

NAME _____

ADM NO _____

SCHOOL _____ SIGNATURE _____

AGRICULTURE
FORM FOUR
443/1
PAPER 1
MARCH/APRIL - 2013
TIME: 2HRS

PENTAGON JOINT EXAMINATION - 2013
WARENG DISTRICT
(Kenya Certificate of Secondary Education) K.C.S.E

Instructions :

- Write your Name and Index Number in spaces provided above
- This paper consists of three sections A, B and C
- Answer all questions in section A, and B and any other two questions in section C in the spaces provided in this booklet

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAX SCORE	CAN. SCORE
A	1-17	30	
B	18-21	20	
C	22-24	20	
		20	
TOTAL SCORE		90	

SECTION A (30 MARKS)

Instructions: Answer ALL the questions in this section in the spaces provided

1. State **two** reasons for discouraging the use of fire in seedbed preparation (1 mark)

2. State **four** information contained in a land title deed (2 marks)

3. List **four** factors that influence the depth of planting. (2 marks)

4. Differentiate between oversowing and undersowing. (1 mark)

5. Define the following terms as used in agricultural economics

a) Gross National Products(GNP) (1 mark)

b) National income (1 mark)

6. List **four** ways of harvesting water in the farm (2 marks)

7. State **two** factors that would determine the amount of fertilizer to be top dressed to a crop in the field. (1 mark)

8. Highlight **four** importance of farm accounts. (2 marks)

9. State **two** disadvantages of tissue culture. (1 mark)

10. State **four** objectives of land reforms in Kenya. (2 marks)

11. List **two** proper storage practices used in pest control. (1 mark)

12 a) Give any **four** factors which determine the number of operations done in a field before it is ready for sowing seeds. (2 marks)

b) State **four** cultural practices that can be used to control maize streak disease. (2 marks)

13 State the differences between

i) A nursery bed and a seedbed (2 marks)

ii) Macronutrient and micronutrient (2 marks)

14. Name any **two** diseases that affect bean production in the field (1 mark)

15. State **four** practices that should be carried out to maintain grass pastures. (2 marks)

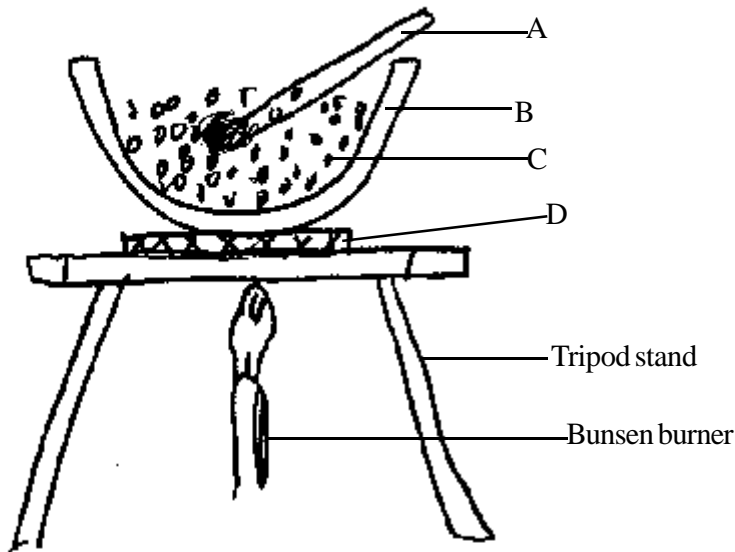
16. What is increasing returns in a production function (½ mark)

17. State **three** roles of trees in soil and water conservation. (1 ½ marks)

SECTION B. 20 MARKS

Answer **ALL** the questions in the spaces provided

18. The illustration below shows an experiment to find out the percentage of total water content of soil. Use it to answer the questions that follow.



a) Name the parts labelled (2 marks)

A _____

B _____

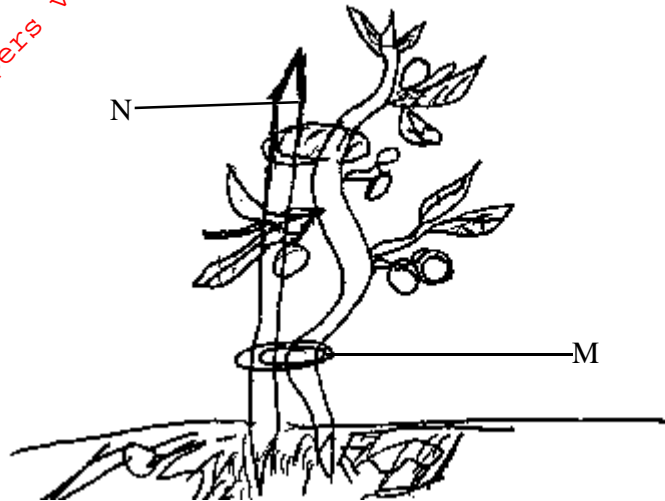
C _____

D _____

b) Explain the procedure followed

(4 marks)

19. Below is a diagram that illustrates one of the field practices carried out on some crops. Study the diagram and answer the questions that follow.



a) Identify the practice illustrated above.

(½ mark)

b) Name the materials used in N and M and their uses.

(2 marks)

Name N _____

Uses: _____

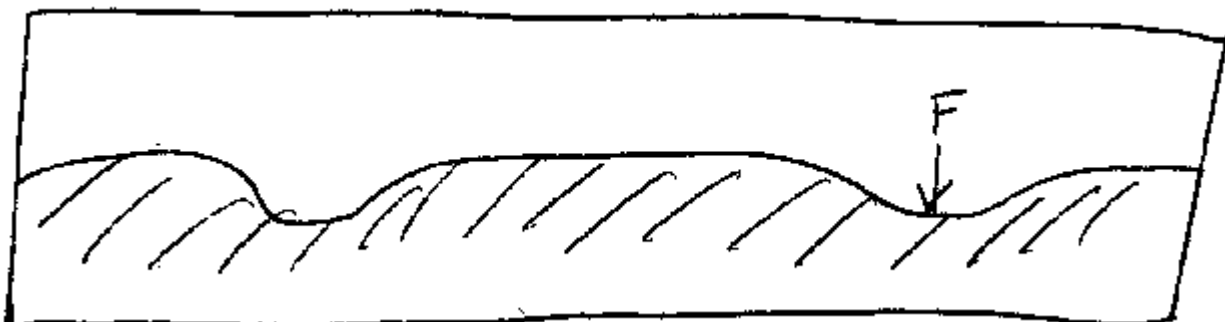
Name M _____

Uses _____

c) State **four** problems faced by a farmer who does not carry out the practice above.

(4 marks)

20. Below is a diagram of a terrace. Study it and answer the questions that follow



a) Identify the type of terrace illustrated. (½ mark)

b) Name the part labelled F. (1 mark)

c) Apart from the above named state any other three types of terraces. (3 marks)

21. Give three conditions for successful re-seeding in pasture management (3 marks)

SECTION C (40 MARKS)

Answer ANY TWO questions from this section in the spaces provided after question 24

22. a) Describe coffee harvesting under the following sub headings.

i) Stage of harvesting. (2 marks)

ii) Procedure of harvesting. (7 marks)

iii) Precautions to be observed while harvesting coffee. (3 marks)

b) Explain the cultural methods of soil erosion control. (8 marks)

23 a) Describe the procedure of silage making. (10 marks)

b) Give four reasons why green manure is not commonly used. (4 marks)

c) State six advantages of land consolidation. (6 marks)

24 a) Explain the different physical methods used in crop pest control. (16 marks)

b) Name four disadvantages that farmers experience when they use synthetic type of mulches. (4 marks)
