



EXAMINATIONS COUNCIL OF ESWATINI
Junior Certificate Examination

CANDIDATE
NAME

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CENTRE
NUMBER

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AGRICULTURE

516/02

Paper 2

October/November 2023

Additional material: calculator

1 hour 45 minutes

READ THESE INSTRUCTIONS FIRST

Write your 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.

Read all questions carefully

Answer on the lines provided.

For Examiner's Use		
Section A		
Section B	1	
	2	
	3	
Total		

Section A: Simple Response Questions

Answer all questions in this section (50 Marks)

1 (a) Describe the role of intercropping in improving crop yield.

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..... [2]

(b) Explain the benefits of planting grass in a crop rotation.

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..... [2]

[Total: 4 marks]

2 Fig. 2. 1 is a diagram of a farm implement.



Fig. 2.1.

(a) Name the implement in Fig. 2.1.

..... [1]

(b) Describe how a wheelbarrow is used.

.....

.....

.....

..... [2]

(c) Discuss the importance of using tools that are in good condition.

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..... [2]

[Total: 5 marks]

3 (a) State any **two** benefits of a green house in vegetable production.

(i)

(ii) [2]

(b) Explain how desertification can be reduced.

.....

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..... [2]

[Total: 4 marks]

4 (a) Name the term which describes the balance of available nutrient in the soil and nutrient required by the plant.

..... [1]

(b) State the role of lime in clay soils with a pH of 5.5-6.5.

..... [1]

(c) Explain the process of green manuring in a field.

.....

.....

..... [2]

[Total: 4 marks]

5 (a) Explain the process of respiration in plants.

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..... [2]

(b) Discuss the effects of light on the rate of respiration.

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..... [2]

[Total: 4 marks]

6 (a) Give any **one** method of curing sweet potatoes.

..... [1]

(b) Explain the procedure for testing if tobacco leaves are ready for harvest.

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

[Total: 3 marks]

7 (a) State the importance of a footbath in a poultry house.

..... [1]

(b) Describe how the age of chickens affects the size of eggs in layers.

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..... [2]

(c) Explain any **one** way of preventing cannibalism in poultry.

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..... [2]

[Total: 5 marks]

8 (a) Give any **two** types of pheromones in bee keeping.

(i)

(ii) [2]

(b) Describe supplementary feeding in bees.

.....

.....

.....

..... [2]

[Total: 4 marks]

9 (a) **Table 9.1** shows organs and functions of parts of the digestive system of a rabbits. Complete the following information:

ORGAN	FUNCTION
Small intestines	(i)
Ceacum	(ii)
(iii)	Absorption of water

[3]

Table 9.1

(b) Explain why rabbits feed on their night faeces.

.....

.....

.....

..... [2]

[Total: 5 marks]

10 (a) State **any** two factors to consider when buying a breeding stock of goats.

(i).....

(ii)..... [2]

(b) Explain the importance of hoof-trimming.

.....

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..... [2]

[Total: 4 marks]

11 (a) Describe any **one** way of controlling invasive plant in a pasture.

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..... [2]

(b) Explain the benefit of planting kikuyu and rye grass together in a pasture.

.....

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..... [2]

[Total: 4 marks]

12 Describe **two** marketing processes that promote a product.

(i).....

.....

(ii).....

..... [4]

[Total: 4 Marks]

Section B: Essay Questions

Answer any **two** questions in this section (50 Marks)

- 1.** Describe the control of pests on crops using the guidelines below.
- Topic [1]
 - Introduction (description of pest) [1]
 - Two things to consider on the method of control to use [2]
 - Describe with an example the following pest control methods:
 - biological
 - cultural and
 - chemical) [6]
 - Ways in which systemic and contact pesticides work [2]
 - Preparation for spraying [5]
 - Using a sprayer [5]
 - Any three safety precautions [3]

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2. Describe the production and marketing of honey using the guidelines below.

- Topic [1]
- Introduction (description of honey bee production) [1]
- Importance of honey bees [5]
- Factors considered when establishing an apiary [5]
- Marketing of honey:
 - packaging [3]
 - labelling details [4]
 - grading [2]
 - promotion strategies [4]

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[Total: 25 Marks]

3. Describe the killing and dressing of rabbit using the guide below.

- Topic [1]
- Introduction (description of rabbits production) [1]
- Maturity for slaughter (weeks and kg) [2]
- Preparations for killing [2]
- Methods of killing [4]
- Dressing of the rabbit after killing [13]
- Packaging and storage [2]

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[Total: 25 Marks]

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