

Name: Index no

School: Candidate's sign

Date:

443/1
AGRICULTURE
PAPER 1
JULY/AUGUST 2011
TIME: 2 HOURS

BUSIA DISTRICT JOINT EVALUATION TEST

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

Agriculture
Paper 1

INSTRUCTIONS TO CANDIDATES:

- Write your **name** and **index number** in the spaces provided.
- This paper consists of three section **A, B** and **C**
- Answer **all** the questions in section **A** and **B**
- Answer any **two** questions in section **C**.
- Answers should be written in the spaces provided in this booklet.

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-17	30	
B	18-22	20	
C		20	
		20	
	TOTAL	90	

This paper consists of 8 printed pages. Candidates should check to ascertain that all papers are printed as indicated and that no questions are missing

SECTION A: (30MARKS)

Answer all questions in this section in the spaces provided.

1. Give **four** advantages of mixed farming. (2mks)

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2. State **two** ways in which human health affects agricultural production. (1mk)

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3. Name **two** agricultural organizations for the youth. (1mk)

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4. State **four** importance of draining agricultural land. (2mks)

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5. State **four** objectives of land reforms in Kenya. (2mks)

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6. State **four** sources of agricultural credit to farmers. (2mks)

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7. Give **four** effects of soil erosion. (2mks)

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8. State **three** deficiency symptoms associated with potassium in crops (1½mks)

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9. Give **four** advantages of land title deed to a farmer. (2mks)

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10. State **three** cultural Practices that can be used to control maize streak disease. (1½mks)

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11. State **two** precautions to be taken when harvesting cotton. (1mk)

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12. Give **two** disadvantages of minimum tillage. (1mk)

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13. State **five** benefits of Agroforestry trees. (2½mks)

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14. Give **four** types of records that can be kept by a crop farmer. (2mks)

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15. Give **four** factors that influence the quality of hay. (2mks)

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16. Give **four** reasons why seeds a may fail to germinate after planting. (2mks)

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17. Give **five** functions of a farm Manager.

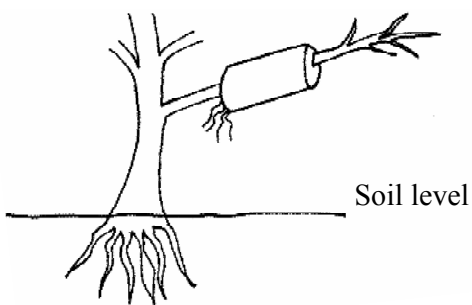
(2½mks)

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SECTION B: (20 MARKS)

Answers all 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.

(1mk)

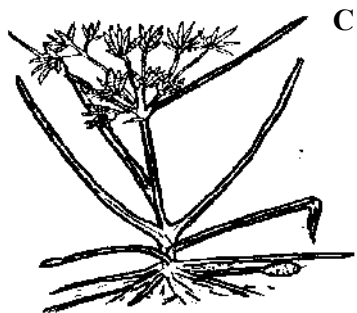
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(ii) State **three** ways of initiating faster root development in propagation method illustrated.

(3mks)

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19 The diagrams below shows, weeds.



(a) Identify the weeds C and D.

(1mk)

C.....

D.....

(b) State why it is difficult to control weed C

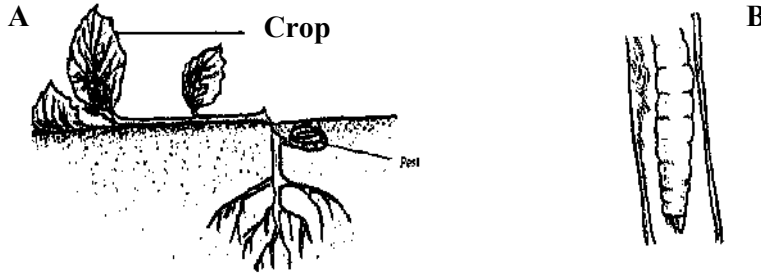
(1 mk)

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(c) State **two** economic importance of weed **D** (1 mk)

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20. The diagrams below A and B illustrates some field pests. Study them carefully and answer the questions that follow.



(a) Identify pests A and B. (1 mk)

A.....
B.....

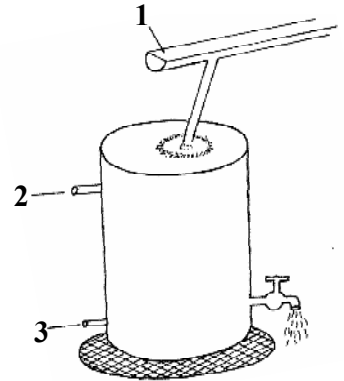
(b) State **two** damages caused by pest B to a crop of maize. (1 mk)

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(c) Give **two** cultural practices carried out to control the pest in A. (1 mk)

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21 Below is a diagram of a domestic tank. Study it and answer the questions that follow.



a) Name the parts labeled 1,2,3. (3mks)

1.....
2.....
3.....

b) Outline the properties of clean water. (7mks)

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SECTION C: (40 MARKS)

Answer any two questions in this section in the spaces provided after questions 24.

22. Describe the establishment and management of grass pasture to the time it is ready for grazing under the following subheadings.

- a) Land preparation (6mks)
- b) Planting (7mks)
- c) Field management practices. (7mks)

23. (a) What is a production function ? (1mk)

(b) A farmer has a piece of land where he has been growing millet. His farm records of millet production for 9 years is as shown below and only one input factor is considered i.e fertilizer application.

Year	Fertilizer applied in (bags)	Total out put of millet in (bags)
1992	0	4
1993	2	10
1994	4	28
1995	6	42
1996	8	52
1997	10	60
1998	12	66
1999	14	66
2000	16	64

(i) Using the above data and an appropriate scale draw a graph to show the relationship between inputs and total output. (5mks)

(ii) From the graph you have drawn how many bags of millet the farmer will obtain if he applied 9 bags of fertilizer. (½mk)

(iii) Calculate the farmers MP (marginal product) for the year 1994. (1mk)

(iv) Calculate the average product for the year 1996. (1 mk)

(v) What rate of fertilizer application would the farmer choose if he wanted to grow millet in 2001 Give a reason. (1 mk)

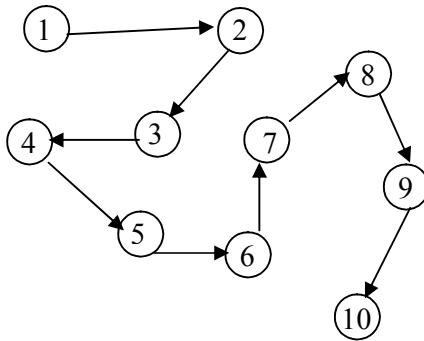
(c) On 1st June 2007 Bidii farm purchased on credit the following items from valley agro-vet

- 15 bags of sow and weaner meal 100kg each shs 1350 per bag.
- 20 bags of finisher meal 70kg each shs 800 per bag
- 14 bag D.S.P fertilizer 50kg each shs 1800 per bag
- 20 bags of seed maize 10kg each shs 1050 per bag
- 2 milking churns 50 litres each shs 3,500 per can
- 4 pruning knives (medium sized) shs 400per knife

(i) Prepare the purchase order that Bidii farm made to valley agro-Vet. (7mks)

(ii) Calculate the value of each item purchased and the total value of the order. (3½ mks)

24. The diagram illustrates some method of collecting spoil samples from a field. Carefully study the illustration and answer the questions that follow.



- a) Identify the method illustrated. (1mk)
- b) State **four** precautions that a farmer should take when collecting a representative soil sample. (4mks)
- c) Distinguish between soil sampling and soil testing. (2mks)
- d) Outline the procedure to be followed in preparing soil sample collected for laboratory testing. (4mks)
- e) Give **two** pieces of information that should accompany the soil sample. (2mks)
- f) Draw a well labeled diagram to illustrate soil profile. (7mks)

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