

NAME DATE

INDEX NO. CANDIDATE'S SIGNATURE

443/1
AGRICULTURE
PAPER 1 (THEORY)
July/August, 2010
TIME: 2 HOURS

MBOONI WEST DISTRICT JOINT EVALUATION TEST

Kenya Certificate of Secondary Education

443/1
AGRICULTURE
PAPER 1 (THEORY)
TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the spaces provided above.
2. This paper has **THREE** sections: A , B and C
3. Answer **ALL** the questions in section A and B and any **TWO** questions in section C
4. ALL answers **MUST** be written in the spaces provided.
5. Do not remove any pages from this booklet.

FOR EXAMINER'S USE ONLY

	Questions	Maximum score	Candidate's score
A	01-17	30 marks	
B	18-22	20 marks	
C	23-25	40 marks	
Total score			

*This paper consists of 10 printed pages.
Candidates should check to ensure that all pages are printed as indicated and no questions are missing*

SECTION A (30 MARKS)

Answer ALL the questions in the spaces provided.

1. Give **four** factors which characterise large scale farming. (2 marks)

.....
.....
.....
.....

2. Name **four** methods used for clearing land. (2 marks)

.....
.....
.....
.....

3. What is the importance of taking a farm inventory? (1 mark)

.....
.....
.....

4. State **two** effects of aphids on plants. (2 marks)

.....
.....

5. Give **four** reasons why it is undesirable to carry out minimum soil tillage operations before planting (2 marks)

.....
.....
.....
.....
.....
.....
.....

6. Why is it advisable to apply straight nitrogenous fertilizer to a crop of maize at a height of 30-45 cm? (2 marks)

.....
.....
.....

7. List **four** different problems brought by water in the farm. (2 marks)

.....
.....
.....

8. Give **four** reasons why the use of herbicides is discouraged during land clearing. (2 marks)

.....

.....

.....

.....

.....

9. State **four** management practices carried out on Agroforestry trees from planting to ageing of the same tree. (2 marks)

.....

.....

.....

.....

10. List **four** environmental conditions that may lead to low crop yields. (2 marks)

.....

.....

.....

.....

11. State **two** activities carried out during hardening-off of tomato plants in the nursery (1 mark)

.....

.....

12. Outline **two** ways through which rain drop erosion initiates the process of soil erosion (2 marks)

.....

.....

.....

.....

13. State **two** reasons for carrying out soil conservation in the farm (1 mark)

.....

.....

14. Name **four** factors that determine the depth of planting seeds in crop production C (2 marks)

.....

.....

.....

.....

15. Give **four** conditions that have led to fragmentation and sub-division of agricultural land in Kenya. (2 marks)

.....

.....

.....

.....

16. State **two** advantages of organic farming. (1 marks)

.....

.....

17. State **four** advantages of a good crop rotational programme. (2 marks)

.....

.....

.....

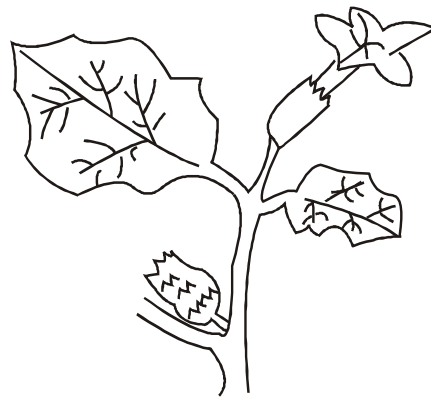
SECTION B (20MARKS)

Answer ALL questions in this section

18. Diagram X and Y represent two weeds



X



Y

i) Identify weeds:

X

Y

(1 mark)

ii) Give **two** economic importances of each of the weeds above

(1 mark)

(1

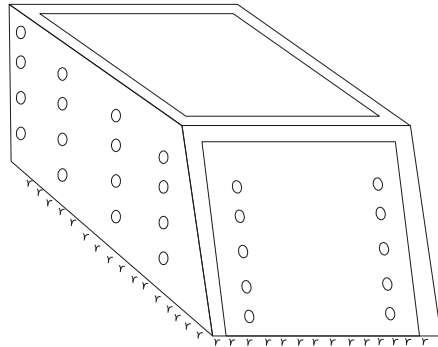
.....

.....

.....
 iii) Name **two** kinds of herbicides used to control the above weeds C. (1 mark)

.....

 19. The diagram shows a method of conserving forage.



(a) Identify the structure shown above (1 mark)

.....
 (b) Outline **two** qualities of a good quality silage (2 marks)

.....

 (c) Briefly explain the **three** main categories of silage losses (3 marks)

.....

 20. A farmer has a piece of land on which he can produce wheat, maize, and barley.

The yields and selling prices of the three crops as shown below:

Crop	Yield 90 kg bag	Selling price Kshs. Per bag
Maize	2000	750
Wheat	1400	900
Barley	1500	1200

The farmer decides to produce barley. Assuming the cost of producing any of the crops is the same.

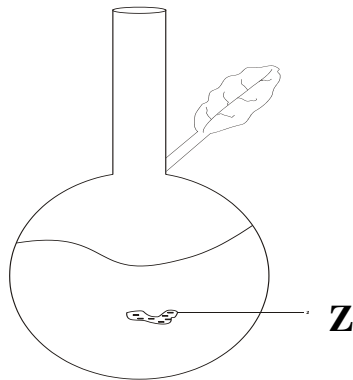
(i) Calculate the farmer's opportunity cost. Show your working (1½ marks)

.....
.....
.....
.....
.....
.....

(ii) Give reasons for your answer in (i) above (½ mark)

.....
.....
.....

21. Study the illustration below of a tomato fruit and answer the questions that follow



(a) Name the pest labelled z (1 mark)

(b) State two characteristics symptoms of attack by the pest named in (a) above (2 marks)

.....
.....
.....

(c) State two cultural control measures of the pest named in (a) above (2 marks)

.....
.....
.....

(d) Apart from pest Z identified above name two insect pests of tomatoes (2 marks)

.....
.....

22. Describe the procedure used during harvesting of sugarcane (2 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

SECTION C (40 MARKS)**Answer any TWO questions from this section in the spaces provided after question 25.**

- 23.** (a) What are the uses of farm records (6 marks)
- (b) Explain the problems farmers face in marketing agricultural produce (9 marks)
- (c) Describe various agencies and institutions involved in the marketing of agriculture produce. (5 marks)
- 24.** (a) Describe the methods used in preparing planting materials in readiness for planting (8 marks)
- (b) Explain the factors that may determine spacing of crop in the farm (8 marks)
- (c) Explain briefly the factors that influence timely planting (4 marks)
- 25.** (a) Describe the establishment of grass pasture from the time the land is ploughed using a mould board plough to the time the pasture is ready for grazing (10 marks)
- (b) What are the advantages of a mixed grass legume pasture over a pure grass pasture? (10 marks)

Dotted lines for writing.

(This area contains numerous horizontal dotted lines for writing.)

