Name	Index No
School	Candidate's signature
443/1	Date
AGRICULTURE Paper 1	
July 2017	

Time 2 hours

FORM FOUR END OF SECOND TERM EXAM

Kenya Certificate of Secondary Education **AGRICULTURE**

Paper - 443/1 **July 2017 Time:** 2 hours

INSTRUCTIONS TO CANDIDATES

- Write your name and Index number in the spaces provided above.
- Sign and write the date of the examination in the spaces above.
- This paper consists of THREE sections A, B and C.
- Answer ALL questions in section A and section B and Two questions in section C.
- All answers must be written in this booklet.

This paper consists of 8 printed pages

Candidates should check the question paper to ensure that all the printed pages are printed as indicated and no questions are missing.

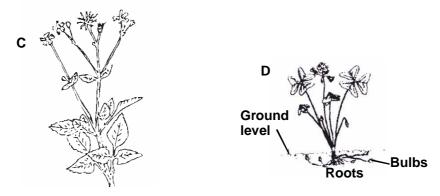
<u>SECTION A (30 marks)</u> Answer ALL questions in this section on the spaces provided.

1.	State two characteristics of plantation farming.	(1 mark)
2.	State three ways by which plant nutrients may be lost from the soil.	(1½ marks)
3.	Give four reasons why most farmer do not use green manure in crop production.	(2 marks)
		•••••
		•••••
4.	State four practices which help in achieving minimum tillage.	(2 marks)
		•••••
		•••••
		•••••
5.	State four ways of improving labour productivity.	(2 marks)
		•••••
		•••••
		•••••
		•••••
6.	Give two policies that the government has instituted inorder to regulate importation of goods.	(1 mark)
		•••••
7.	Name four physical forces of soil formation.	(2 marks)
		•••••
		•••••
		•••••
8.	Give three soil factors that influence soil productivity	(3 marks)
		•••••

9.	State two ways of overcoming water logging in crop production.	(1 mark)
10.	Other than drainage, name two other methods of land reclamation in Kenya.	(1 mark)
11.	Give a reason why a nursery bed should not be more than one meter wide.	(1 mark)
12.	Give four examples of land reform programs in Kenya.	(2 marks)
13.	State the meaning of each of the following terms as used in agricultural marketing. i) Monopolistic competition	(1 mark)
	ii) Oligopoly	(1 mark)
	iii)Monopsony	(1 mark)
14.	State two classes of herbicides based on formulation.	(1 mark)
15.	What is legislative method of pest control?	(1 mark)
16.	List four sites on which agroforestry trees can be established on a farm.	(2 marks)
17.	State four financial documents that should be kept on a farm	(2 marks)

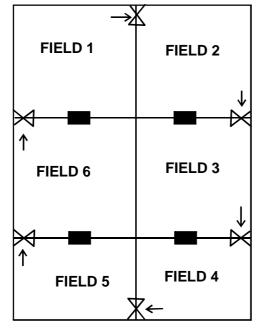
18.	. Give three disadvantages of using seed as planting material					
	SECTION B (20 marks)					

19. The diagram below illustrate common weeds in arable land. Study them and answer the questions that follow.



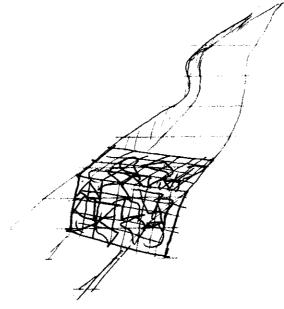
a)	Identify the weed labelled C and D.	(2 marks)
	C	
	D	
b)	Classify the weed labelled D according to plant morphology.	(1 mark)
c)	Give one reason why it would be difficult to control weed labelled D.	(1 mark)

20. The diagram below illustrates a grazing system. Study it carefully and answer the questions that follow.



a)	Identify the grazing system illustrated above.		(1 mark)
b)	State the advantages of the grazing system illust	rated above.	(2 marks)
			•••••
(۵			
c)	Give one factor that determine the nutrient conte	nt of nay.	(1 mark)
21.	The following information was extracted from N	Jakueni Farm Records for the fina	ncial vear ending
	on 30th June 2009. Study it and prepare a pro	fit and loss account for the farm.	(5 marks)
	- Rent received	sh 10,000	
	- Egg sale	sh 60,000	
	- Repair of tractor	sh 30,000	
	- Opening valuation	sh 80,000	
	- Interest on bank loan	sh 20,000	
	- Tax paid	sh 40,000	
	- Closing valuation	sh 90,000	
	- Purchase of farm inputs	sh 90,000	
	- Debts receivable from farmers co-op society	sh 100,000	
	- Maize sales	sh 50,000	

The illustration below shows a structure used for controlling soil erosion. Study it carefully and answer the questions that follow.



a)	Identify the structure.	(1 mark)
b)	Explain two ways in which the structure helps to control soil erosion.	(2 marks)
c)	State four factors that may lead to the type of soil erosion shown above.	(4 marks)
	SECTION C 40 marks) Answer two questions from this section. All questions carry equal marks.	
23.	a) Explain five ways in which the Kenyan Government can improved maize profood security in the country.	oduction to ensure (10 marks)
	b) Describe how water is treated to remove soil impurities.	(5 marks)
	c) Give a reason for each of the farm records kept in the farm	(5 marks)
24.	a) Describe production of cabbages under the following subheadings.	
	i) Seedbed preparation	(3 marks)
	ii) Transplanting	(8 marks)
	c) Describe how stem cuttings for tea planting are prepared.	(9 marks)

25.	a)	Explain	five	factors	that	influence	seed	rate i	n n	lanting	crops.	_
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(5 marks)

b) Explain seven physical methods of pest control

a)

(7 marks)

c) A bean farmer is cultivating five acres of land. The farmer tries to increase output by varying labour (by increasing the number of workers.) The change in total bean production in 90kg bags from varying labour (man-days) is shown in the table below. The marginal product is also shown in the table below.

Units of input (man-days)	Total products in (90kg bags)	Marginal production in (90kg bags)	Average product (90kg bags)
1	100	100	100
2	220		110
3	360	140	
4	460	100	
5	530	-	106
6	570	-	95
7	595	25	
8	600	5	
9	594		66
10	560	-34	56

Complete the table above by filling in the blank spaces in the marginal product and the average product columns.	verage (8 marks)
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