

EXAMINATION NO.: _____



THE MALAWI NATIONAL EXAMINATIONS BOARD

2015 MALAWI SCHOOL CERTIFICATE OF EDUCATION EXAMINATION

AGRICULTURE

(100 marks)

Subject Number: M012/I

Monday, 22 June

Time Allowed: 2 hours
8:00 – 10:00 am

PAPER I

Instructions

1. This paper contains 11 printed pages. Please check.
2. This paper has **two** sections, A and B. Section A has **ten** questions and Section B, **four** questions.
3. Answer **all** questions in the spaces provided.
4. Write your **Examination Number** on all pages.
5. In the table provided on this page, **tick** against the question number you have answered.
6. At the end of the examination, hand in your paper to the invigilator.

Question Number	Tick if answered	Do not write in these columns	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			



Section A (60 marks)

Answer **all** the **ten** questions in this section.

1. a. List any **two** chemical properties of soil.

(2 marks)

- b. Give any **two** ways of modifying soil pH.

(2 marks)

2. a. State any **two** points to consider when setting up a flood irrigation system.

(2 marks)

- b. (i) Describe “surface land drainage”.

(2 marks)

- (ii) State **four** disadvantages of “surface land drainage”.

(4 marks)

Continued/...



3. a. (i) Name **one** bloodless method of castrating bull calves.

_____ (1 mark)

- (ii) Give any **two** advantages of castrating bull calves.

_____ (2 marks)

- b. A form 3 class carried out an experiment on manure to find out the appropriate rate of manure on maize yield. Use this information to answer questions that follow.

Treatment	Rate of manure (kg/ha)	Maize yield (50 kg bag/ha)
1	0	10
2	10	25
3	15	45
4	20	50
5	25	53

- (i) Give any **three** factors that should be held constant in the experiment.

_____ (3 marks)

- (ii) Name the control treatment.

_____ (1 mark)

- (iii) How many kilogrammes of maize were harvested from treatment 4?

_____ (1 mark)

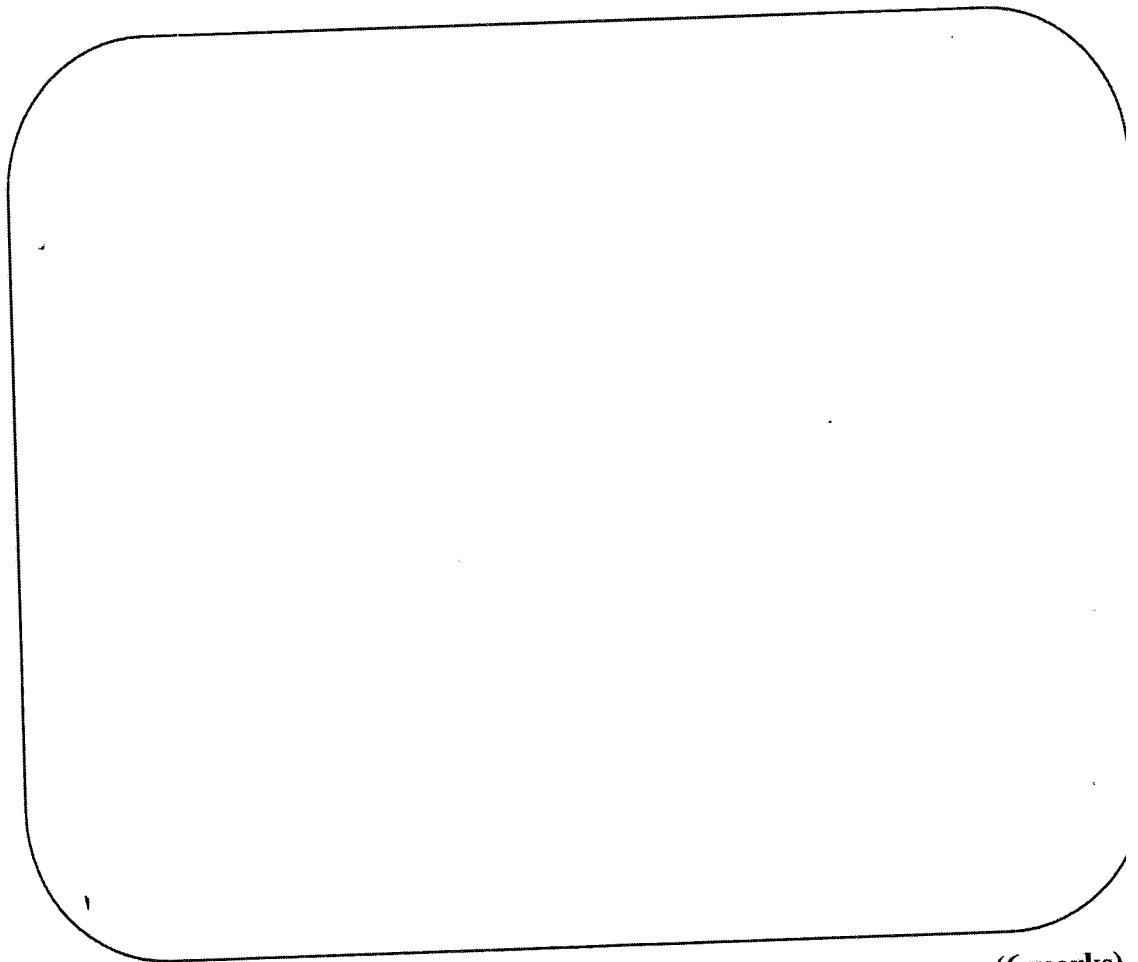
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4. Describe the **three** steps that are involved in hay making.

(6 marks)

5. At a certain market, the price of chambo rose from K2 000.00 to K2 500.00 per unit. This resulted in change of supply from 27 units to 30 units of Chambo. Calculate price elasticity of supply at this market.



(6 marks)

Continued

6. a. State any **two** signs that could show that a cow is about to give birth.

(2 marks)

- b. Describe **two** management activities that are recommended to a newly born calf.

(4 marks)

7. a. State any **four** situations in which a partial budget could be useful to a farmer.

(4 marks)

- b. Write down any **three** examples of production records for a dairy farmer.

(3 marks)

Continued/...



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8. State any **four** factors that should be considered when selecting a site for mango production.

(4 marks)

9. a. Define the term “cropping systems”.

(1 mark)

- b. List any **three** activities involved in “bush fallowing”.

(3 mark

- c. State **three** disadvantages of “bush fallowing”.

(3 marks)

Continued/..



10. Describe each of the following steps in a report of an agricultural experiment:

a. design of an experiment

(2 marks)

b. data analysis

(2 marks)

Continued/...

Section B (40 marks)

Answer **all** the **four** questions in this section. Your answers should be in an essay form **except** for **Question 12**.

11. Explain any **five** effects of soil degradation on agricultural production.

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(10 mark

Continued/



12. Draw a well labelled diagram to describe the life cycle of a **one** host tick.

(10 marks)

Continued/...



13. Explain any **five ways in which high population growth may contribute to the occurrence of droughts.**

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(10 marks)

Continued/..



14. The following agricultural development services exist in a certain farming community:

- money lending institution
- farm settlement
- land husbandry
- soil testing

Explain any **five** ways in which the community would utilize these services to improve agricultural production.

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(10 marks)

END OF QUESTION PAPER

This paper contains 11 printed pages.

