



# MASENO SCHOOL MOCK – 2022

Kenya Certificate of Secondary Education



443/1

Paper 1

## AGRICULTURE Sept. 2022 – 2 Hours

Name ..... Admission Number .....

Class ..... Date ..... Candidate's Signature.....

### Instructions to candidates

- Write your name and admission number in the spaces provided above.
- Write your class, date of examination and sign in the spaces provided above
- This paper consists of three sections: **A**, **B** and **C**
- Answer **All** questions in section **A** and **B**
- Answer **any two** questions in section **C**.
- All answers should be written in the spaces provided.
- This paper consists of **13** printed pages
- Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
- Candidates should answer the questions in English.

### For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1-20	30	
B	21-24	20	
C		20	
		20	
Total Score		90	

**SECTION A** (30 MARKS)

*Answer ALL questions in this Section.*

1. State any two disadvantages of pastoral nomadism system of farming. (1mk)

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2. Name three forms of horticulture practiced in Kenya. (1½mks)

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3. State two benefits of optimum soil temperature in crop production. (1mk)

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4. State three advantages of adding organic matter to sandy soil. (1½mks)

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5. Give four conditions of land which may make it necessary to carry out reclamations practices. (2mks)

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6. State four reasons for deep ploughing during land preparation. (2mks)

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7. Give the reasons why water treatment is important. (1 ½ marks)

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8. Name two sources of underground water. (1mark)

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9. State three factors that determine the quality of compost manure. (1 ½ marks)

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10. What is the minimum number of people required to form a co-operative society. (1mk)

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11. Name four statutory boards that are involved in the marketing of crops. (2mks)

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12. Distinguish between intensive hedgerow and border planting forms of agroforestry. (2mks)

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13. List four financial books a farmer should keep. (2mks)

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14. State any four characteristics of a fertile soil. (2mks)

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15. State three precautions necessary during soil sampling. (1½mks)

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16. Differentiate between manure and fertilizer. (2mks)

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17. Give three factors that influence planting depth. (1½mks)

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18. How can crops be prepared before storage? (1½mks)

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19. Name one cause of blossom end rot in tomatoes. (½mk)

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20. Name the part harvested for each of the following crops. (1mk)

i) Onions .....

ii) Carrots .....



**SECTION B****(20 MARKS)***Answer any TWO question in this section*

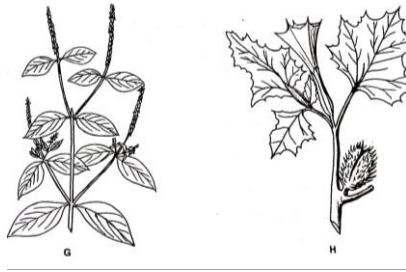
21. Study the following information which was extracted from Mr.Rambo's farm record on 31<sup>st</sup> Dec 1995.

	Ksh
Loans payable to bank	300,000
Five milking cows	250,000
400 layers	80,000
20 goats	30,000
Debts payable to Co-operative	20,000
Building and structures	600,000
Bonus payable to workers	19,000
Cattle feed in store	10,000
Animal drugs in store	4,000
Debts receivable	18,000
Breakages to repair	30,000
Cash at hand	20,000
Cash in bank	30,000
Spray equipment	12,000

Prepare a balance sheet for Mr.Rambo's farm using the information above.

**(10mks)**

22. The diagrams below illustrate some common weeds. Study them carefully and answer the questions that follow.



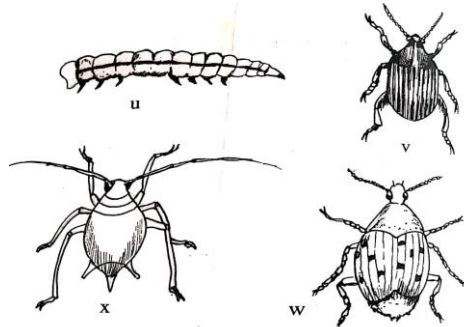
a) Identify the weeds illustrated in diagrams G and H. (2mks)

G.....  
H.....

b) State one harmful effect of the weeds G and H in livestock production. (1mk)

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23. The diagrams below illustrate some of the common bean pests, study the diagrams and answer the questions that follow.



a) Identify the parts labelled U,V,W and X. (2mks)

U.....  
V.....  
W.....  
X.....

b) Describe two methods of controlling pests Vand W. (2mks)

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24. 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.

a) State the percentage of  $P_2O_5$  in the fertilizer. (1mk)

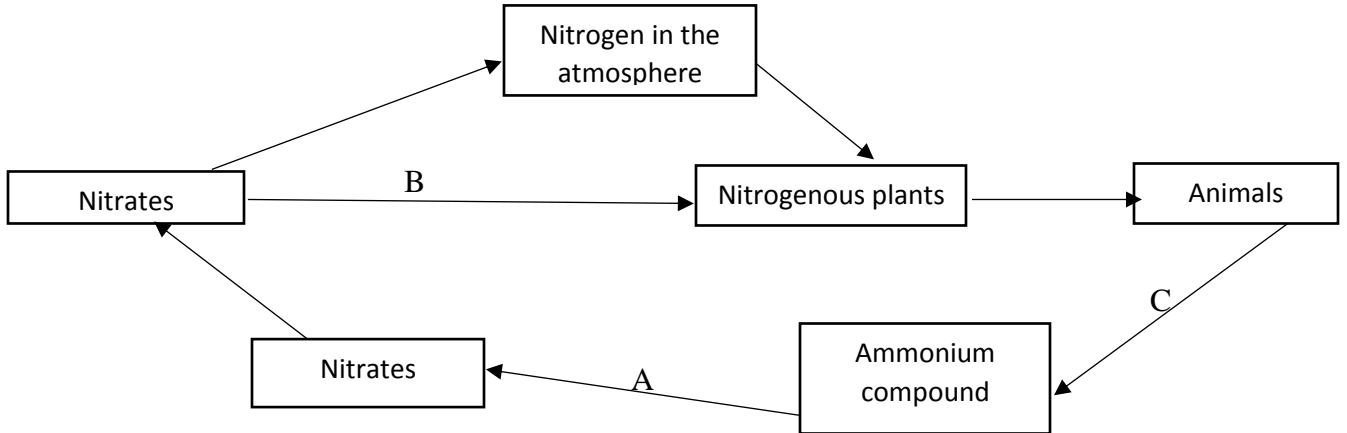
b) Calculate the amount of fertilizer the member would require for the plot.(Show your working)  
(2mks)



**SECTION C (40 MARKS)**

**Answer any 2 questions from this section.**

25. a) The figure below shows part of nitrogen cycle



i) What are the processes in the cycle at A, B and C? (3mks)

- A.....
- B.....
- C.....

ii) Describe the part played by leguminous plants (such as beans and peas in the nitrogen cycle, (3mks)

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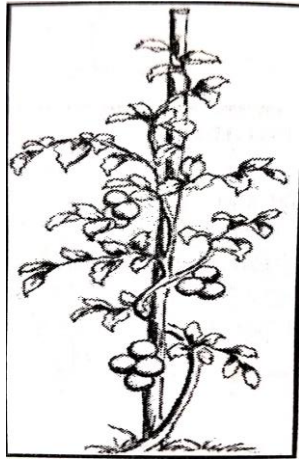
b) Nitrates dissolve easily in water. Explain why sandy soils often lack nitrates. (4mks)

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c) The diagram below represents a tomato plant. Study it and answer the questions that follow.



i) Identify the practice above.

(1 mark)

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ii) Outline disease and pests control methods in Tomato production.

(9mks)

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26. a) State the law of demand. (1mk)

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b) State four factors that determine the demand of a commodity in a free market economy. (4mks)

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c) What is elasticity of Demand? (1mk)

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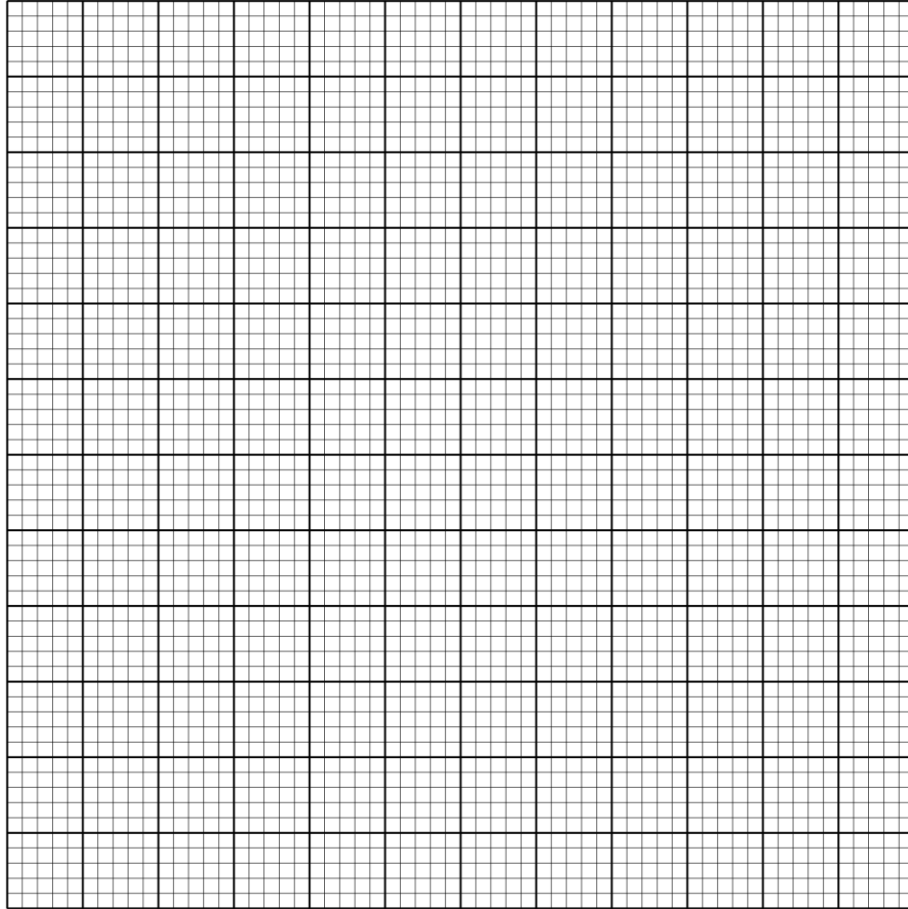
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d) The table below show the demand and supply of potatoes at UKULIMA market.

Price (Ksh)	Quantity demanded in (bags)	Quantity Supplied in (bags)
1200	50	250
1000	90	200
800	150	150
600	225	70
400	335	0

i) Using a suitable scale draw and label a graph showing the relationship between the demand and the supply of the potatoes at UKULIMA Market. (5mks)





ii) What is the equilibrium price of potatoes?

(2mks)

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iii) From the graph determine

a. The number of bags of potatoes that would be bought if the price per bag is Ksh 900(1mk)

b. The price of bags of potatoes if 180 bags are supplied.

(1mk)



e) Describe the problems of marketing of Agricultural produce.

(6mks)

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27. Describe the production of maize under the following sub headings.

a) Ecological requirement

(4mks)

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b) Land Preparation

(5mks)

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c) Field management and harvesting

(6mks)

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d) Explain any five factors affecting the efficiency and effectiveness of pesticides.

(5mks)

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