

Name: ..... Index No.:.....  
 School.: ..... Candidate's Sign:.....  
 Date:.....

443/1  
 AGRICULTURE  
 PAPER 1  
 JULY/AUGUST - 2015  
 TIME: 2 HOURS

**TRANS-NZOIA COUNTY JOINT EVALUATION EXAM – 2015**  
*Kenya Certificate of Secondary Education (K.C.S.E)*

443/1  
 AGRICULTURE  
 PAPER 1  
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**INSTRUCTIONS TO THE CANDIDATES**

- Write your *name*, *index number*, and *school* 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**.
- All answers should be written in spaces provided

**For Examiner's Use Only:-**

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 18	30	
B	19 – 22	20	
C		20	
	23 – 25	20	
	<b>Total Score</b>	<b>90</b>	

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

**SECTION A: (30 MARKS)**

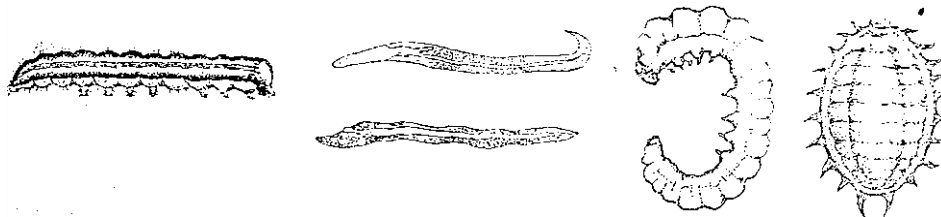
**Answer all questions in this section.**

1. State **two** field practices carried out to maintain an optimum plant population. (1 mk)
2. State **four** factors that affect the rooting of cuttings in tea and sugar cane. (2 mks)
3. Give **two** ways of controlling damping off in vegetable nursery. (1 mk)
4. Give **two** examples of the types of products experienced in product- product relationship. (1 mk)
5. (a) State **two** roles of the element magnesium in crop growth. (1 mk)  
(b) List any **six** important soil micro-nutrients to crops. (3 mks)
6. Name **four** materials required during the budding in crop production. (2 mks)
7. Give **four** roles of micro-organisms in the soil that are beneficial to crops. (2 mks)
8. Define the following terms as used in crop production.  
(i) Economic injury level. (1 mk)  
(ii) Integrated pest management. (1 mk)
9. Give a reason for carrying out each of the following practices in tomato nursery.  
(i) Pricking out. (1 mk)  
(ii) Hardening off (1 mk)
10. State **four** qualities of good farm record. (2 mks)
11. Distinguish between **shifting cultivation and nomadic pastoralism**. (2 mks)
12. List **two** advantages of tissue culture. (4 mks)
13. Outline **four** practices that can be applied to increase light intensity to crops. (2 mks)
14. State **one** importance of each of the following crops.  
(i) Sweet Potatoes (½ mk)  
(ii) Ground nuts (½ mk)  
(iii) Tobacco (½ mk)  
(iv) Maize (½ mk)
15. Name **two** types of inventory records. (2 mks).

**SECTION B (20 MARKS)**

**Answer all questions in this section**

16. The diagram below illustrates crop pests.



- (a) Identify the pests labelled K, L, M and N. (4 mks)
- (b) Which of the pests above commonly attacks seedlings in the nursery? (1 mk)
- (c) State the damage caused by pest labelled L in crops. (1 mk)

17. Alfa farm bought the following on credit from Betan Agro-vet on 6-03-2005.

- 15 bags of chick marsh, 60 kg each 1,200/=
- 20 bags of maize germ, 50 kg each at 300/=
- 17 bags of D.A.P. fertilizer, 50 kg each at 1,400/=
- 40 bags wheat seeds, 3 kg at 300/= per bag.
- 9 sickles at 300/= per sickle

- (a) Use the diagram below to complete purchase orders below.

Alfa Farm	Purchase Order
P.O. BOX 102, KITALE	No. 5691
	Date 6/3/2005

To Beta Agro-vet  
P.O. Box 69 KITALE

Please supply us with the following;

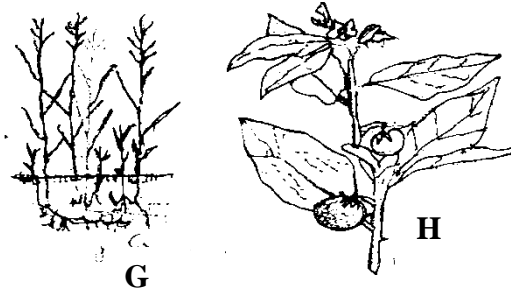
ITEM	PARTICULARS	QUANTITY
1		
2		
3		
4		
5		
Ordered by _____ Signature _____		
Authorized by _____ Signature _____		

(2 ½ mks)

(b) Calculate the value of each item purchased and total value of the order.

(2 ½ mks)

18. Diagram G and H shows weeds.



(a) Identify the weeds.

(2

mks)

G - .....

H - .....

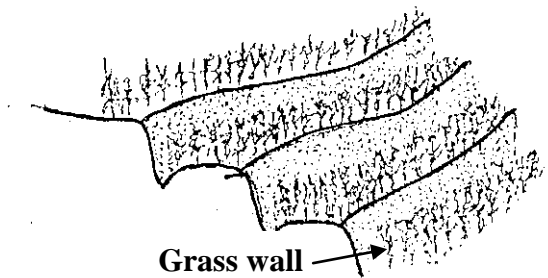
(b) State **two** economic importance of the weed shown in diagram G.

(2 mks)

(c) Why is it difficult to control the weed in diagram G.?

(1 mk)

19. Study a section of the diagram of soil conservation practices shown below then answer the questions that follow.



(a) Identify any **two** soil conservation practices on the diagram, other than grass wall.

(2

mks)

(b) Explain any **two** ways in which the grass wall helps to conserve soil.

(2 mks)

**SECTION C (40 MARKS)**

**Answer two questions in this section.**

20. (a) State **four** methods of preparing planting materials in readiness for planting.

(4 mks)

(b) Explain **four** factors which determine the scale of production in extensive and intensive farming.

(8 mks)

(c) State **eight** practices carried out to ensure field hygiene.

(8

mks)

21. (a) State **six** advantages of a mixed pasture. (6 mks)
- (b) Explain **five** roles of trees in soil and water conservation. (10 mks)
- (c) State **four** conditions that should be observed when harvesting to ensure that cotton picked is of high quality. (4 mks)

22. The following information was extracted from the farm records of **Kiriamburi Farm** as at 31-12- 2012

Sale of poultry	5,000
Sale of milk	6,000
Telephone bill	1,000
Purchase of feeds	2,500
Purchase of calves	3,000
Purchase of lambs	2,800
Sale of goats	5,000
Closing valuation	150,000
Rent	2,000
Casual Labour	2,500
Sale of cereals	12,000
Opening valuation	140,000
Machinery depreciation	500
Interest on loan	400
Purchase of chicks	800
Sale of sukumawiki	500

- (a) Prepare a Profit and Loss Account for Kiriamburi Farm using the above information. (10 mks)
- (b) Explain the role of Agricultural Co-operatives in Kenya. (10 mks)