

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

443/1  
AGRICULTURE  
Paper 1  
MARCH/APRIL 2015  
Time: 2 hours

CANDIDATE'S SIGNATURE.....

# CROSS COUNTRY EXAMS 2015

Kenya Certificate of Secondary Education  
AGRICULTURE  
Paper 1  
Time: 2 hours

## Instructions to candidates:

Write your name and index number in the spaces provided above.

Sign and write the date of examination in the spaces provided above.

This paper consists of **THREE** Sections **A**, **B** and **C**.

Answer all questions in Section **A** and **B** and any **Two** in Section **C**.

All answers must be written in the spaces provided.

## For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
<b>A</b>	<b>1 - 17</b>	<b>30</b>	
<b>B</b>	<b>18 - 22</b>	<b>20</b>	
<b>C</b>		<b>20</b>	
		<b>20</b>	
<b>Total Score</b>		<b>90</b>	

**SECTION A: (30 MARKS)**

**Answer all questions from this section in the spaces provided.**

1. Differentiate between:

(a) Extensive and intensive farming systems.

(1 mark)

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(b) Aqua culture and apiculture.

(1 mark)

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2. State **two** disadvantages of pastoral nomadism system of farming.

(1 mark)

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3. State **two** ways in which soil depth influences crop production.

(1 mark)

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4. Give **two** ways of increasing light intensity in crop production.

(2 marks)

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5. Name **two** types of micro-catchments commonly used in water conservation.

(1 mark)

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6. Give **four** ways of acquiring land for agricultural use in Kenya today.

(2 marks)

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443/1

2

7. State **four** roles of mulch in soil and water conservation. (2 marks)

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8. Give **four** ways of water harvesting in a farm. (2 marks)

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9. State **four** methods that make weeds be competitive with desired crops in regard to successful means of propagation. (2 marks)

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10. A farmer is to apply a compound fertilizer 20-30-0 on a vegetable plot measuring 5m long by 4m wide at the rate of 200kg/ha. Calculate the amount of fertilizer the farmer requires for the plot (show your working). (3 marks)

11. State **four** advantages of drip irrigation. (2 marks)

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12. (a) State **two** positive effects of high temperatures on crop production. (1 mark)

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(b) What is forage defoliation? (1 mark)

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13. State **two** importance of drainage of land. (2 marks)

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14. Define the term opportunity cost. (1 mark)

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15. State **four** effects of soil erosion. (2 marks)

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16. Name **two** methods used to control weeds in pastures. (1 mark)

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17. Give **four** reasons why seeds may fail to germinate after planting. (2 marks)

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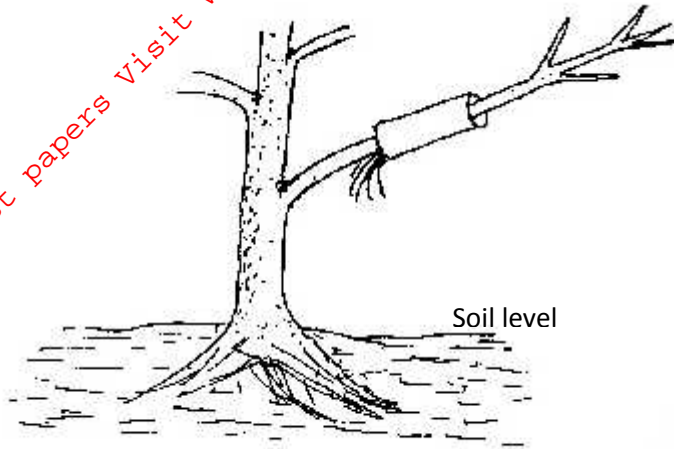
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**SECTION B: (20 MARKS)**

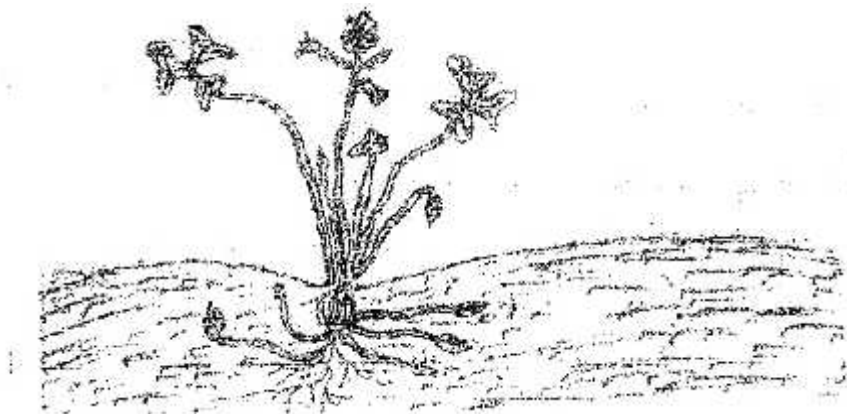
**Answer all the questions in this section in the spaces provided.**

18. The diagram **below** shows a method of crop propagation.



- (i) Identify the propagation method illustrated above. (1 mark)
- 
- (ii) State **three** ways of initiating faster root development in propagation method illustrated. (3 marks)
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19. Study the diagram **below** and answer the questions that follow.

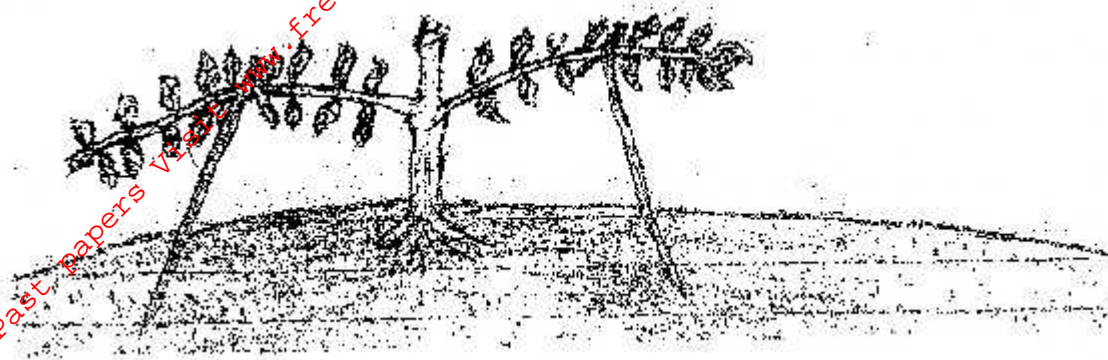


- (i) Identify the weed. \_\_\_\_\_ (1 mark)
- (ii) State the reason why it is hard to control the above named weed. (1 mark)
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- (iii) Classify the above weed according to the life cycle.

443/1

20. The diagram **below** illustrates how a plucking table is developed in a given crop.



(i) Identify the crop where the above practice is carried out.

\_\_\_\_\_ (1 mark)

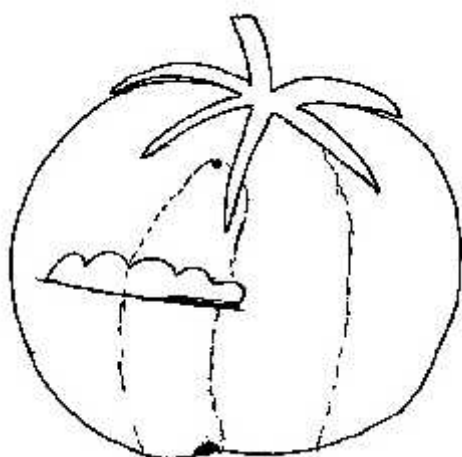
(ii) Name the method.

\_\_\_\_\_ (1 mark)

(iii) Mention **three** advantages of pruning a crop.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (3 marks)

21. The diagram **below** illustrates a tomato fruit infested by a certain pest.



(i) Identify the pest. \_\_\_\_\_ (1 mark)

(ii) State the damage caused by the pest on the fruit.

\_\_\_\_\_ (1 mark)

(iii) Name **one** alternate host of the pest in the diagram.

\_\_\_\_\_ (1 mark)

443/1

6

- (iv) State **two** methods of controlling the pest. (2 marks)

22. A plot of land measures 6.6m long by 3.6m wide. The plot is prepared for planting cabbages at a spacing of 60cm by 60cm. the outermost row start 30cm from the edges all around the plot.

Calculate:-

- (i) the number of rows falling on the width side of the plot. (1 mark)

- (ii) the number of cabbages seedlings that should be planted in the plot. (Show your working). (2 marks)

### **SECTION C: (40 MARKS)**

**Answer any TWO questions in this section in the spaces provided after question 25.**

23. Describe the production of irrigated rice under the following sub-headings.
- (a) Land preparation. (7 marks)
  - (b) Water control. (5 marks)
  - (c) Fertilizer application (3 marks)
  - (d) Weed control. (5 marks)
24. (a) Explain various management practices that can be carried out by a farmer to maintain soil fertility on his farm. (10 marks)
- (b) Explain **five** ways in which soil loses its fertility. (5 marks)
- (c) Explain **five** importance of soil organic matter. (5 marks)
25. (a) State and explain **five** factors that influence spacing in crops. (10 marks)
- (b) State and explain **five** general methods of crop pest and disease control. (10 marks)

443/1

7

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