

MINISTRY OF EDUCATION
DEPARTMENT OF BASIC EDUCATION(SECONDARY)

FORM THREE END OF III- 2024

443/1 AGRICULTURE PAPER 1

TIME : 2 HOURS

NAMEADM/NOCLASS.....

Instruction to candidates.

- 1. Write your **Name**, **Class** and **Admission number** in the spaces provided above.*
- 2. This paper consists of **three** sections **A**, **B** and **C**.*
- 3. Answer **all** questions in section A and B.*
- 4. Answer **any two** questions from section C.*
- 5. **All** answers should be written in the spaces provided.*
- 6. **NB.** Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*
- 7. Additional foolscaps shall be provided for questions in section C.*

Question	Max score	Candidate Score	Total Score
<i>SECTION A</i>	<i>30Marks</i>		
<i>SECTION B</i>	<i>20marks</i>		
<i>Section C</i>	<i>40 Marks</i>		

SECTION A (30 MARKS)

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

1. State four reasons for intercropping. (2mks)
2. Give four advantages of intensive farming. (2mks)
3. What is meant by each of the following terms: (1mk)
(a) mixed cropping.
(b) mono-cropping
4. State four advantages of row planting in crop production. (2mks)
5. State four ways through which nitrogen is lost from the soil (2mks)

6 State four ways of harvesting water on the farm. (2 marks)

7. List four benefits of mulching in soil and water conservation. (2mks)

8. Name four farm records that should be kept by a poultry farmer. (2 marks)

9. Give FOUR disadvantages of using organic manures in crop production (2mks)

10.(i) Define opportunity cost (1mk)

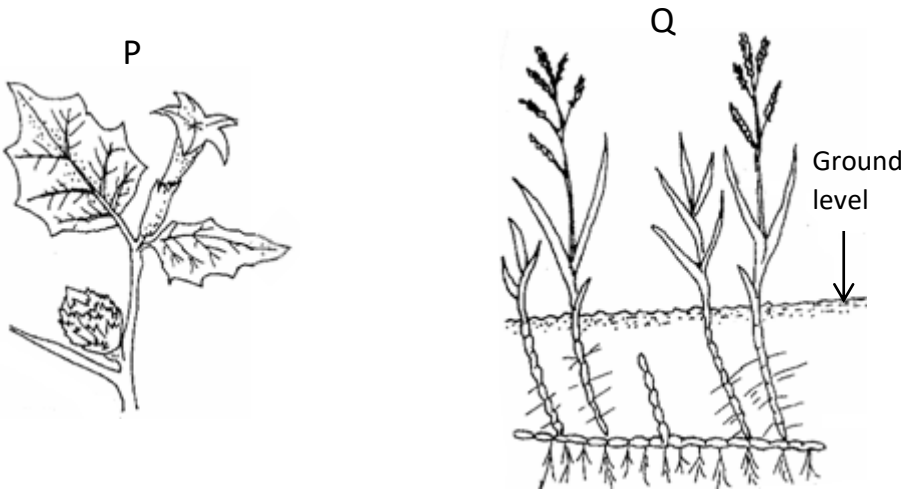
(ii) Name Two types of inventory records kept by farmers. (1mk)

11. (a) Give TWO importance of sub-soiling. (1mk)
12. Give two ways in which nutrients can be lost from silage in a silo (1 mk)
13. Give two ways in which pastures are classified. (1mk)
14. State four factors that determine the stage at which a crop is harvested. (2mks)
15. State four ways in which land reform can be implemented in Kenya. (2mks)
16. Give four factors that influence the number of secondary cultivations in seedbed preparation. (2mks)
17. Give four reasons why seed propagation is encouraged in crop production. (2mks)

SECTION B (20MARKS)

Answer all the questions in this section in the spaces provided

18. Below is a diagram of a weed P and Q . Study the diagrams carefully and answer the questions that follow.



(a). Identify the weed P illustrated above.

.....

(1mk)

(b)Why is weed Q illustrated above difficult to control?

(1 mk)

(c)State four ways in which weed Q can be controlled.

(2mks)

19. The table below shows pH values of different soil samples .Study it and answer the questions that follow.

Soil sample	pH value
S1	3
S2	4
S3	5
S4	6
S5	7
S6	8
S7	9
S8	10

(a) Which soil sample has the highest acidity? (1mk)

(b) State two ways in which the ph value of sample S8 can be lowered. (2mks)

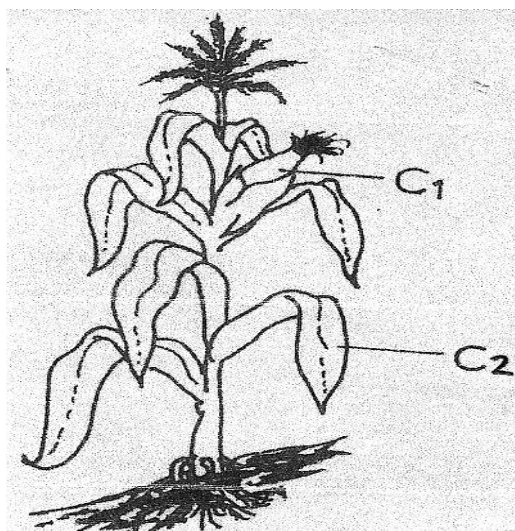
(c) Which of the above soil samples is suitable for growing tea? (1mk)

(d) .A member of Young Farmers Club was advised to apply a complete fertilizer 30:20:10 in a tomato plot measuring 10m long by 5m wide at the rate of 300kg per hectare.

(i) State the percentage of P_2O_5 in the complete fertilizer (1mk)

(ii) Calculate the amount of fertilizer the member would require for the plot .Show your working. (2mks)

20.a)Study the crop illustrated below and answer the questions that follow Study the crop illustrated in the diagram below and answers the questions that follow.

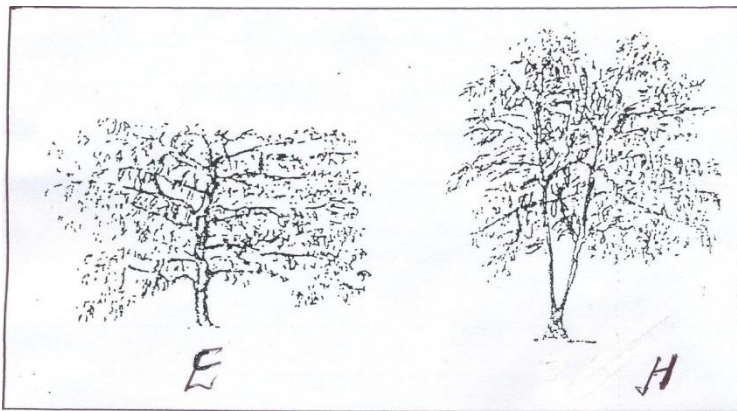


Name one insect pest which attacks the part labeled C1 and one disease which attacks the part labeled C2. (2mks)

Pest.....

Disease.....

b). The diagrams labeled E and H below are illustrations of coffee established using two different pruning systems. Study them and answer the questions that follow.



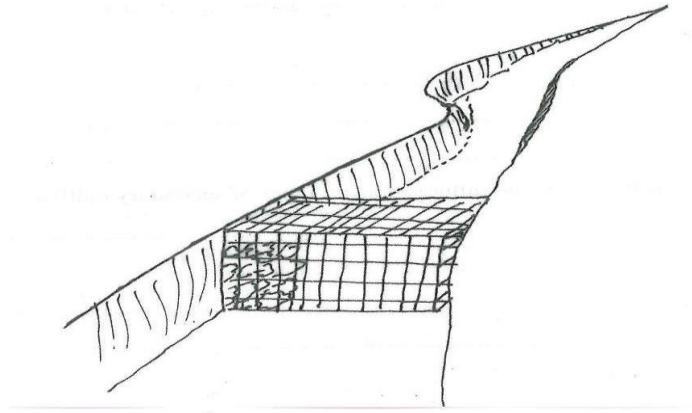
(a) Name the system of pruning illustrated in diagram E and H above. (2mks)

E.....

F.....

(b) Outline how the pruning system illustrated in diagram E is carried out (2mks)

21. The illustration below shows a structure used for controlling soil erosion. Study it carefully and answer the questions that follow



(a) Identify the structure.....(1mk)

(b) Explain two ways in which the structure helps to control soil erosion.
(2mks)

SECTION C (40 marks)

Answer any two questions in this section in the spaces provided after question 25.

22. (a) Explain eight factors that can encourage soil erosion. (8mks)

(b) Describe the seven management practices that should be carried out on a vegetable nursery after sowing seeds until the seedlings are ready for transplanting. (7mks)

c) Explain six factors that should be considered when selecting seeds for planting. (5mks)

23.(a) Outline SIX ways in which temperature affects agricultural production in Kenya. (6mks)

(b)i) Describe the role of magnesium in crop production. (5 marks)

(ii) Describe the harvesting of sugarcane. (3mks)

(c) Explain the importance of irrigation in crop production. (6marks)

24. (a) Explain six physical methods that can be used to control crop pests on the farm . (8mks)

(b) Describe the production of bulb onions under the following sub-heading:-

(i) field management. (4mks)

(ii) harvesting . (3mks)

(c) Explain seven factors that influence seed rates in crop production. (7mks)

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