

EXAMINATION NO.: _____



SOUTH EAST EDUCATION DIVISION

2024 MALAWI SCHOOL CERTIFICATE OF EDUCATION MOCK EXAMINATION

AGRICULTURE

Subject number: M012/ II

Tuesday, 12th March

Time allowed: 1:30 hours

10:00 am onwards

PAPER II

(40 marks)

Practical

Instructions

1. This paper contains **5 printed pages**. Please check.
2. This paper has **two sections, A and B**. Each section has **two** questions.
3. Answer **all** questions in the spaces provided.
4. Write your **Examination number** on all pages.

| Questions Number | Tick if answered | Do not write in these column | |
|------------------|------------------|------------------------------|--|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| | | | |

SECTION A (20 marks)

1. Describe an experiment that could be carried out to determine the textural classes of soil using sedimentation. In your description, include materials required, procedure and expected results.

Materials

(3 marks)

Procedure

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 are no margins, text, or other markings on the paper.

(5 marks)

Expected results

(2 marks)

Continued/...

2. A dairy farmer plans to start using a milking machine instead of hand milking. This change is expected to increase milk yield from 350kg to 400kg per lactation. Casual labour for hand milking costs K5, 000.00 while use of the milking machine costs K25, 000.00 the whole lactation period. The milk is sold at K300/kg.

- a. Prepare a partial budget for the farmer.

(8 marks)

- b. Justify whether or not the farmer should implement his planned change.

(2 marks)

Continued/...

SECTION B (20 marks)

Use the specimens provided for each question.

3. You are provided with the following things:

- Specimen **K**
- Specimen **L**
- Soil sample

Procedure

- i. Divide the soil sample into two separate portions.
- ii. Mix the first portion of soil with specimen **K**.
- iii. Mix the second portion of soil with specimen **L**.

a. In which portion of soil are microbial activities likely to be hindered?

(1 mark)

b. Give a reason for your answer in **3a** above.

(2 marks)

c. Describe **two** physical functions specimen **L** would play in the soil.

(4 marks)

d. Mention any **one** chemical effect of specimen **K** in the soil.

(1 mark)

e. State any **two** advantages specimen **K** has over specimen **L**.

(2 marks)

Continued/...

4. You are provided with three different livestock feeds labelled **A**, **B** and **C** respectively.

a. Complete **Table 1** by filling in the type of feed of the specimens provided.

Table 1

| Specimen | Type of feed |
|----------|--------------|
| A | |
| B | |
| C | |

(3 marks)

b. Mention **one** main nutrient animal obtain from specimens **A** and **B** respectively.

A. _____ (1 mark)

B. _____ (1 mark)

c. Give **two** reasons why specimen **C** is highly recommended for a pregnant nanny.

(2 marks)

d. Mention **two** feed supplements that can be added specimen **C** when feeding cattle.

(2 marks)

e. State **one** importance of feed supplements in livestock feeds.

(2 marks)

END OF QUESTION PAPER

NB: This paper contains 5 printed pages