

NAME..... INDEX NO.....

443/1
AGRICULTURE
Paper 1
July/August, 2011
2 hours

CANDIDATE'S SIGNATURE.....

DATE.....

BARINGO COUNTY EDUCATIONAL IMPROVEMENT EXAMINATION 2011

Kenya Certificate of Secondary Education
443/1
AGRICULTURE
Paper 1
2 hours

Instructions to candidates:

- (a) Write your name and index number in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of three sections A, B and C.
- (d) Answer all the questions in sections A and B.
- (e) Answer all questions in section A and B and any two in section C.
- (f) All answers should be written in the spaces provided.
- (g) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1 - 16	30	
B	17 - 21	20	
C		20	
		20	
Total Score		90	

SECTION A: Answer all questions from this section in the spaces provided.

1. (a) What is Organic Farming? (1mk)
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- (b) Give **two** practices done during organic farming. (1mk)
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2. State **four** factors considered while siting compost manure. (2mks)
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3. Give **four** details shown on a marketing record. (2mks)
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4. State **four** disadvantages associated with concession or company land tenure system. (2mks)
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-
5. Under what conditions does opportunity cost not exist? (1mk)
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-
6. Name **four** importance of drainage as a land reclamation procedure. (2mks)
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-

7. Give **four** functions of a farmers' cooperative society. (2mks)

8. State **four** problems brought about by excess water on the farm. (2mks)

9. Give **four** factors that determine the number of times secondary cultivation is done on a seedbed (2mks)

10. Name **three** types of equipment that can be used to break hard pans and reduce the size of clods. (2½mks)

11. Give **four** reasons for paddocking pastures. (2mks)

12. State **five** post-harvest practices done to a crop product after harvesting. (1½mks)

13. State **four** objectives of agricultural research stations. (2mks)

14. List **four** possible causes of hardpans in crop production. (2mks)

15. State **four** good qualities of silage. (2mks)

16. List **two** functions of copper to plant growth. (1mk)

SECTION B: (20 MARKS)

Answer all the questions in this section in the spaces provided.

17. Below is a diagram of a crop pest. Study it and answer the questions that follow:-



(a) Give the identity of the pest. (½mk)

(b) State **three** types of damage the pests cause to crops. (1½mks)

(a) Give the identity of the above diagram. (½mk)

(b) Identify parts **A** and **B**. (1mk)

A _____

B _____

(c) Give **four** advantages of the above operation shown on the diagram in crop production. (2mks)

20. A farmer has 9 acres of land in which 3 acres is under tea. 3 acres is fallow. He wants to establish cotton in the remaining 3 acres. Casual labour hiring would demand 40 Man-days per acre at 100/= per man-day. Hiring a tractor would cost Kshs. 1,800/= per acre. Use of a tractor would improve cotton yield from 600kgms to 750kgms. Seed cotton per acre worth 40/= per kgm if well cultivated and timely planted. Harvesting costs Kshs. 100/= per 100kgms seed cotton. Prepare a partial budget indicating whether the change is worthwhile or not. (5½mks)

21. (a) Calculate the plant population per hectare of tomatoes planted at a spacing of 75cm by 60cm. show your work. (2mks)

- (b) State **four** factors that determine the depth of planting seeds. (2mks)

SECTION C: (40 MARKS)

Answer ANY TWO questions in this section in the spaces provided.

22. (a) State and explain **four** methods of water harvesting. (8mks)
- (b) Describe **six** precautions that should be considered while pruning mature tea bushes. (6mks)
- (c) Describe **three** methods of breaking seed dormancy. (6mks)
23. (a) Explain **six** cultural methods of controlling crop diseases. (6mks)
- (b) Describe the production of tomatoes under the following:-
(i) Transplanting: (3mks)
(ii) Field Management (5mks)
- (c) State and explain the influence of light aspects in Agriculture. (6mks)
24. (a) Describe **six** importance of farm budgeting. (6mks)
- (b) Discuss the advantages of land consolidation to a farmer. (10mks)
- (c) Describe precautions taken during the harvesting of coffee. (4mks)
