

NAME..... INDEX NO:.....

CANDIDATE'S SIGNATURE:..... DATE:.....

443/1

AGRICULTURE

PAPER 1

MARCH/APRIL 2015

2 HOURS

SUNSHINE SECONDARY SCHOOL

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

443/1

AGRICULTURE

PAPER 1

MARCH/APRIL 2015

2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Write your name and date in the spaces provided above.
2. This paper consists of **three** sections **A**, **B**, and **C**.
3. Answer all the questions in section **A** and **B** any **two** questions from section **C**.
4. Answers should be written in the spaces provided.

FOR EXAMINERS USE ONLY

Section	Question	Maximum score	Candidates score
A	1 - 14	30	
B	15 - 18	20	
C	19 - 21	20	
		20	
<i>Total score</i>		90	

*This paper consists of 12 printed pages.
Candidates should check the question paper to ensure that all pages are printed as indicated*

SECTION A (30MARKS)

ANSWER ALL QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED

1. State **four** disadvantages of extensive farming. (2 marks)

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2. State **four** human factors that lead to low crop production. (2 marks)

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3. State **four** characteristics of soil that influence crops planted. (2 marks)

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4. State **four** factors that influence the number of secondary cultivation. (2 marks)

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5. Mention **four** reasons for ridging in crop production. (2 marks)

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6. State **four** practices that encourage minimum tillage. (2 marks)

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7. (a) Name **three** non chemical methods of water treatment. (1½ marks)

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(b) State **four** advantages of trickle irrigation. (2 marks)

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8. State **four** importance of organic matter in sandy soil. (2 marks)

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9. Name **four** types of records kept by a poultry farmer. (2 marks)

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10. (a) Name **two** forms of nitrogen element is absorbed by plants. (1 mark)

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(b) Name any **two** methods of harvesting agro forestry trees. (1 mark)

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11. (a) State **four** importance of nursery practice in vegetable crop production. (2 marks)

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(b) Name **three** vegetative propagation material used to propagate pineapples. (1½ marks)

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12. State **four** effects of excessive application of nitrogen fertilizer on growing crops. (2 marks)

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13. State **four** cultural ways of controlling nematodes in a field of bananas. (2 marks)

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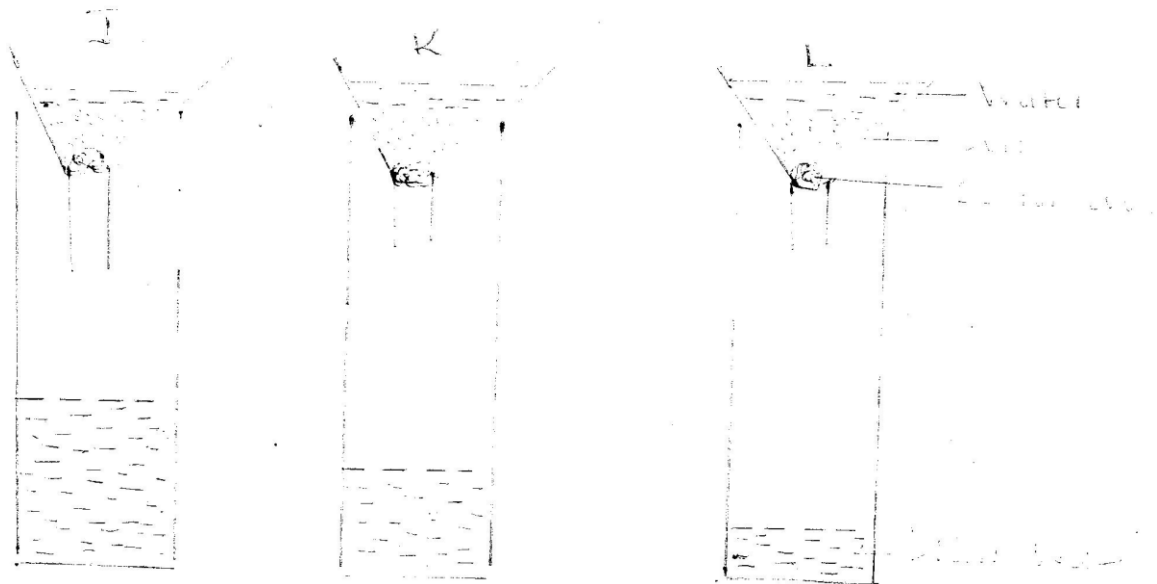
14. Distinguish between Pricking out and Rogueing. (1 mark)

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SECTION B: (20 MARKS)

ANSWER ALL THE QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED

15. The diagram below illustrates an investigation on property of soil using soil samples labeled J, K, and L



(a) If the levels of water drained in the diagram were observed after two hours, name the property of soil being investigated. (1 mark)

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(b) What is the relationship between the soil property named in (a) above and the size of soil particles. (1 mark)

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(c) Which soil sample would be suitable for growing paddy rice? (1 mark)

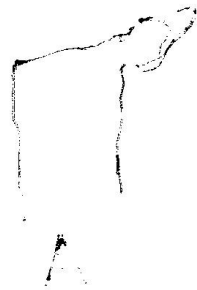
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(d) Name the type of soil. (2 marks)

J

L

16. Use the diagrams below that show pruned plants after budding to answer the questions that follow



(a) Which diagram shows the correct pruning cut? (½ mark)

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(b) Explain why the other **three** cuttings are wrong? (1½ marks)

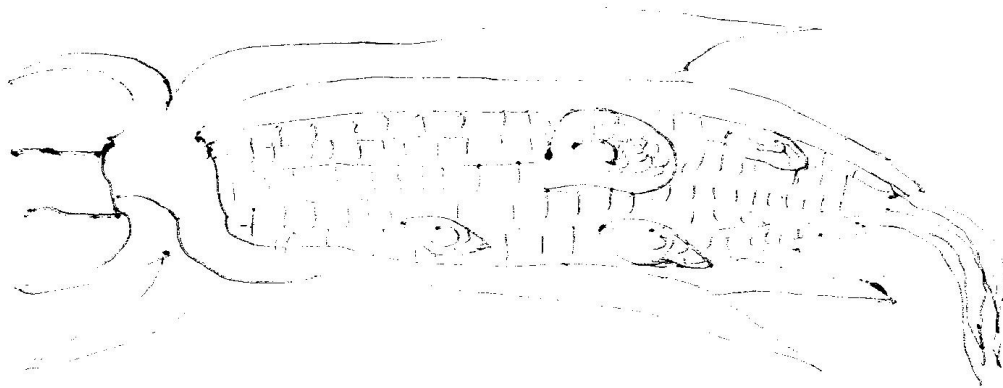
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(c) State **three** importance of pruning coffee. (3 marks)

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17. Use the diagram below that show maize cob attacked by a disease. Study it and answer the questions that follow.



(a) Identify the crop disease illustrated above. (1 mark)

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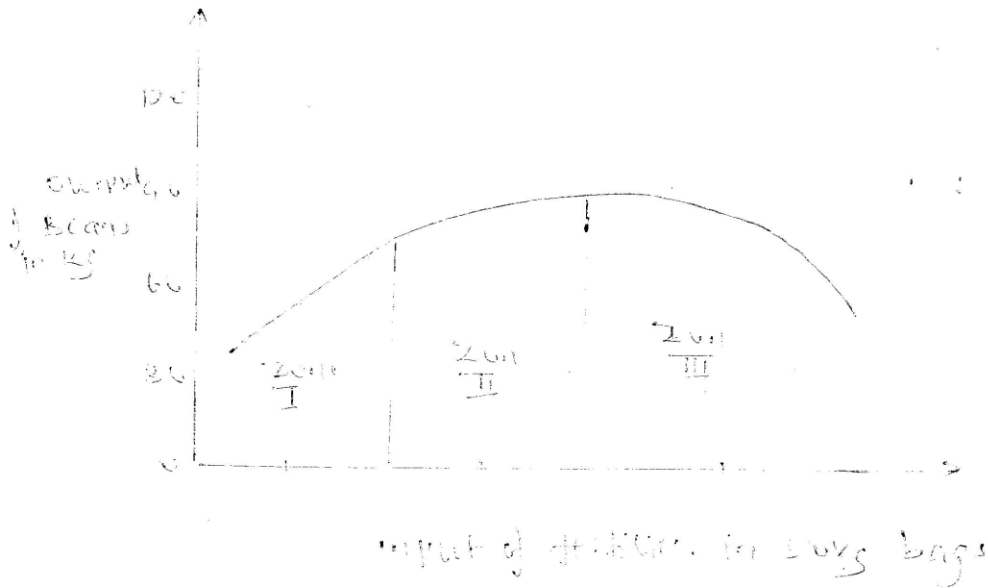
(b) A part from maize name other **two** crops attacked by the same disease. (2 marks)

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(c) State **two** control measure of the disease in (a) above. (2 marks)

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18. Below is a graph representing the law of diminishing returns. Study it carefully and answer the questions that follow.



(a) Explain what would happen to each of the three zones marked I, II, and III in relation to fertilizer input to beans output. (3 marks)

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(b) Which is the rational zone among **three** zones and why? (2 marks)

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NAME

INDEX NO:.....

CANDIDATE'S SIGNATURE.....

DATE:.....

443/2

AGRICULTURE

PAPER 2

MARCH/ APRIL 2015

2 HOURS

SUNSHINE SECONDARY SCHOOL

Kenya Certificate of Secondary Education (KCSE)

443/2

AGRICULTURE

PAPER 2

MARCH/APRIL 2015

2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the spaces provided above.
2. Sign and write the date of examination in the spaces provided above.
3. This paper consists of three sections, **A**, **B** and **C**.
4. Answer all the questions in sections **A** and **B**.
5. Answer any two questions from section **C**.
6. Answers should be written in the spaces provided.

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C	19 - 21	20	
		20	
	Total score	90	

SECTION A: (30 MARKS)

Answer ALL questions in the spaces provided

1. (a) State **four** importance of keeping rabbits. (2 marks)

(b) Name **two** dual purpose breeds of cattle. (1 mark)

2. Give **two** reasons for flushing in sheep management. (2 marks)

3. State **four** qualities of a good vaccine. (2 marks)

4. Name any **four** components of a zero-grazing unit. (2 marks)

5. Give **four** management practices carried out in a crush. (2 marks)

6. (a) State **four** symptoms of coccidiosis. (2 marks)

(b) Give **two** ways in which the health of an animal can be restored. (1½ marks)

7. List **four** abnormalities which may arise during egg formation. (2 marks)

8. Name any **six** milking requirements after restraining a dairy cattle. (3 marks)

9. Name **four** factors that influence the amount of concentrates fed to a milking cow. (2 marks)

10. Give the breeding system involved in each of the following cases;

(a) Friesian sire mated with Aryshire dam. (½ mark)

(b) Friesian sire (father) mated with Friesian dam (daughter). (½ mark)

11. State **four** control measures of Tsetseflies. (2 marks)

12. Name **four** examples of succulent feeds. (2 marks)

13. List down **three** methods of treating bloat. (1½ marks)

14. Give **four** reasons for maintaining farm tools. (2 marks)

SECTION B: (20 MARKS)

Answer ALL the questions in the spaces provided.

15. (a) The diagram below represents a cross-section of a floor of a permanent milking shed.

(i) Label on the diagram, the layers marked 1, 2, 3 and 4. (2 marks)

- 1 -----
- 2 -----
- 3 -----
- 4 -----

(ii) State **two** factors that influence quality of concrete. (2 marks)

16. Below is a diagram illustrating a farm structure. Study it carefully and answer the questions below.

(a) Identify the structure. (1 mark)

(b) Name the parts G, H and K. (3 marks)

G -----

H -----

K -----

(c) State the factors to consider when siting the structure. (2 marks)

17. Below are illustrations of live stock parasites. Study them and answer the questions that follow.

(a) Identify the parasites A and B. (2 marks)

A -----

B -----

(b) State **two** control measures for parasite B. (2 marks)

(c) Give **two** symptoms of parasite A attack on cattle. (2 marks)

18. Study the illustrations below and answer the questions below and answer the questions that follow.

(a) Identify the tools J, K, L and M. (4 marks)

J -----
K -----
L -----
M -----

SECTION C: (40 MARKS)

Answer any TWO questions from this section in the spaces provided.

19. (a) Discuss **five** factors considered when constructing a farm structure. (5 marks)

(b) State any **five** factors that should be considered when choosing tools and equipment to use in the farm. (5 marks)

(c) Describe ten management practices carried out on a fish pond. (10 marks)

20. (a) Compare the use of animal drawn implement to tractor drawn implements. (10 marks)

(b) Describe any **five** maintenance practices carried out on an ox-drawn plough. (5 marks)

(c) Discuss the advantages and disadvantages of using tractor hire serves in the farm over using own tractor. (5 marks)

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