens. You are provided with specimens *K* and *L* from vegetables *K* and *L* respectively.

Task

(a) Using observable features, identify the specimens

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(b) Explain why K takes longer to dry up.

[illegible]

[illegible]