

Candidate's

Name:

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Signature: Personal number:/...../.....

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

527/2

PRINCIPLES AND

PRACTICES OF AGRICULTURE

Paper 2

2024

2 hours

PEAS UG NETWORK

PRE-MOCK EXAMINATIONS 2024

Uganda Lower Secondary Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 2

2 hours

INSTRUCTIONS TO CANDIDATES:

- The paper consists of **two** compulsory examination items.
- Write your answers in the spaces provided using **blue** or **black** pen ink

*Answer **all** items in this paper*

Item 1.

Nyamuha picked soil samples from her two different plots and took them to the Laboratory for carrying out experiments on them. She picked these samples because she was planning to grow different crops in the following season. One of the plots was in a swamp while the other one was on a gentle slope. Nyamuha reclaimed the swamp for banana production. In the first two years, she harvested very small bunches. She tried the same on a gentle slope and yields increased. The following year, he picked soil samples **Y** and **Z** from the two different places for further investigation because she had interest in quality production.

Task:

As a student with vast knowledge about soil science, plan and carry out investigations on the two specimens **Y** and **Z** and then answer the items below;

- (a). Briefly explain how Nyamuha can carry out an experiment to investigate the texture of soil samples **Y** and **Z** when wetted with little water. (2marks)
- (b). Advise Nyamuha on the steps to take in carrying out a suitable experiment to determine how particles of specimens **Y** and **Z** settle in two separate labelled cylinders after 10 minutes when given 40cm^3 of soil, 50cm^3 of water and other known materials for the experiment. (08 marks)
- (c). After 10 minutes, use a ruler provided and measure the length (in cm) of soil separates in the measuring cylinders. Present your findings in a table form for the two specimens. (06 marks)
- (d). Draw a table and state the differences between the two mixtures in the separate 100 cm^3 measuring cylinders. (04 marks)

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This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

Item 2.

A teacher of Agriculture at Golden High School has a total of 12 Agriculture students and he divided them into two major groups **A** and **B**. Students in Group **A** were assigned to raise cassava, maize, beans and sugarcane while those in Group **B** were assigned to grow bananas, sweet potatoes and Irish potatoes. Each group has tried to work hard so that group members can score highly. However, some members in the groups have not done their best and have left the work to the few individuals. Yesterday evening, the teacher went to the field to

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