

Name ..... Class .....

Adm. No .....

Candidates Sign: .....

Date: .....

443/1

**Agriculture**

Paper 1

**Time: 2 hours**



# Atika School

Free Online Academy

## Kenya Certificate of Secondary Education

### Instructions

This page consists of **three sections A, B and C.**

Answer **ALL** the questions in **sections A and B** and **only two** questions from **section C.**

### FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
A	1-9	30	
B	10-12	20	
C	13-15	40	

**SECTION A: 30 MARKS**

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

1. Define the following terms. (3 marks)

a) Under sowing

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b) Over sowing

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c) Ammonification

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2. State **four** factors which determine soil depth. (2 marks)

i) .....

ii) .....

iii) .....

iv) .....

3. State **four** benefits of soil organisms in crop growth. (2 marks)

i) .....

ii) .....

iii) .....

iv) .....

4. a) Give **four** natural factors that would encourage the gully erosion on a farm. (2 marks)
- i) .....
  - ii) .....
  - iii) .....
  - iv) .....
- b) State **four** ways by which mulch control soil erosion. (2 marks)
- i) .....
  - ii) .....
  - iii) .....
  - iv) .....
- c) List **four** materials used in the construction of gabions. (2 marks)
- i) .....
  - ii) .....
  - iii) .....
  - iv) .....
5. a) State **four** factors that should be considered when selecting a forage crop species to be established in a given area. (2 marks)
- i) .....
  - ii) .....
  - iii) .....
  - iv) .....
- b) Define topping as used in forage crops. (1 mark)
- .....
- .....
- .....
6. State **four** ways of weed control in a field of tomatoes. (2 marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....

7. State **four** factors that should be considered when collecting seeds for tree planting. (2 marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....

8. Name **two** types of labour used on a farm. (2 marks)

- i) .....
- ii) .....

9. State **four** problems farmers face in a loan repayment. (2 marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....

10. Outline **four** uses of gross margin to a farmer. (2 marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....

11. Outline **four** reasons why a farmer should diversify his farm enterprises. (2 marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....

12. State **two** advantages of contract marketing. (2 marks)

- i) .....
- ii) .....

**SECTION B 20MARKS**

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

13. The photographs below show two maize pests labeled **A** and **B**. Study them carefully and answer the questions that follow.



a) Name the pests. (2 marks)

- A** .....
- B** .....

b) Define the term economic injury level. (1 mark)

- .....
- .....
- .....

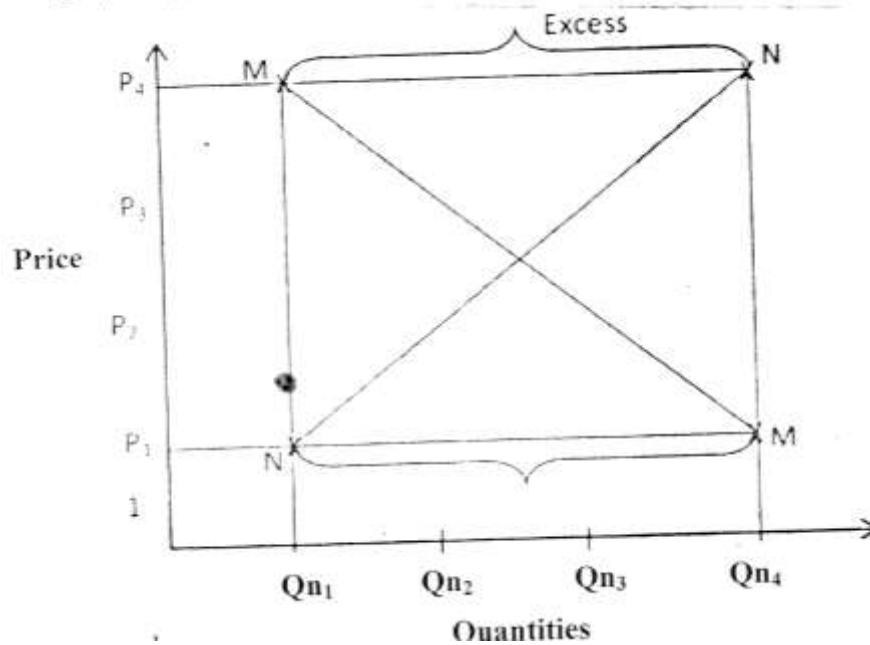
c) Outline **three** factors to consider before deciding to use a chemical method of pest control. (3 marks)

- i) .....
- ii) .....
- iii) .....

d) List **three** advantages of biological pest control. (3 marks)

- i) .....
- ii) .....
- iii) .....

14. Below is a graph showing the relationship between supply and demand in price determination.



a) Name the curves. (2 marks)

- M** .....
- N** .....

b) What is the name given to the point where the two curves **M** and **N** intersect. (1 mark)

- .....
- .....

c) Give **two** reasons why there is excess supply above P4. (2 marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....

d) Define the law of demand. (1 mark)

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.....

e) Given that at a price of ksh 100 per bag, 20 bags of maize are on demand but when the price changed to 80sh per bag 22 bags are demanded. Calculate elasticity of demand. Show your working. (3 marks)

f) Give **two** types of production functions in agricultural economics. (2 marks)

i) .....

ii) .....

**SECTION C 40 MARKS**





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b) Describe the process involved in water treatment using a chemical treatment system. (10 marks)

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