**`NAME…………………………………………….………..INDEX NO………….….....................………**

**SCHOOL………………………………………………..CANDIDATES SIGN…………....................….**

 **DATE…………………......................………**

**443/1**

**AGRICULTURE**

**PAPER 1**

**TIME: 2 HOURS**

**AUGUST-2022**

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**CEKENAS END OF TERM TWO EXAM-2022**

**FORM FOUR EXAM**

*Kenya Certificate of Secondary Education. (K.C.S.E)*

**443/1**

**AGRICULTURE**

**PAPER 1**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and admission number in the spaces provided above
2. Sign and write date of examination in the space provided.
3. This paper consists of **three** sections **A, B** and **C**
4. Answer **ALL** questions in section A and B and any **two** questions from section C
5. Candidates must answer the questions in English.
6. All answers should be written in the spaces provided.

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| --- | --- | --- | --- |
| **SECTION**  | **QUESTION** | **MAXIMUM SCORE** | **CANDIDATE’S SCORE** |
| A | 1-17 |  |  |
| B | 18-21 |  |  |
| C | 22-24 |  |  |

**SECTION A (30 MARKS)**

**Answer ALL Questions in this section**

1. List **three** aspects of light a farmer should consider when deciding on a crop to grow. (1½mks)

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2. State **four** factors which determine the depth of ploughing. (2mks)

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3. Give **four** reasons why it is advantageous to use farm yard manure instead of straight fertilizer. (2mks)

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4. State **four** methods of reclamation farmers can carry out. (2mks)

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5. State **four** benefits of land consolidation. (2mks)

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6. State **four** factors that determine the spacing of maize crops. (2mks)

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7. State **four** factors which may affect the quality of hay. (2mks)

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8. State **four** factors that affect the effectiveness of a pesticide. (2mks)

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9. List any **four** types of records a crop farmer should keep. (2mks)

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10. State **four** importance of practicing agroforestry. (2mks)

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11. State **four** characteristics of a good site for a nursery bed. (2mks)

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12. Name **four** methods of farming. (2mks)

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13. Name **four** natural factors that may influence soil erosion. (2mks)

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14. State **two** conditions that should be observed when harvesting to ensure that cotton picked is of high quality. (2mks)

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15. State **four** uses of water on the farm. (2mks)

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16. List **three** types of surface irrigation in crop production. (1½mks)

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17. Differentiate between coppicing and pollarding as used in Agroforestry. (1mk)

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**SECTION B (20MARKS)**

**Answer ALL questions in this section**

18. Below are filed practices. Study them carefully and answer the questions that follow.



a) Identify the above practices. (2mks)

M

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N

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b) State **three** reasons for carrying out practice M. (3mks)

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19. Below are common weeds found on the farm. Use them to answer the questions that follow.



a) Identify the weeds R, S, T, U. (2mks)

R

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S

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T

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U

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b) State the reason why S and U are difficult to control. (2mks)

S

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U

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c) Why is weed R not suitable on dairy animals. (½mk)

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d) Which weed is parasitic to cereals? (½mk)

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20. The diagram below shows a silo. Study it carefully and answer the questions that follow.



a) Identify the type of silo shown on the diagram. (1mk)

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b) State the use of the part labelled M and N. (2mks)

M

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N

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c) Give two ways of ensuring that anaerobic conditions are achieved during silage making process. (2mks)

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21. The illustrations below represents types of soil structures. Study them carefully and answer the questions that follow.



a) Identify the soil structures X and Y shown above. (2mks)

X

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Y

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b) Which of the soil structure you have named above is not suitable for growing maize. (1mk)

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c) Give **two** methods of improving the soil structure you have mentioned in (ii) above. (2mks)

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**SECTION C (40 MARKS)**

**Answer any two questions from this section**

22. a) Explain how farmers overcome risks and uncertainties in a farming business. (5mks)

b) Explain how various practices carried out in the field help to control crop diseases. (8mks)

c) Transplanting of seedlings. (7mks)

23. Study the following information which was extracted from Mr. Rono’s farm record on 31st December 2021 and answer the questions below.

Item

Debts receivable 18,000

Loans payable to bank 300,000

Cows 250,000

Chicken 80,000

Goats 30,000

Debts payable to cooperative 20,000

Buildings and structures 600,000

Wages payable to workers 19,000

Cattle feed in store 10,000

Animal drugs in store 4,000

Breakages to repair 30,000

Cash at hand 20,000

Cash in bank 30,000

Farm equipment 12,000

a) Prepare a balance sheet for Rono’s farm using the information above. (10mks)

b) Describe the properties of nitrogenous fertilizers. (15mks)

c) Describe **five** problems farmers face in marketing of water melon. (5mks)

24. a) Describe cabbage production under the following sub-headings.

i) Ecological requirements. (2mks)

ii) Field management practices. (3mks)

b) State **five** advantages of using seeds as planting material. (5mks)

c) Describe process of chemical water treatment before storage. (10mks)

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