



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

6882/02

Paper 2

October/November 2023

1 hour 30 minutes

Additional Material: Calculator

Candidates answer:

Section A: Structured questions on the Question Paper.

Section B: Two Essay questions on the Question Paper.

READ THESE INSTRUCTIONS FIRST

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

You may use a 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	
3	
4	
5	
6	
7	
8	
9	
Total	

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

Section A: Structured Questions

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

1 (a) (i) State what is meant by:

1 cash-crop farming

.....
.....

2 subsistence farming.

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

(ii) Maize yields are poor under subsistence farming.

State **two** reasons to explain these poor yields:

1

2

..... [2]

(b) Commercial crop production can involve both monoculture and organic farming methods.

(i) Give any **two** reasons why a farmer might choose to farm using monoculture methods.

1

2

..... [2]

(ii) Give any **two** reasons why a farmer might choose to farm using organic methods.

1

2

..... [2]

(iii) Explain why mixed farming can be useful in organic farming.

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

(c) Suggest how climate change might affect the type of crops grown in Eswatini.

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

[12 marks]

2 Fig. 2.1 shows a cross-section of a root.

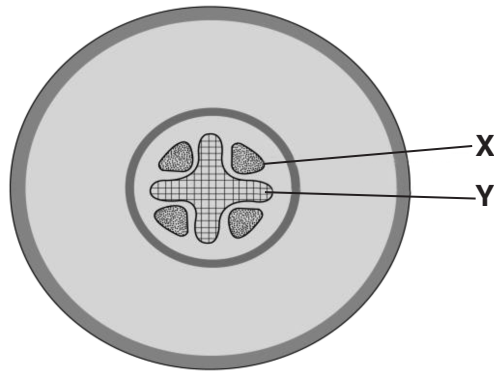


Fig. 2.1

(a) Name the parts labelled X and Y in Fig. 2.1.

X

Y [2]

(b) Describe the process of water movement from the soil up to the leaves.

.....

 [3]

(c) Explain how a greenhouse can be used to control the rate of transpiration.

.....

 [2]

(d) Suggest **two** reasons why transpiration is important to plants.

(i)

(ii)
 [2]

[9 marks]

3 Fig. 3.1 shows a soil profile.

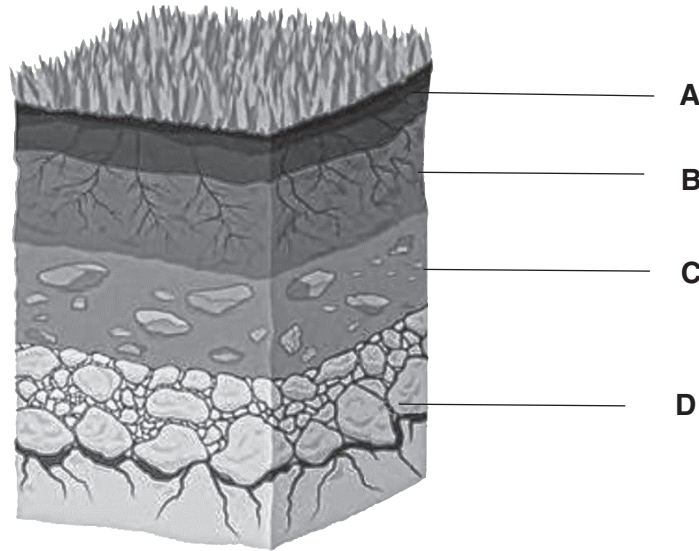


Fig. 3.1

(a) (i) In which layer are most microorganisms found?

..... [1]

(ii) State any **two** characteristics of Layer B that hinders the growth of crops.

1

.....

2

..... [2]

(b) Describe the reasons for applying lime to the soil.

.....

.....

..... [2]

(c) Explain how any **two** properties of soil are influenced by soil texture.

(i)

.....

(ii)

..... [4]

[9 marks]

4 Fig. 4.1 shows a vegetable crop of tomatoes which have collapsed during a cool day.



Fig. 4.1

(a) (i) Identify a plant disease that might have caused this collapse in Fig. 4.1.

..... [1]

(ii) State any **two** other factors which can lead to the condition in Fig. 4.1.

1

2

(iii) Describe prevention methods that can be used for crop diseases.

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

(b) Describe suitable soil conditions for the growth of cabbages.

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

(c) Explain any **one** reason for ridging in sweet potatoes.

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

[10 marks]

5 Fig. 5.1 illustrates a management practice being carried out on a cow.

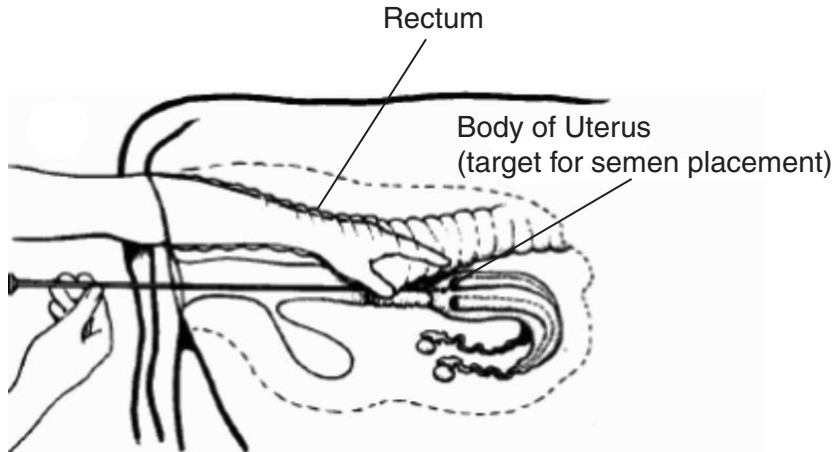


Fig. 5.1

(a) (i) Name the practice being carried out in Fig. 5.1.

..... [1]

(ii) State the reason for inserting the arm in the rectum as shown in Fig. 5.1.

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

(iii) Explain, with a reason, the importance of carrying out this practice when a cow is on heat.

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

(iv) Suggest costs that might be incurred by the farmer when carrying out this practice.

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

(b) State with reasons **two** tasks that a farmer might carry out immediately after the birth of a calf.

(i) task

reason

(ii) task

reason [4]

[10 marks]

6 Fig. 6.1 shows chicks raised under an artificial brooder.

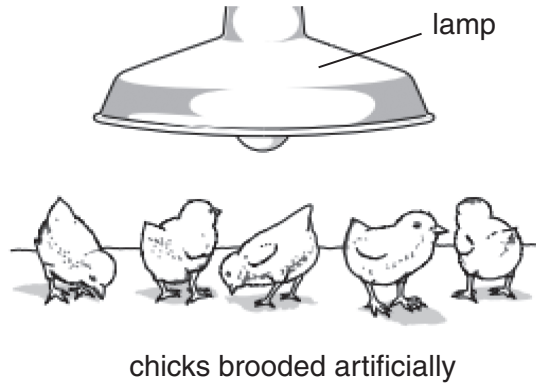


Fig. 6.1

(a) (i) State a suitable temperature for the chicks under the brooder in the first week.

..... [1]

(ii) Explain how the temperature around the chicks is controlled.

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

(iii) Describe the behaviour of the chicks that would indicate that the temperature was too hot.

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

(b) Describe how a Newcastle vaccine can be administered to chicks.

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

(c) Describe measures, other than vaccination, that should be taken to ensure good health of growers in a deep litter shed.

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

(d) Describe any **two** physical appearances that indicate ill-health in livestock.

(i)
.....

(ii)
..... [2]

[10 marks]

Section B: Essay Questions

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

- 7 (a) Define pasture management. [1]
(b) Describe the process of making a silage. [6]
(c) Suggest characteristics of a good pasture. [3]
[10 marks]
- 8 (a) Define selective breeding. [1]
(b) Describe any **three** factors to consider when selecting a breeding stock. [6]
(c) Suggest any **three** reasons for breeding animals with desired traits. [3]
[10 marks]
- 9 (a) Define entrepreneurship. [1]
(b) Describe any **three** factors that could affect farm productivity. [6]
(c) Suggest any **three** sources of farm credit. [3]
[10 marks]

[This section contains 30 horizontal dotted lines for writing.]

Dotted lines for writing.

