NAME..... INDEX NUMBER.....

SCHOOL..... CANDIDATE'S SIGNATURE.....

DATE.....

443/1 AGRICULTURE PAPER 1 **TIME: 2 HOURS** JULY/AUGUST 2018

Kenya Certificate of Secondary Education AGRICULTURE PAPER 1 **2 HOURS**

INSTRUCTIONS TO CANDIDATES:

(a) Write your name and index number in the spaces provided.

(b) Sign and write the date of examination in the spaces provided.

(c) This paper consists of three sections: A, B and C.

(d) Answer ALL the questions in Section A and B in the space provided.

(e) Answer any two questions in section C in the space provided.

(f) Candidates should check the question paper to ascertain that all the pages are printed as indicated

and that no questions are missing.

g) The paper has 17printed pages

For Examiners Use Only			
SECTION	QUESTION	MAXIMUM	CANDIDATE'S
		SCORE	SCORE
Α	1 - 19	30	
В	20 - 23	20	
С	24	20	
	25	20	
	24	20	
	26	20	
ТОТА	L SCORE	90	
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SECTION A-30 MARKS ANSWER ALL THE QUESTIONS

1. List two advantages of practicing mixed farming.	(1 mark)
	•••••
2. Differentiate between aquaculture and apiculture.	(1 mark)
	, , , , , , , , , , , , , , , , , , ,
3. State four advantages of organic farming in agricultural production.	(2 marks)
S. State four advantages of organic farming in agricultural production.	(2 11/01/5)
4. Name four aspects of rainfall that a farmer should consider during selection of	a crop to grow
in a given area.	(2 marks)
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5. State four ways through which the amount of light harnessed by a plant can be increased.

(2marks) 6.State two disadvantages of superfluous water in the soil during crop production.(1 mark) 7. Give two ways through which cultural beliefs and practices affect agriculture production (2 marks) 8. **Mention two ways** through which the pH of an alkaline soil can be lowered. (1 mark)

9. State three conditions of land that necessitate land cleaning before primary cultivation

(1½marks)

10.List three factors that determine the number of secondary cultivation done.(1 ½marks) 11.Name two methods of soil sampling. (1 mark) 12.State two of advantages of using crowns instead of suckers in pineapple production(1 mark) 13.List down four importance of budding in crop production. (2 marks)

14. State four cultural methods of water and soil conservation.	(2 marks)
15.Outline fourharmful effect of weeds in livestock forage production.	(2 marks)
16. Give four reasons for land redistribution in Kenya.	(2 marks)
17. State four ways in which labour productivity can be improved.	(2 marks)

18.**Outline three qualities** of a good farm manager. (1½ marks)

19. State three functions of National Cereals and Produce Board(NCPB) in Kenya. (1 ½ marks)

SECTION B- 20 MARKS. (ANSWER ALL QUESTIONS)

20. The diagram **below** shows a **nursery practice**.

root developing a.) Name the practice shown.	(1 mark)
b.) State three advantages of the practice over any other nursery practice.	(3 marks)
c.) State the function of L.	(1 mark)

21.) The **diagrams below** represent field practices carried out in tea.



a)	Name the method being undertaken in A and B.	(1 mark)
	A	
	В	•••••
b)	State two advantages of method B over method A.	(2 marks)
-) NI	are two other ways used to achieve some results as in practice P	(2 marks)
C)IN	ame two other ways used to achieve same results as in practice B.	(2 marks)
•••••		

22.) The **diagrams** below **represents** various weeds that grow in crop fields. Use the diagrams to answer the questions that follow.



23.) Mr. MWANGI has **4 hectares** of arable land.**1.5 hectares** are under wheat production,**0.5 hectares** under maize,**0.3 hectare** under fodder crops and the rest is under improved grass ley. He wishes to know if replacing **0.3 hectares** of maize with potatoes in the following season would be worthwhile. Fertilizer rate would have to be increased from **2 bags per hectare to 2.5 bags per hectare for potatoes** and an extra **40mandays** of casual labour per hectare would be required for the change. Average yield of maize and potatoes are **56 and 90 bags per hectare respectively**. The price of maize is **Ksh. 1200 per bag and Ksh. 300 per bag of potatoes**. Seed **costs Ksh1350 per 10 kg maize and ksh 200 per 50 kg potatoes**. DAP fertilizer **cost ksh 1400 per 50 kg bag.** Labour **cost ksh 150 per man day**. MWANGI requires **10 bags of potatoes seed and 1 bag of maize to cover 0.3 hectares of land**.

b) State the rational decision he should make basing on your calculations. (1 mark)	

a) Draw up a **partial budget** to **determine** the effect of the change. $(1/2 \times 8 = 4 \text{ marks})$

SECTION C ANSWER ANY TWO QUESTIONS IN THIS SECTION.

24.)Describe the production of tomatoes under the following subheadings.

a) Transplanting.	(10 marks)

b)Field management practices.

25.a) **Explain** the following **terms** as used in product-product relationships.

i) Supplementary products.	(2 marks)
ii) Complimentary products.	(2 marks)
b) Explain seven factors considered during farm planning.	(14 marks)

26.) a) Give five ways of controlling water pollution.	(10 marks)
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b)Explain five problems associated with credit in agricultural production.	(10 marks)