



BOTSWANA EXAMINATIONS COUNCIL
JUNIOR CERTIFICATE EXAMINATION

AGRICULTURE

16/4

Paper 4 Alternative to Coursework

SAMPLE PAPER

Marks: 40

Time: 1 Hour

Candidate
Full Names:

Centre Number:

J	C				
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Candidate Number:

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INSTRUCTIONS

1. Write your full names and examination number in the spaces provided above.
2. Write your answers in the spaces provided on the question paper.
3. Answer **ALL** questions.
4. Read all questions carefully before attempting to answer them.

FOR EXAMINER'S USE ONLY

Question	Marks scored
1	
2	
3	
4	
Total Marks	

This question paper contains 7 printed pages.

The diagram below shows a tractor pulling a farm implement used to carry out a certain management activity. The farm implement is used immediately after ploughing. Use it to answer questions 1(a) and (b).



1. (a) (i) Name the management activity that is being carried out.

.....
..... (1)

(ii) Describe how the management activity can be carried out in a 4 m x 1 m plot.

.....
.....
..... (3)

(b) (i) Name any **one** vegetable you have studied.

..... (1)

(ii) Describe how the vegetable named in (b) (i) is prepared for marketing.

.....
.....
.....
..... (3)

The picture below shows a pest feeding on a crop.
Use it to answer questions 2 (a) and (b).



2. (a) Name the pest.

..... (1)

(b) Describe how the pest can be controlled using an environmentally friendly method.

.....
.....
..... (2)

Use the information below to answer questions 3 (a) and (b).

Jaone's plot measures 10 m² and it has 4 weeks old vegetable seedlings planted in rows. Jaone was advised to apply a fertilizer on the plot.

3. (a) Outline **four** steps to show how Jaone should apply the fertilizer on the plot.

.....
.....
.....
.....
..... (4)

(b) State **three** activities that Jaone should carry out in preparation for the application of the fertilizer.

.....

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..... (3)

The diagram below shows a farmer applying some fertilizer.
Use it to answer question 3 (c).



(c) Name the method of fertilizer application used.

..... (1)

The diagram below shows a plant growing in a piece of land which is about to be used for vegetable production. Use it to answer question 4 (a).



4. (a) Outline **five** steps that can be taken to prepare the piece of land for planting a vegetable crop.

.....
.....
.....
.....
..... (5)

- (b) Describe how a concrete plot is prepared. Use a well labelled diagram to support your description.

Description

.....
.....
.....
..... (3)

Diagram

(3)

Use the information below to answer question 5 (a) and (b).

A plot measuring 2 m x 1 m was basal dressed with kraal manure at an application rate of 200 kg/ha in preparation for sowing vegetable seeds. The seeds were sown on the 20th February. On February 29, the seedlings emerged from the soil. The following day on March 1, you were asked to take over the management of the plot until the maturity of the crop.

5. (a) Prepare a record to show all the management activities you would carry out up to the maturity of the crop.

Date	Activity	Reasons for activity	Tools used

(6)

- (b) Calculate the amount of kraal manure which was applied on the plot.
 $1 \text{ ha} = 10000 \text{ m}^2$

.....
.....
.....
.....
..... (2)

- (c) State **two** advantages of applying kraal manure to the soil in a vegetable plot.

.....
.....
..... (2)
