



# EXAMINATIONS COUNCIL OF ESWATINI

## Junior Certificate Examination

CANDIDATE  
NAME

CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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AGRICULTURE

516/02

Paper 2

October/November 2019

1 Hour 45 Minutes

### READ THESE INSTRUCTIONS FIRST

Write your candidate name, Centre number and candidate number on the answer sheet provided. Answer all questions on the question paper by completing each question as instructed.

This paper consists of **two** sections. **Section A and Section B.**

**Section A** consist of simple response questions worth 50 marks.

**Section B** consist of **three** essay questions of which you are expected to answer any **two** essays worth 25 marks each.

Answer on the lines provided.

For Examiner's Use	
Section A	
Section B	

This document consists of **17** printed pages and **3** blank pages.

**SECTION A: 50 MARKS**

- 1 (a) What is intercropping?  
.....  
..... [1]
- (b) What is the importance of commercial farming?  
.....  
..... [1]
- (c) Explain the role of wind in plant growth.  
.....  
.....  
..... [2]

**[Total: 4 Marks]**

- 2 (a) Name **two** farm tools used to break soil lumps.  
(i).....  
(ii)..... [2]
- (b) Why should tool and implements be kept under shelter?  
..... [1]
- (c) Why is it important to use tools that are in good condition?  
..... [1]

**[Total: 4 Marks]**

- 3 (a) State any **one** cause of desertification.  
..... [1]
- (b) What are the factors that determine the type of crop to be grown in an area?  
.....  
.....  
.....  
..... [2]

[Total: 3 Marks]

- 4 (a) Figure 4.1 shows a maize seed.

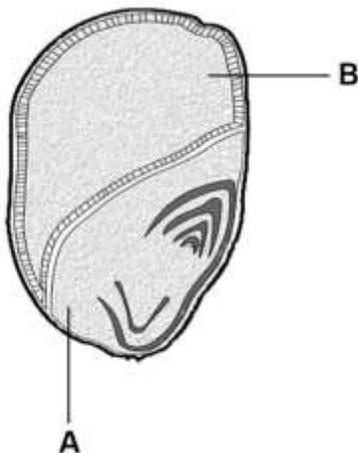


Fig.4.1

- (i) Name part A.  
..... [1]
- (ii) What is the function of part B?  
..... [1]
- (b) Discuss how oxygen can affect respiration on plants.  
.....  
.....  
..... [2]

(c) Explain the effect of high transpiration on photosynthesis.

.....  
.....  
..... [2]

**[Total: 6 Marks]**

5 (a) Give any **two** disadvantages of using chemicals to control pests.

(i).....  
(ii)..... [2]

(b) What is cultural pest control?

.....  
..... [1]

(c) Describe how systemic pesticides work in plants.

.....  
.....  
..... [2]

**[Total: 5 Marks]**

6 (a) State any **one** effect of low soil pH on plant growth.

.....  
..... [1]

b) Describe a crumby soil structure.

.....  
.....  
..... [2]

(c) Why is a crumby structure important for plant growth?

.....  
..... [1]

**[Total: 4 Marks]**

7 (a) Figure 7.1 shows cabbages planted in a field.



Fig. 7.1

Which planting method is used in figure 7.1?

..... [1]

(b) Why should crops of the same family not follow each other in a crop rotation?

..... [1]

(c) Describe how sweet potatoes are planted.

.....  
.....  
.....  
..... [2]

**[Total: 4 Marks]**

8 Figure 8.1 shows grain storage containers.



**Fig. 8.1**

(a) What is the name of the storage containers in figure 8.1?  
..... [1]

(b) Why is a maize crib rectangular in shape?  
..... [1]

(c) Explain why it is important to stake maize correctly.  
.....  
.....  
..... [2]

**[Total: 4 Marks]**

9 (a) State any **two** characteristics of a traditional chicken.  
(i).....

(ii)..... [2]

(b) How long is the incubation period in chickens?  
..... [1]

(c) Describe the importance of light in layers.

.....  
.....  
.....  
..... [2]

**[Total: 5 Marks]**

10 (a) State any **two** characteristics of good grasses used in cultivated pastures?

(i).....  
(ii)..... [2]

(b) Explain why farmers use a running tether in goats.

.....  
.....  
..... [2]

**[Total: 4 Marks]**

11 (a) Explain how honey is packaged for marketing?

.....  
.....  
.....  
..... [3]

**[Total: 3 Marks]**

12 (a) State any **two** advantages of promoting a product.

(i) .....

(ii) ..... [2]

(b) Describe marketing mix in farm business.

.....

.....

..... [2]

**[Total: 4 Marks]**

**SECTION B: 50 MARKS**

Answer any **two** questions from this section

**1** Your school is to start a vegetable enterprise. Explain how you can prepare and maintain the land. Use the points below as a guide.

- relevant topic of the essay [1]
- introduction (importance of land preparation) [1]
- land reclamation [3]
- importance of soil testing [2]
- method of digging [2]
- reasons for digging [3]
- maintaining soil fertility [6]
- examples of organic fertilizers [2]
- human activities that can lead to soil erosion [5]

**[Total: 25maks]**

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