

**ALLIANCE HIGH SCHOOL
AGRICULTURE - FORM IV 2016
TERM ONE – END OF TERM
TIME TWO HOURS**

SECTION A (30 MARKS)

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

1. Define organic farming (1mark)
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2. List THREE soil constituents (1 ½ mark)
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3. Give FOUR benefits of crop rotation (1mark)
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-
4. State TWO disadvantages of using hydram pumps in pumping water in the farm. (1mark)
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5. List FOUR benefits of land consolidation in farming (2marks)
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-
6. Name a crop weed that is:
- (i) Parasitic to maize crop (½ mark)
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- (ii) Alternate host for rusts (½ mark)
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(iii) Aquatic (1/2 mark)

(iv) Has medicinal value (1/2 mark)

7. State THREE ways in which nitrogen is lost from the soil (1 1/2 marks)

8. State FOUR benefits of mulching in soil and water conservation (2marks)

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

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

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

11. (a) Give TWO importance of sub-soiling (1mark)

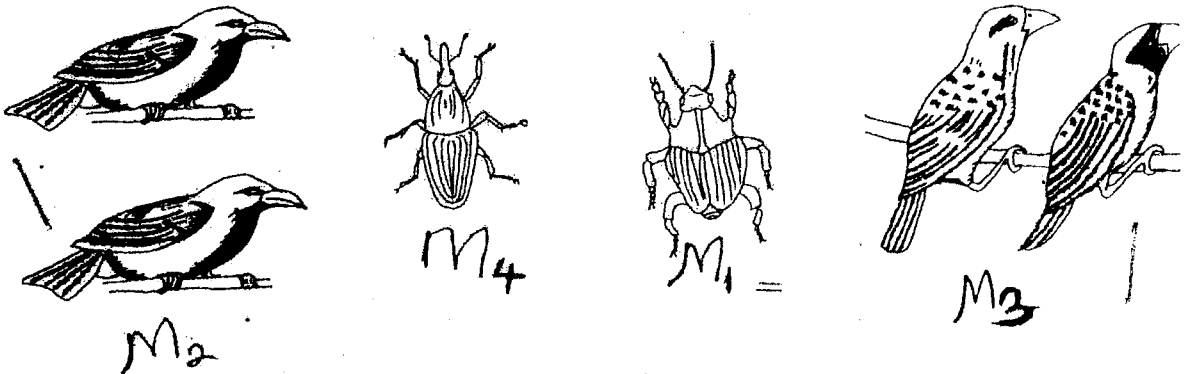
12. Give THREE ways in which nutrients can be lost from silage in a silo (1 1/2 mark)

13. (i) Give TWO destructive effects of moles in crop production (1mark)
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- (ii) Apart from moles, name TWO other rodent pests (1mark)
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14. State THREE examples of nitrogen fixing trees/shrubs. (1½ marks)
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15. List FOUR factors that determine the quality of hay (2marks)
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-
16. State FOUR field pests that attach maize (2marks)
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17. Differentiate between apiculture and aquaculture as used in Agriculture (1mark)
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18. State TWO ways in which burning leads to loss of soil fertility (1mark)
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19. State TWO benefits of hardening off seedlings before transplanting. (1mark)
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SECTION B (20 MARKS)

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

20. The diagrams below illustrate both field and storage pests.



a) Identify the pests in the illustration. (1½mark)

M1: _____

M2: _____

M3: _____

b) State two ways by which pest labelled M2 causes loss in cereal crops. (2marks)

c) State three methods which are used to control the pest labelled M2. (2marks)

21. Study the farm record below and use it to answer the questions that follow.

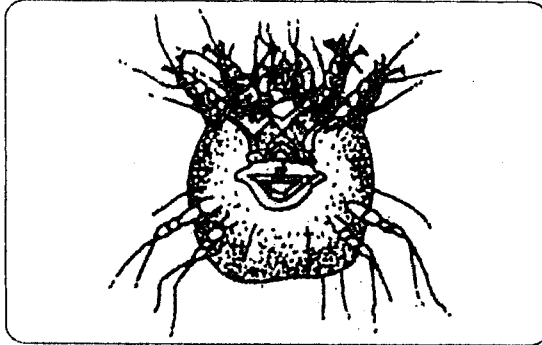
Date	Amount Sold	Price per unit (Kshs.)	Total value (Kshs)	Where sold	Remarks
19/5/2015	120kg	30	3,600	Professional Agrovet	Fair Price
20/5/2015	150kg	32	-	Nunguni Agrovet	To supply more

Name the type of farm record above (1mark)

On the record fill the missing values (1mark)

Give a farm statement that heavily depends on information extracted from the farm record named above (1mark)

22. The diagram below illustrates a crop pest

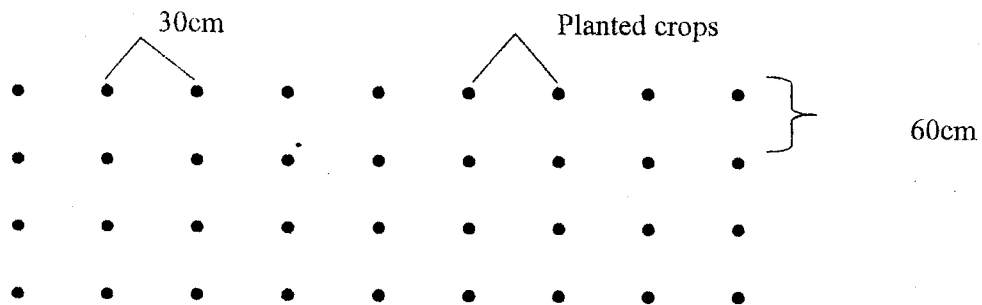


Identify the pest (1mark)

Give TWO reasons why the above pest is difficult to control (2marks)

Give a reason why indiscriminate use of pesticide on the farm may cause increased crop damage by the above pest (1mark)

23. The diagram below shows a method of planting used to establish a certain variety of crop



Identify the method of planting used (1mark)

Give the interplant spacing followed above

(1mark)

Give THREE advantages of the above method of planting

(3marks)

The spacing above was used to establish a crop on an area of land measuring 6m by 3m.
Calculate the crop population. Show your working

(4marks)

SECTION C (40 MARKS)

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

24. (a) Explain challenges faced by Kenyan vegetable farmers in the production of crops (10mks)
- (b) Explain five qualities of a good silage. (5mks)
- (c) Describe the benefits of minimum tillage in crop production (5mks)
25. (a) Outline various ways in which land fragmentation increases the cost of food production in Kenya (5mks)
- (b) Describe the importances of top dressing in pasture establishment (5mks)
- (c) Explain FIVE factors that influence soil erosion (10mks)
26. (a) Describe the production of beans under the following sub-topics:
- (i) Planting (2marks)
- (ii) Field Management Practices. (4marks)
- (iii) Harvesting. (2marks)
- (b) Outline the safety measures in the use of chemicals to minimize environmental pollution. (8marks)
- (c) Explain **four** qualities of a good silage. (4marks)