

Name: ..... Index No. ....

School: ..... Date: ..... Candidate's Sign .....

443/1  
AGRICULTURE  
PAPER 1  
FORM 4  
MARCH / APRIL 2013  
TIME: 2HOURS

**BARINGO NORTH TRIAL EXAMINATIONS - 2013**  
**The Kenya Certificate of Secondary Education (K.C.S.E)**

**INSTRUCTIONS TO CANDIDATES**

- Write your name, School and Index Number in the spaces provided above.
- This paper consists of three Sections A,B and C.
- Answer ALL the questions in Section A and B and ANY TWO Questions from Section C.
- Answers to ALL questions must be written in the spaces provided.
- This paper consist of 26 questions.

**FOR EXAMINER'S USE ONLY**

Section	Question	Max. Score	Cand. Score
A	1-20	30	
B	21-23	20	
C		20	
		20	
<b>TOTAL SCORE</b>		<b>90</b>	

*This paper consists of 8 printed pages.  
Candidates should check the question paper to ensure that all pages are  
printed as indicated an no questions are missing.*

**SECTION A: (30MARKS)**

**Answer ALL the questions in this section in the spaces**

1. Name **four** major branches of agriculture. (2marks)  
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2. State **two** effects of low temperature on crop production. (1mark)  
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3. Outline **two** factors that influence soil erosion. (1 mark)  
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4. Name **two** propagation materials for pineapples (1mark)  
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5. a) Name **two** types of capital. (1mark)  
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b) Name **three** sources of capital. (1½ marks)  
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6. State **two** importance of tissue culture in crop production. (1mark)  
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7. Give **three** reasons for carrying out soil testing. (1½ marks)  
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8. Give **two** ways through which land can be acquired. (1mark)  
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9. Explain the term changing the cycle in coffee growing. (1mark)  
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10. Outline **four** problems which famers encounter in marketing vegetables. (2marks)  
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11. Differentiate thinning from pricking out as used in crop production. (1mark)

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12. a) State **two** factors which influence the efficiency pesticides. (1mark)

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b) Why is finger millet rarely destroyed in the store. (1mark)

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13. List **four** records a farmer keeps in poultry enterprise. (2marks)

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14. For each of the following marketing functions state one importance. (3½ marks)

i) Packing

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ii) Processing

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iii) Storage

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15. State **two** factors that determine the number of times a farmer would harrow his land. (1mark)

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16. Under what **two** conditions would you recommend irrigation? (1mark)

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17. Why are leguminous plants preferred for green manure? (1mark)

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18. State **four** importance of water in wet paddy. (2marks)

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19. What is labour peak period? (1mark)

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20. a) Give **one** function of each of the following in the preparation of compost manure. (1½marks)

i) Top soil

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ii) Wood ash

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iii) Manure

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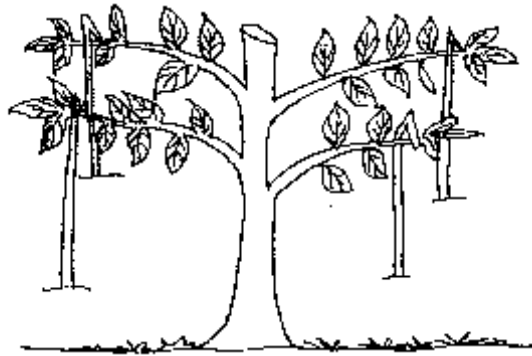
b) What is the importance of the stick that is driven into the compost manure heap (Pit) during the preparation of compost manure? (1mark)

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**SECTION B: (20MARKS)**

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

21. Below is an illustration of a method of frame formation in tea. Answer the questions that follow.



a) Identify the above method. (1mark)

b) Describe the procedure followed in (a) above. (4marks)

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c) A part from the above method name one other method of frame formation. (1mark)

22. The diagram below illustrates a vegetable. Study it carefully and answer the questions that follow.



A

a) Identify the above crop labeled A. (1mark)

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b) Name **two** varieties of the above crop (2marks)

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c) Briefly explain why manure application is not recommended for the above crop. (1mark)

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d) State **two** good qualities of crop A. (2marks)

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23. a) A form four student has a plot measuring 8.8m x 4.8m on which he has established egg plants at a spacing of 80 x 80cm and one plant per hole at the 1<sup>st</sup> row is 0.4m all round the plot. Showing your working find:

i) Number of rows falling on wide side of the plot. (2marks)

ii) Number of plants per row. (2marks)

iii) Number of plants in the plot assuming there is 100% germination. (2marks)

b) i) What is opportunity cost? (1mark)

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ii) A farmer has an option of growing either wheat or maize in his one hectare of land. Wheat gives a return of kshs.20, 000 while maize fetches kshs.35, 000 in the market. If the farmer chooses to grow wheat what will be the opportunity cost? (1mark)

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**SECTION C: (40MARKS)**

**Answer ANY TWO questions from this section in the spaces provided.**

24. Describe the raising of maize crop for grains production under the following sub headings.
- a) Ecological requirements. (5marks)
  - b) Seedbed preparation (3marks)
  - c) Planting (5marks)
  - d) Field management (5marks)
  - e) Harvesting (2marks)
25. a) Explain the factors that determine the choice of method for controlling pests and diseases in crop production. (10marks)
- b) Explain **seven** ways of breaking seed dormancy. (7marks)
- c) Give **three** reasons why it is advantageous to use farm yard manure instead of a straight fertilizer. (3marks)
26. a) State the characteristics of a fertile soil. (5marks)
- b) Explain **six** physical or structural methods of soil erosion control. (12marks)
- c) State the problems association with the use of herbicides. (3marks)

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