

NAME:.....

INDEX NO:.....

SCHOOL:.....

CANDIDATES SIGNATURE:.....

DATE:.....

443/1

AGRICULTURE

PAPER 1

JULY/AUGUST-2014.

TIME: 2 HOURS

KISII SOUTH SUB COUNTY JOINT EVALUATION EXAM - 2014

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

443/1

AGRICULTURE

PAPER 1

JULY/AUGUST-2014.

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- (a) Write your name and index number in the spaces provided at the top of this page
- (b) Sign and write the date of this examination in the spaces provided above.
- (c) This paper consists of *three* sections: **A, B and C**
- (d) Answer **ALL** the questions in **section A** and **B**
- (e) Answer any **two** questions from section C
- (f) All questions should be written in the spaces provided on this question paper.
- (g) Answer all questions in English

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAX. SCORE	CANDIDATE'S SCORE
A	1-14	30	
B	15-19	20	
C	20	20	
	21	20	
	22	20	
TOTAL		90	

*This paper consists of 12 printed pages.
Candidates must check to ascertain that all pages are printed as indicated
and that no question(s) is/are missing.*

SECTION A (30 MARKS)

Answer all questions in the spaces provided

1. (a) Give the meaning of the following terms. (1mk)
- (i) Plantation farming (1mk)
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-
- (ii) Large scale farming (1mk)
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- (b) Give two reason why ranching is important in the arid and semi- arid areas of Kenya. (1mk)
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-
2. (a) State one reason why farmers should carefully consider the following factors before selecting a tool or implement for land preparation. (1mk)
- (i) Type of tilth (1mk)
-
-
- (ii) Cost of the tool or implement. (1mk)
-
-
- (b) List two tertiary operations carried out during land preparation. (1mk)
-
-
-
3. Name two climatic factors which influence the rate of soil formation. (1mk)
-
-
-
4. Outline two ways through which rough soil texture influence crop production. (1mk)
-
-
-

5. State one role of humus in the soil. (1mk)
-
-
6. Name two processes through which carbon is returned to the atmosphere in the carbon cycle. (1mk)
-
-
-
7. Name two methods of layering. (1mk)
-
-
-
8. State one difference between Topping and Top-dressing. (1mk)
-
-
9. State two factors which would lead to the occurrence of blossom-end disease in tomatoes. (1mk)
-
-
-
10. (a) State two objectives of land redistribution in Kenya. (1mk)
-
-
-
- (b) State four functions of a manager on the farm. (2mks)
-
-
-
-
11. Name two pests which attack stems of crops. (1mk)
-
-
-

12. Give four cultural crop disease control measures. (2mks)

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13. Name four financial documents which can be kept in an Agricultural farm. (2mks)

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14. Name any two post harvest practices. (2mks)

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15. List four environmental factors that affect the effectiveness of herbicides. (2mks)

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16. Mention four ways of improving land as a factor of production. (2mks)

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17. Give four ways of improving labour in the farm. (2mks)

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18. Name two methods of harvesting agro forestry trees. (1mk)

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SECTION B (20 MARKS)

Answer all questions in this section

19. The table below shows a relationship between marginal revenue and marginal cost, for the maize crop produced at the DAP fertilizer cost of Ksh 300 per 10kg bags.

The crop was harvested and sold at Ksh 200 per 20kg bag.

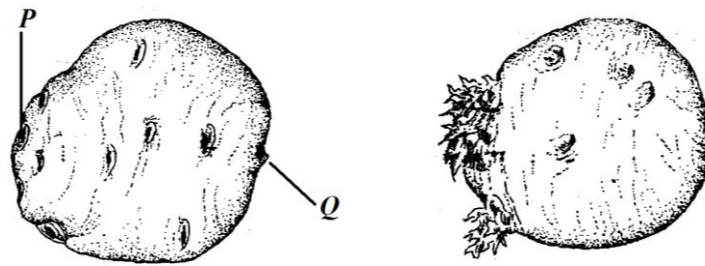
DAP Fertilizer in (10kg bag)	Maize yield in (20kg bag)	Total revenue (Ksh)	Total cost (Ksh)	Marginal Revenue (Ksh)	Marginal cost (Ksh)
0	10.5				
1	20.5				
2	42.5				
3	58.5				
4	60.0				
5	60.5				
6	58.5				
7	56.0				

- (a) Calculate the total revenue when 3 bags and 4 bags of DAP fertilizer were applied.

(1mk)

- (b) Calculate the marginal revenue at the level 2 and 3 of DAP fertilizer application. (2mks)

20. Below is a figure showing a planting material which has been fully prepared for planting. Study it carefully and use it to answer the questions that follow;



(a) Name the method that was used to prepare the material drawn above. (1mk)

.....

(b) Name the parts of the diagram labeled

P

Q.....

(c) State one advantage the farmers realized after using the above planting material. (1mk)

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21. A farmer applied two sets of fertilizer during planting and top-dressing. When planting he applied NPK (25:20:15) and Urea (46:5:0)

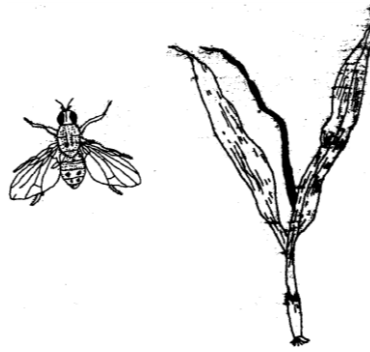
(a) Explain briefly the meaning of figures NPK (25:20:15) (3mks)

.....

(b) Giving a reason classify the two types of fertilizer the farmer applied on his farm. (4mks)

Fertilizer	Class	Reason
NPK (25:20:15)		
Urea (46:5:0)		

22. Use the figure below to answer the questions that follow.



(a) Identify the pest illustrated in the figure above. (1mk)

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.....

(b) State one symptom of damage shown on the crop that helped you to identify the pest. (1mk)

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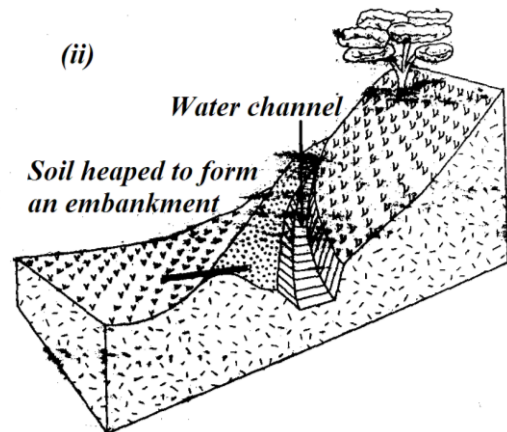
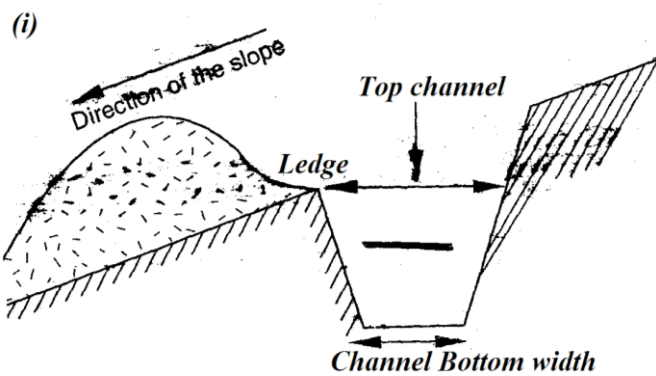
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(c) State the most effective method that can be used to control the pest. (1mk)

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23. The diagrams below shows two different types of terraces used to control soil erosion. Study them carefully and answer the questions that follow;



(a) Identify terrace;

(i)

.....

(ii)

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(b) Give the width of

(i) Top channel =

(ii) Bottom channel =

(1mk)

SECTION C

Answer any two questions in the spaces provided after question 22.

24. (a) Explain five reasons for controlling weeds. (10mks)
- (b) Outline the four steps followed in hay making. (4mks)
- (c) Explain the importance of Agro forestry trees. (6mks)
25. (a) Describe the production of millet under the following sub headings.
- (i) Land preparation (3mks)
- (ii) Planting (4mks)
- (iii) Harvesting (3mks)
- (b) Describe the following economic laws and principles of agricultural economics
- (i) The law of Diminishing Returns (2mks)
- (ii) The principle of profit maximization. (2mks)
- (iv) The law of substitution. (2mks)
- (c) Explain briefly how the following factors influence agriculture;
- (i) Biotic factors. (2mks)
- (ii) Government policy. (2mks)
26. (a) Explain why the following places should be considered during soil sampling.
- (i) Cattle bomas. (2mks)
- (ii) Water ways (2mks)
- (b) Outline four factors considered when selecting a good nursery site. (4mks)
- (c) Describe the soil sampling procedure (6mks)
- (d) Explain six reasons why farmers need to keep good farm records. (6mks)

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ANSWERS:

Order a copy of answers from www.schoolsnetkenya.com/order-e-copy

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