



SOUTH EAST EDUCATION DIVISION

2024 MALAWI SCHOOL CERTIFICATE OF EDUCATION MOCK EXAMINATION

AGRICULTURE PAPER II

PROVISIONAL MARKING KEY

QUESTION 1

Materials

- 50g of garden soil
- water
- sodium bicarbonate (*optional*)
- measuring cylinder /any transparent bottle **(3 marks for all the materials)**

Procedure

- Put 50g of soil sample in a 250cm³ measuring cylinder
- Add about 5-10g of sodium bicarbonate powder to help breakdown the soil clods further (*optional*)
- Add about 150cm³ of water
- Cover the mouth of the cylinder with a palm, and while holding its bottom with the other hand and shake the content vigorously
- Leave the content to settle for about 30 minutes. **(5 marks for correct procedure)**

Expected results

- Soil particles will settle in different layers depending on particle size^(1 mark) Largest particles settle at the bottom while the smallest ones are at the top. ^(1 mark)



Student Name: _____

QUESTION 2

a. **Partial budget for a dairy farmer**

GAINS (BENEFITS)		COSTS (LOSSES)	
Extra revenue(New income)	Amount (MK)	Extra costs(New costs)	Amount (MK)
Sell 400kg milk @ K300/kg	120,000.00 ¹	Use of machine	25,000.00 ¹
	120,000.00		25,000.00
Costs saved(Old costs)		Revenue forgone(Income lost)	
Casual labour for hand milking	5,000.00 ¹	Sell 300kg milk @K350/kg	105,000.00 ¹
	5,000.00		105,000.00

$$\begin{aligned}\text{Total gains} &= \text{extra revenue} + \text{costs saved} \\ &= \text{K}120,000.00 + \text{K}5,000.00 = \text{K}125,000.00^1 \\ \text{Total costs} &= \text{extra costs} + \text{revenue forgone} \\ &= \text{K}25,000.00 + \text{K}105,000.00 = \text{K}130,000.00^1 \\ \text{Net worth} &= \text{total gains} - \text{total costs} \\ &= \text{K}125,000.00 - \text{K}130,000.00 = - \text{K}5,000.00^1\end{aligned}$$

Mark allocation

- **1 mark for correct table (with correct column headings)**
- **1 mark for each correct entry in the table (4 marks for 4 entries)**
- **1 mark for correct calculation of total gains**
- **1 mark for correct calculation of total costs**
- **1 mark for correct calculation of net worth**

b. The farmer should not implement the intended change^(1 mark) because it is reducing income by K5,000.00

Student Name: _____

QUESTION 3

- a. Soil portion mixed with specimen **K** (1 mark)
- b. Specimen **K** is a chemical fertilizer which alters soil pH^(1 mark) hence creating unfavourable living environment for soil micro-organisms^(1 mark)
- c. - It influences soil colour (makes the soil look dark)^(1 mark)/due to the formation of humus after decomposition^(1 mark)
- It binds the soil particles together^(1 mark)/hence improving soil structure^(1 mark)
- d. - It improves soil fertility
- It lowers or raises soil pH (1 mark for each point)
- e. - **K** is less bulky than **L**
- **K** releases nutrients faster than **L**
- **K** has higher nutrient content per unit weight than **L** (1 mark for each point)

QUESTION 4

- a. **Table 1**

Specimen	Type of feed
A	concentrate ^(1 mark)
B	roughage ^(1 mark)
C	concentrate ^(1 mark)

- b.

- A.** Fats/protein^(1 mark)
B. Carbohydrate/water^(1 mark)

Student Name: _____

c. – providing energy to the nanny in readiness for parturition.

- for healthy growth of the foetus
- help the nanny produce more milk upon giving birth
- improving the immunity of the pregnant nanny

(1 mark for each point)

d. - mineral supplements e.g. iodised salt

- vitamin supplement e.g. oxyvit tablets

(1 mark for each point)

e. - improving the immunity of the animal

- stimulating growth of animals
- enhancing the efficiency of livestock feeds
- controlling parasites and diseases

(1 mark for 1 point)

END OF QUESTION MARKING SCHEME