NAME	INDEX NO
SCHOOL	DATE

CANDIDATE'S SIGNATURE

443/1 AGRICULTURE. PAPER 1 FORM 4

JULY 2017 TIME: 2 HOURS

Kenya Certificate of Secondary Education

MURANG'A COUNTY MOCK

END OF TERM II EXAMINATION QUESTIONS

INSTRUCTIONS:-

- 1) Answer all questions in section **A** and **B** in the spaces provided.
- 2) Answer any **2** questions in section **C**.

SECTION A (30 MARKS)

Answer all questions in this section in the spaces provided.

- 1. Define the following terms as used in agriculture.
- (i) Pomoculture (1 mk)

(ii) Mixed farming (1mk)

2. State two processes by which farmyard manure lose nutrients when exposed to the open during preparation. (1mk)

3.	How do	the fo	ollowing	factors	affect seed	rate?	(2mks)
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(i) Seed purity?

(ii) Spacing?

4. State any four non-chemical methods controlling storage pests in a maize granary. (2mks)

5. What is fertilizer grade? (1mk)

Compiled and supplied online by Schools Net Kenya | P.O. Box 85726 – 00200, Nairobi Tel:+254202319748 | +254 733 836593 | email: <u>infosnkenya@gmail.com</u> Order answers online at: <u>www.schoolsnetkenya.com</u> 6. State four benefits of individual owner-operator land tenure system. (2mks)

7. List four roles of trees in soil conservation. (2mks)

8. Give four basis of classifying pests. (2mks)

9. List four details that appear on a delivery note. (2mks)

10. Give two reasons why farmers are encouraged to practice organic farming. (1mk)

11. State four ways in which burning of vegetation may lead to loss of soil fertility. (2mks)

12. State four features that should be considered when choosing water pipes for use on the farm. (2mks)

13. Give three reasons for early seedbed preparation. $(1 \frac{1}{2} \text{ mks})$

14. State three biotic factors that influence crop production. $(1 \frac{1}{2} \text{ mks})$

15. State four advantages of row planting in crop production. (2mks)

16. Give the reason for breaking seed dormancy. (1mk)

17. State four reasons for pruning fruit crops. (2mks)

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SECTION B (20 MARKS)

Answer all questions in this section in the spaces provided.

19. Mr. Mwangi wishes to know whether replacing 3 hectares of maize with Irish potatoes the following seasons would be worthwhile. The fertilizer cost would be increased from Ksh. 4,000 per hectare to Ksh. 6,000 per hectare. He also incurs cost of maize seeds at Ksh 1,200 per hectare. The cost of Irish potatoes seeds is Ksh. 3,000 per hectare. The income from maize was Ksh. 90,000 and for Irish potatoes will be Ksh. 120,000.

(a) Draw up a partial budget for Mr. Mwangi's farm. (4mks)

(b) With a reason, what advice can you give to Mr. Mwangi? (1mk)

20. The diagram below illustrates on method of crop propagation in bananas. Study it and answer the questions that follow.



(a) Identify the method of propagation illustrated. (1mk)

(b) Name solution labeled M

(c) State three advantages of using this method in crop propagation. (3mks)

21. The diagrams labeled A₁, A₂, A₃ and B below illustrate materials and methods of vegetative propagation. Study them and answer the questions that follow.



- (a) Name the part labeled A_1 and A_2 . (2mks)
 - A₁ _____ A₂ _____
- (b) Name the methods of propagation illustrated in diagrams A₃ and B.(2mks)
 - A 3 _____ B _____

(c)Give crop that is propagated using method B above. (1mk)

22. The diagram below illustrates an experiment on soil. Study carefully and answer the questions that follow.



(a) State the aim of the experiment. (1mk)

(b) If the volume of water illustrated in the measuring cylinders was observed after one hour, identify the soil samples labeled A and B. (2mks)

A-

B-

(c) State two ways in which the soil structure of the soil sample labeled C above can be improved. (2mks)

SECTION C (40 MARKS)

Answer any two questions from this section.				
23. (a) Outline farming activities which may encourage soil erosion.	(8mks)			
(b) Explain four ways in which;-				
(i) Health (eg HIV and AIDS) limits agricultural production. Compiled and supplied online by Schools Net Kenya P.O. Box 85726 – 00200, Nairobi Tel:+254202319748 +254 733 836593 email: <u>infosnkenya@gmail.com</u>	(4mks)			

(ii) Government policy improves agricultural production.	(4mks)	
(iii) Low level of education and Technology influences agriculture	. (4mks))
24. (a) Give four factors that determine the nutrient content of hay.	. (4mks)	
(b) Explain ten roles of a farm manager in agricultural production.	(10 mks)	
(c) Describe the harvesting of tea.	(10 mks)	
25. (a) Explain ten cultural measures of controlling crop diseases.	(10 mks)	
(b) List four sources of capital to the Kenyan farmer.	(4mks)	
(c) (i) Give two reasons for proper drying of maize grains before s	torage.	(2mks)
(ii) Explain four maintenance practices done to a maize store befor	e storage.	(4mks)

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