



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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AGRICULTURE

Paper 2

6882/02

October/November 2021

1 hour 30 minutes

Additional Material: Calculator

Candidates answer:

Section A: Structured questions on the Question Paper.

Section B: Two essay questions on the lined paper provided.

READ THESE INSTRUCTIONS FIRST

Write your Centre Number, Candidate Number and Name on all the work you hand in.
Write in **dark blue** or **black** pen.

You may use an **HB** pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.

Answer **all six** structured questions and attempt **two** essay questions out of the three provided.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part of the question.

For Examiner's Use	
1	
2	
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9	
Total	

This document consists of **16** printed pages.

Section A: Structured Questions

Answer **all** questions in this section (60 marks)

- 1 **Fig. 1.1** is a cross section of a soil profile.

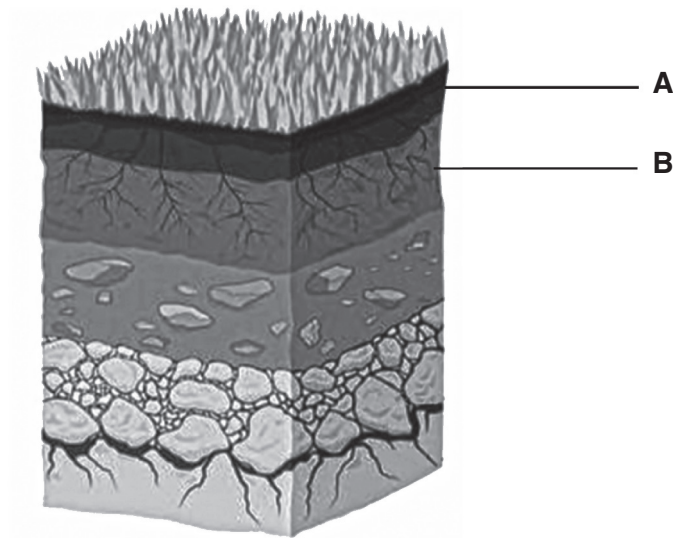


Fig. 1.1

- (a) (i) Name the layer labelled **B** on **Fig. 1.1**.

.....
 [1]

- (ii) Explain how layer **A** supports plant growth.

.....

 [2]

- (b) Explain why a soil sample may not be collected from certain parts of the field.

.....

 [3]

(c) Suggest **two** ways to prevent erosion on cultivated land.

.....

.....

.....

..... [2]

(d) Describe how temperature changes cause weathering.

.....

.....

.....

..... [2]

[10 marks]

2 Fig. 2.1 shows maize yield in response to an inorganic fertiliser application.

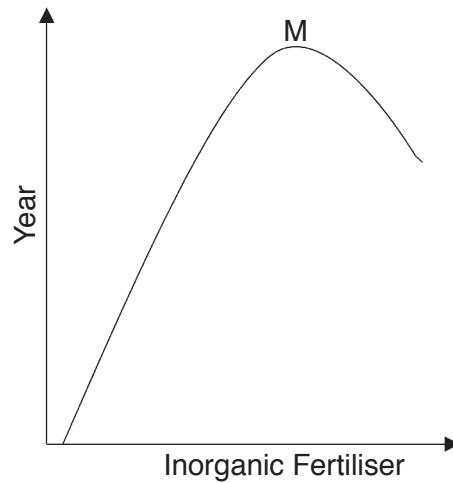


Fig. 2.1

(a) (i) Explain the law of diminishing returns as shown in **Fig. 2.1**.

.....

.....

.....

.....

.....

..... [3]

(ii) Suggest **two** effects of adding inorganic fertiliser beyond point **M**.

.....

.....

.....

..... [2]

(b) Describe how market research helps a farm business.

.....

.....

.....

..... [2]

- (c) A bank gave a farmer a loan of E6000.00 at an interest rate of 12% per annum to be repaid after 12 months.

Calculate the interest and total amount to be paid.

.....

.....

.....

..... [2]

[9 marks]

- 3 **Fig. 3.1** shows a maize crop damaged by a pest.



Fig. 3.1

- (a) (i) Name the type of pest shown in **Fig. 3.1**.

..... [1]

- (ii) Explain the effect of the damage made by the pest in **Fig. 3.1**.

.....

 [2]

- (b) Suggest the possible economic effects of an outbreak of the pest in **Fig. 3.1** on agriculture.

.....

 [2]

- (c) Describe how a systemic insecticide can control a piercing and sucking pest.

.....

 [3]

- (d) (i) State the harmful effects of heavy rainfall on crop production.

.....

.....

.....

..... [2]

- (ii) Suggest **two** harmful effects of a fungal disease on potatoes.

.....

.....

.....

..... [2]

[12 marks]

- 4 (a) Give **one** symptom of brucellosis in ruminants.

..... [1]

- (b) **Fig. 4.1** shows cattle grazing on a pasture.



Fig. 4.1

Describe the impact of cattle grazing on a pasture with a low stocking rate.

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

- (c) Explain the importance of quarantine when importing a herd of livestock.

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

- (d) Describe how a readily-mixed deworming chemical is administered to livestock using a dosing gun.

.....

.....

.....

..... [2]

- (e) Suggest advantages of crossbreeding, rather than pure breeding, in livestock production.

.....

.....

.....

..... [2]

- (f) Suggest **two** ways in which zero grazing can improve the yield of beef cattle.

.....

.....

.....

..... [2]

[11 marks]

5 (a) State **one** use of the following tools.

(i) Saw

.....

(ii) Screw-driver

..... [2]

(b) Outline **two** safety precautions in the use of farm tools.

(i)

.....

(ii)

..... [2]

(c) (i) Describe any **two** factors to be considered when selecting a site for a farm building.

.....

.....

.....

..... [2]

(ii) State any **two** reasons why thatch could be a good material for roofing livestock houses.

.....

.....

.....

..... [2]

[8 marks]

6 (a) (i) State the meaning of permaculture.

.....
 [1]

(ii) Explain why permaculture is considered a good farming system.

.....

 [2]

(b) Describe how crop rotation can improve yields of crops.

.....

 [3]

(c) Suggest the impact of HIV/AIDS on food production.

(i)

 (ii)
 [2]

(d) Suggest **two** reasons why the use of genetically modified organisms (GMO's) can improve food security.

.....

 [2]

[10 marks]

SECTION B: Essay Questions

Answer any **two** questions in this section (20 marks)

- 7 (a) Explain the advantages of intercropping. [4]
- (b) Discuss the advantages of organic fertilisers. [4]
- (c) Suggest problems that might arise when practising monoculture. [2]
- [10 marks]**
- 8 (a) Explain how the use of fencing can result in improvements to a pasture. [4]
- (b) Wooden fence posts need replacing regularly.
Discuss reasons for this and the methods used to protect the posts. [4]
- (c) Suggest how a live fence promotes biodiversity. [2]
- [10 marks]**
- 9 (a) Explain how records can be used in livestock production. [4]
- (b) Discuss the problems that might arise in intensive livestock production. [4]
- (c) Suggest the importance of commercial farming in relation to the export of livestock products. [2]
- [10 marks]**

This image shows a full page of a handwriting practice worksheet. It consists of multiple sets of three horizontal dotted lines, providing a guide for letter height and placement. The lines are evenly spaced across the entire page, leaving ample room for writing practice. There is no text or other markings on the page.

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