

**MARANDA HIGH SCHOOL**

***Kenya Certificate Of Secondary Education***

**THE 2024 MOCK EXAMINATION**

**443/1 AGRICULTURE PAPER 1**

**June, 2024 TIME: 2 Hrs**

**Name**: …………………………………….……… **Admission No:** ……………

**CODE - SUBJECT**

Wednesday, 5th June, 2024

Midmorning

10.45am-12:45pm

**Stream**: ………………….. **Signature**: ……….........

**INSTRUCTIONS TO CANDIDATES**

1. *Write your* ***name****,* ***admission number, date, stream and signature*** *in the spaces provided above.*
2. *Answer* ***all*** *the questions in section A and B.*
3. *Answer any* ***two*** *questions in section C. Indicate on the grid the question number done.*
4. *All answers must be written in the spaces provided in the booklet.*
5. ***This paper consists of 14 printed pages with 22 questions. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing***
6. *Candidate should answer the questions in* ***English***

**FOR EXAMINER’S USE ONLY**

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTIONS** | **QUESTIONS** | **MAXIMUM SCORE** | **CANDIDATES SCORE** |
| **A** | **1-15** | **30** |  |
| **B** | **16-19** | **20** |  |
| **C** |  | **20** |  |
|  | **20** |  |
| **TOTAL SCORE** | | **90** |  |

**SECTION A (30 marks)**

**Answer ALL questions from this section**.

1. State **four** advantages of organic farming. (2 marks)

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1. Give **four** factors that can increase seed rates in crop production.

(2 marks)

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1. State **four** roles of organic matter in sandy soils. (2 marks)

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1. Give **four** reasons for practicing minimum tillage. (2 marks)

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1. What is meant by each of the following in crop production?

(a) Crop rotation; (1 mark)

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(b) Mulching. (1 mark)

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1. Give **four** reasons for inverting soil slices during primary cultivation. (2 marks)

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1. State **four** cultural Ways of controlling couch grass (*Digitaria scalarum*). (2 marks)

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1. (a) Name **three** vegetative parts that can be used to propagate pineapples. (1½ marks)

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(b) State **three** disadvantages of vegetatively propagating pineapples. (1½ marks)

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1. Name **three** sources of underground water. (1½ marks)

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1. What is meant by each of the following in agroforestry?

(a) Pollarding; (1 mark)

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(b) Coppicing; (1 mark)

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(c) Lopping. (1 mark)

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1. State the information included in a sales receipt when a farmer is selling eggs. (2½ mark)

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1. State **two** reasons for practising agroforestry on a:

(a) River-bank; (1 mark)

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(b) Steep slope. (1 mark)

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1. State **three** disadvantages of using plastic pipes to convey water. (1½ marks)

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1. State **three** causes of blossom end rot in tomatoes. (1½ marks)

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1. What is meant by the term preference and choice as used in agricultural economics? (1 mark)

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**SECTION B: (20 MARKS)**

**Answers all questions in this section in the spaces provided.**

1. (a) Distinguish between straight and compound fertilisers. (1 mark)

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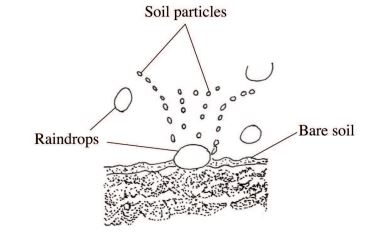
(b) A farmer applied 200 kg of CAN (20%N) per hectare on his ﬁve hectares maize crop. Calculate the amount of nitrogen the farmer applied on his crop. Show your working. (4 marks)

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1. The diagram below illustrates a type of soil erosion.



(a) Identify the type of erosion. (1 mark)

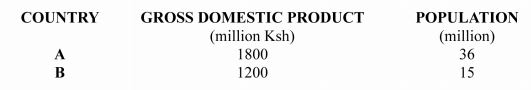
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(b) How does the type of erosion shown above occur? (2 marks)

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1. The table below shows the population and gross domestic products of countries **A** and **B**.



(a) Calculate the per capita income for each country. Show your working. (2 marks)

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(b) Which of the two countries is more developed economically? (1 mark)

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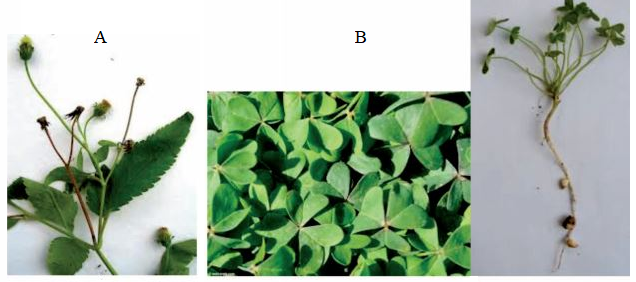
(c) Give a reason for your answer in (b) above. (1 mark)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(d) How can agriculture increase the gross domestic product of a country? (1 mark)

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1. The photograph below shows weeds labeled **A** and **B.**



(a) Identify the weed labeled **A.**  (1 mark)

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(b) State **one** mechanical control measure for the weed labeled **A.**  (1 mark)

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**SECTION C (40 MARKS)**

**Answer any two questions in this section in the spaces provided after question 22**

1. (a) Describe the various risks and uncertainties in crop farming.

(10 marks)

(b) State the functions of Young Farmers Clubs in Kenya. (5 marks)

(c) Give the reasons for land registration in Kenya. (5 marks)

1. (a) Explain **ﬁve** ways in which the Kenyan government can improve maize production to ensure food security in the country. (10 marks)

(b) Why is pruning done in crop production? (10 marks)

1. (a) The tables below give information on the supply and demand schedules for tomatoes on a market.

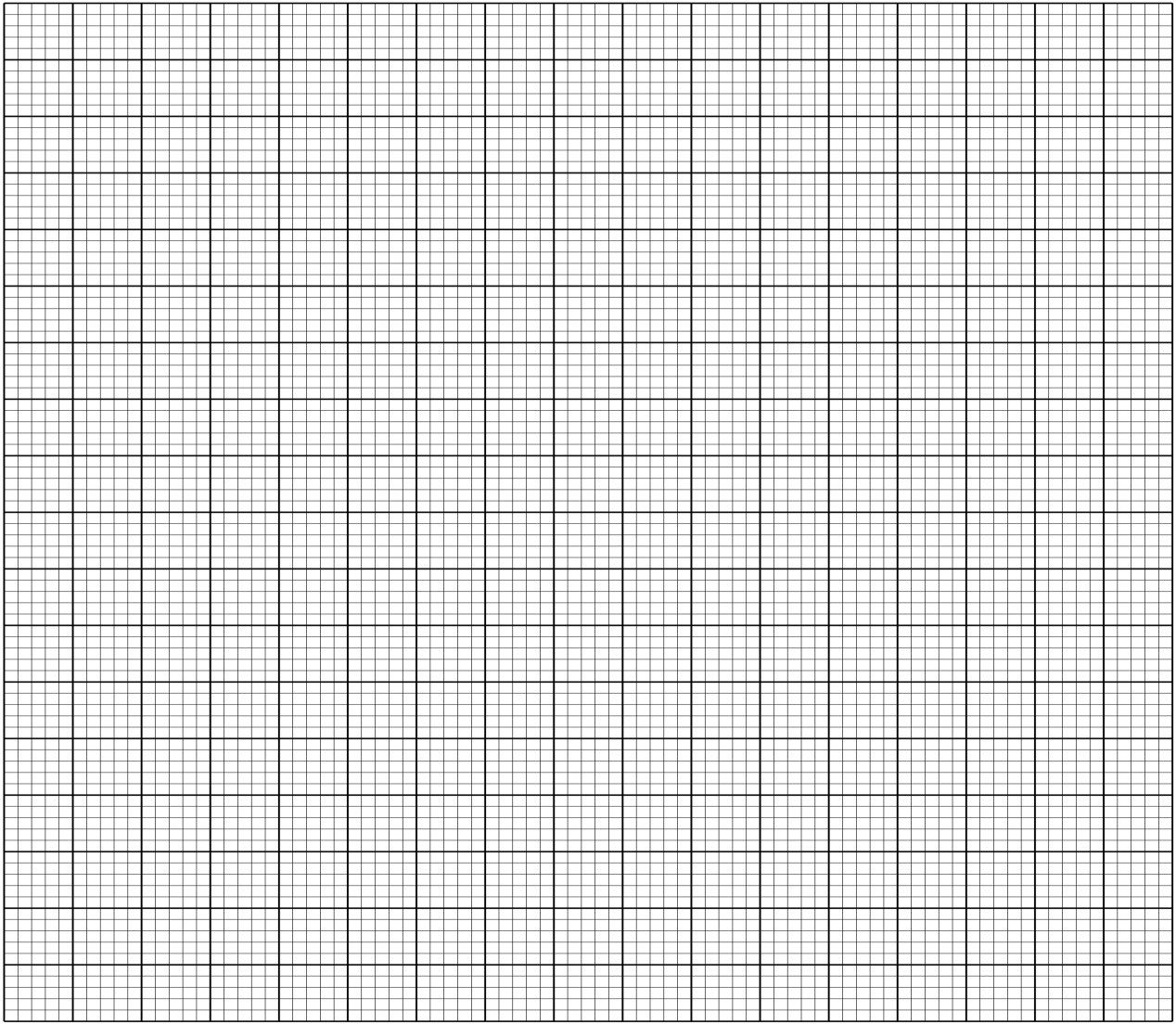
Price of quantities of tomatoes supplied

|  |  |
| --- | --- |
| Tomatoes in( kg) | Price per kg(Ksh) |
| 130 | 34 |
| 116 | 29.5 |
| 100 | 25 |
| 94 | 23 |
| 76 | 18 |
| 62 | 14 |
| 52 | 11.50 |
| 40 | 9 |
| 26 | 7 |
| 10 | 4 |

Price of quantities of tomatoes demanded

|  |  |
| --- | --- |
| Tomatoes in( kg) | Price per kg(Ksh) |
| 10 | 32.5 |
| 20 | 28 |
| 30 | 25 |
| 36 | 23 |
| 52 | 18.5 |
| 74 | 14 |
| 82 | 12.5 |
| 90 | 11 |
| 110 | 8 |
| 126 | 6 |

(i) Using the above data, plot supply and demand curves on the same axes. (7 marks)



(ii) Determine the price at which 120 kg of tomatoes were supplied on the market. (1 mark)

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(iii) How many kilograms of tomatoes were bought at a market price of Ksh. 13.00? (1 mark)

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(iv) What was the equilibrium price for tomatoes on the market? (1 mark)

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(b) Describe the production of maize under the following sub-headings:

(i) Seedbed preparation; (4 marks)

(ii) Planting; (3 marks)

(iii) Harvesting. (3 marks)

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