NAME	ADM NUMBER
	SIGNATURE
	DATE

443/1 **AGRICULTURE** PAPER 1 **TIME: 2 HRS** JULY/AUGUST 2016

NTIMA, NYAKI AND MUNICIPALITY CLUSTER EVALUATION 2016 Kenya Certificate of Secondary Education (K.C.S.E)

AGRICULTURE

Paper 1 July/August 2016 **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 the questions in section A and B and any other two from section C.

FOR EXAMINER'S USE ONLY

Section	Maximum Score	Candidates Score
A	30	
В	20	
С	20	
	20	
TOTAL SCORE	90	

SECTION A 30 MARKS (ANSWER ALL QUESTIONS)

1.	State two ways by which Agriculture contributes to Employment	(1 mk)
2.	Name two methods of farming considered outdated	(1 mk)
3.	State three benefits of good soil structure in crop production	(1 ½ mks)
4.	State two effects of HIV/AIDS on Agricultural Production	(1 mk)
5.	State the conditions under which the opportunity cost is zero in a farming enterprise	(2 mks)
6.	Name two types of labour records	(1 mk)
7.	State four ways of improving farm labour productivity	(2 mks)

	Name four types of financial documents.	(2 mks)
•	Distinguish between oversowing and undersowing as used in pasture establishment	(1 mk)
).	Give four government policies that influence agricultural production	(2 mks)
•	State two advantages of tenancy system in farming	(1 mk)
•	Explain two advantages of biological control of pests in crops	(1 mk)
•	Name two categories of tomato varieties grown in Kenya	(1 mk)
•	a) Define the term elasticity of demand as used in agricultural economics	(2 mks)
	b) State four factors that affect elasticity of demand	(2 mks)

15.	Name the form of soil water that is available to crops	(1 mk)
16.	State three factors that have direct influence on soil formation	(1 ½ mks)
17.	List four characteristics of crops grown for green manure	(2 mks)
18.	List four advantages of timely harvesting of crops	(2 mks)
19.	State two disadvantages of intercropping	(1 mk)
20.	State two deficiency symptoms of potassium in crops	(1 mk)

SECTION B (20 MKS) Answer all the questions in this section in the spaces provided

21. The diagram below shows a Kale seedling attacked by a pest

a) Identify the pest		(1 mk)
b) What mk)	damage do cause to the	es the pest e crop? (1
c) State one method of controlling the pest		(1 mk)
d) Name two insect pests other than the one the field	e identified in (a) above that attack Kale in	(2 mks)

22. The diagram below shows a banana tissue culture. Study it and answer the questions that follow

a) Name two ways of inducing	ng the rooting of p	Glass container		(2 mks)
b) Outline three steps follow	din the developm			(3 mks)
		— Culture medium — Developing root	5	
c) State one advantage of pro	ppagating crops by	use of tissue culture	technique	(1 mk)
3. The diagram below illustrates and answer the questions that	s a physical methot t follow	od that is used to cont	rol soil erosion. Stu	dy it carefull
a) Name the physical soil ero	osion control meth	od illustrated by the	diagram above	(1 mk)
		D		
b) Name the part labelled D	on the diagram			(1 mk)
c) State four places where wa	ater from the struc	eture named in (a) abo	ove is discharged (ET) FORM 4-	(2 mks) AGRICULTURI

A farmer has 16 hectares of land. About 6 ha are under permanent pasture. He plans to grow 6 ha of beans. In the previous seasons, he hired casual workers at the rate of 80 man days per hectare. The cost was Kshs. 30 per man day. This season he intends to hire a tractor to open the land at a cost of kshs. 600 per hectare. He thinks that using a tractor will increase bean production from 800 to 1200 kg/ha. Harvesting will cost Kshs. 6 per kg of bean & seeds and the price of beans will be Kshs.60/kg Draw up a partial budget to show whether the change would be worthwhile

(5 mks)

SECTION C (40 MKS)

Answer any two questions in this section in the spaces provided

25. a) Outline five activities that may be undertaken in minimum tillage (5 mks)

b) State the qualities of a good farm manager (5 mks)

c) Explain five ways in which farmers may overcome risks and uncertainties in a farming business (10 mks)

26. a) Explain five ways through which soil loses fertility (5 mks)

	b) Explain five factors that determine the quality of farm yard manure	(5 mks)
	 c) Describe the field production of sorghum under the following sub-headings i) Seedbed preparation ii) Planting 	(5 mks) (5 mks)
27.	a) Describe the problems facing Agricultural co-operative societies in Kenya	(10 mks)
	b) Discuss the classification of pesticides according to their mode of action	(10 mks)