

NAME INDEX NO.....

SCHOOL..... SIGNATURE

DATE

433/1.

AGRICULTURE

PAPER 1 (THEORY)

2 HOURS.

NYAHOKAKIRA CLUSTER THREE EXAMINATION 2022

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



INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the spaces provided above.
2. This paper has **THREE** sections: A , B and C
3. Answer **ALL** the questions in section A and B and any **TWO** questions in section C
4. ALL answers **MUST** be written in the spaces provided.
5. Do not remove any pages from this booklet.

FOR EXAMINER'S USE ONLY

	Questions	Maximum score	Candidate's score
A	01-17	30 marks	
B	18-21	20 marks	
C	22-24	40 marks	
		Total score	

SECTION A (answer all questions in this section)

1. State **four** reason why farmers should be encouraged to practice organic farming (2mks)

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2. Distinguish between olericulture and pomoculture as used in crop production (1mk)

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3. State **four** effects of HIV/AIDs on agricultural production (2mks)

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4. State **four** advantages of adding organic manure to sandy soil. (2mks)

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5. State functions of the following chemicals used in treatment of water (1mk)

Chlorine

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Aluminum sulphate (allum)

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6. State **four** factors that determine the number of secondary cultivation to be done on a seedbed (2mks)

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7. Give **four** benefits of processing certificate of land ownership (2mks)

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8. Give **two** uses of a farm inventory (1mk)

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9. State **four** benefit agroforestry to a maize crop (2mks)

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10. State **four** qualities considered when selecting seeds for planting (2mks)

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11. a) state **four** ways by which a soil of pH3 can be raised to pH 5 (1mk)

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b) Name **two** types of soil structures (1mk)

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12. Name the plant part used for vegetative propagation of each of the following plants. (2mks)

Sisal (½mk)

Pyrethrum..... (½mk)

Sweet potatoes..... (½mk)

Sugar cane (½mk)

13. Outline **four** ways of improving farm labour productivity (2mks)

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14. Give **one** reason why each of the following nursery management practices are carried out (2mks)

a) Hardening off

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b) Watering before transplanting

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15. State **two** benefits of conserving forage crops (1mk)

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16. Name **two** examples of liabilities in a balance sheet (1mk)

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17. Define the following terms

i) Opportunity cost

(½mks)

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ii) Agricultural economics

(½mks)

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SECTION B (answer all questions in this section)

18. Below is an illustrations of common weeds found in arable land .Study them and answer the questions that follow.



a) Identify each of the weeds labelled **A** and **B** (2mks)

A

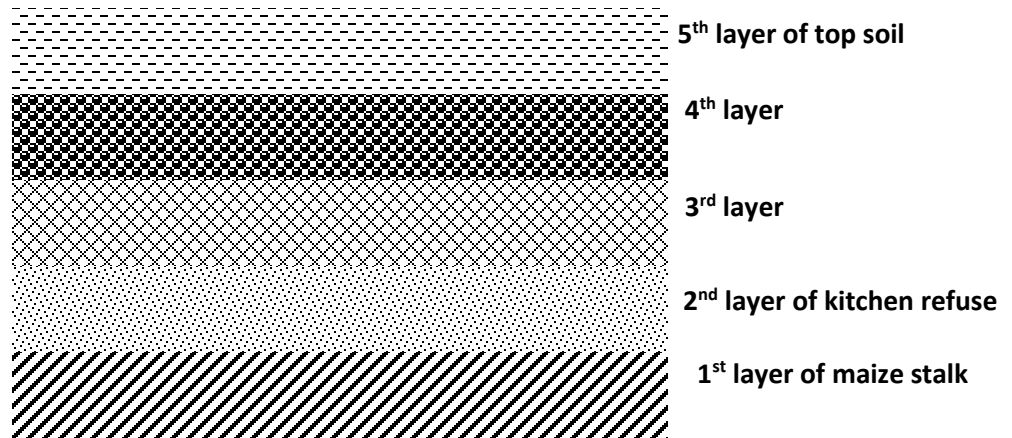
B

Give **three** harmful effects of weed labelled **A** (3mks)

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19. An agronomist recommends application of 130kgN, 55 kg P_2O_5 and 65 K_2O after testing a soil sample. Calculate the amount of urea (46%N), single super phosphate (20% P_2O_5) and potassium chloride (50% K_2O) that should be applied on the land (5mks)

20. The diagram below is a presentation of a cross section through a compost heap. Study it and answer the questions which follow



a) Name what is placed in the 3rd and 4th layer (2mks)

3rd layer

4th layer.....

b) What is the purpose of having 3rd and 4th layer (2mks)

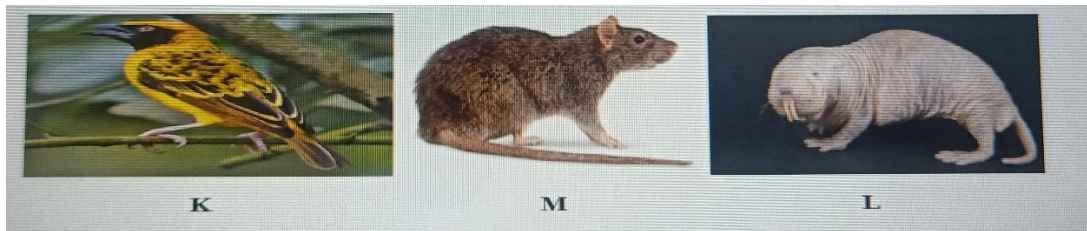
3rd layer

4th layer.....

c) What is the importance of adding garden soil to the compost? (1mk)

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21. Study the diagrams below and answer questions that follow:



a) Identify the pests (3mks)

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L

M

b) Give suitable methods used to control pests K and M (2mks)

K

M

SECTION (answer TWO questions in this section)

22. a) Describe the field production of **tomato** grown for fresh vegetable market under the following subheadings:

- i) Pest control (2mks)
 - ii) Weed control (2mks)
 - iii) Harvesting (3mks)
- b) List **seven** benefits of using organic matter for mulching (7mks)
- c) List **six** methods of harvesting water in the farm (6mks)

23. a) Explain **ten** cultural methods of controlling pests (10mks)

- b) Describe **seven** factors to consider when siting and establishment of vegetable crops nurseries (7mks)
- c) Explain the method and procedure of harvesting sugarcane (3mks)

24. a) Discuss **six** importance of irrigation in farming (6mks)

- b) Describe safety measures observed when handling farm herbicides (6mks)
- c) Explain how various farming practices would help to conserve soil water (8mks)

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