



# EXAMINATIONS COUNCIL OF SWAZILAND

## JUNIOR CERTIFICATE EXAMINATION

CANDIDATE  
NAME

CENTRE  
NUMBER

CANDIDATE  
NUMBER

**Agriculture**  
Paper 1

**516 /01**  
**October/November 2012**  
**1 hour 30 Minutes**

### READ THESE INSTRUCTIONS FIRST

1. Answer **ON THE QUESTION PAPER** by completing each question as instructed.
2. Work quickly. If a question seems hard, skip it and come to it later.
3. You can make your answers quite short and clear. A correct answer will score marks, even if it is short.

<b><i>For official use</i></b>	
<b><i>Marks obtained</i></b>	

This paper consists of **12** printed pages.

1. (a) Give one function of each of the following garden tools.
- (i) Wheel barrow ..... (1)
- (ii) Hoe ..... (1)
- (b) How could the use of tools cause accidents in a school farm? Give **three** ways.
- (i) ..... (1)
- (ii) ..... (1)
- (iii) ..... (1)
2. Explain the following terms as used in agriculture.
- (a) Palpating .....  
..... (1)
- (b) Transplanting .....  
..... (1)
- (c) Regurgitation .....  
..... (1)
- (d) Thinning .....  
..... (1)
- (e) Weeding .....  
..... (1)
3. (a) Discuss **one** importance of export crops to the economy of Swaziland.
- .....  
.....  
..... (2)

- (b) State the importance of keeping cattle to Swazi life and culture.
- (i) ..... (1)
- (ii) ..... (1)
- (iii) ..... (1)
4. (a) Give **three** reasons why it is important for farmers to know about contours.
- (i) .....  
.....
- (ii) .....  
.....
- (iii) .....  
.....
- [3]
- (b) Explain why the slope of a land is important when deciding how a land can be used?
- .....  
..... (2)
5. (a) List and describe briefly any **two** methods which could be used for preventing and controlling crop diseases.
- (i) Method: .....  
Description: .....  
.....

(ii) Method: .....

Description: .....

.....

(4)

(b) How could knowledge about a crop pest help you control the pest?

.....

.....

(1)

6. (a) What is crop rotation?

.....

.....

(1)

(b) How does crop rotation prevent the loss of plant nutrients in the soil?

.....

.....

(2)

(c) Name a cropping method which leads to loss of nutrients in the soil.

.....

(1)

(d) Intercropping practice provides the farmer with insurance. Explain this statement.

.....

.....

(1)

7. (a) Give **one** reason why it is necessary to dry maize before storage.

.....

(1)

- (b) Give **two** examples of traditional storage methods.

(i) .....

(ii) ..... (2)

- (c) List **two** agricultural products which are directly obtained from dry maize.

(i) .....

(ii) ..... (2)

8. (a) List the **two** ways of keeping chickens under intensive management system.

(i) ..... (1)

(ii) ..... (1)

- (b) Briefly describe **one** method that you think is best for keeping broilers at school.

Method: .....

Description: .....

..... (2)

- (c) State **one** disadvantage of keeping chickens under extensive management system.

..... (1)

9. Use the following characteristics to identify good layers.

<u>Characteristic</u>	<u>Good layer</u>	
(i) Moulting	.....	
(ii) Vent	.....	
(iii) Body	.....	
(iv) Eyes	.....	
(v) Plumage	.....	[5]

10. (a) State **two** functions of tree roots.

(i) ..... (2)  
 (ii) ..... (2)

- (b) Name **two** gases that pollute the atmosphere resulting to the depletion of ozone layer.

(i) ..... (2)  
 (ii) ..... (2)

- (c) What can you do to stop deforestation in your community?

..... (1)

11. (a) Define pruning.

..... (1)

(b) Give **two** reasons why it is necessary to prune peaches every winter.

(i) .....

.....

(ii) .....

.....

(2)

(c) What name is given to a tool that is used for pruning fruit trees?

..... (1)

(d) State **one** reason why a cut should be sealed / closed with a tree sealer after pruning fruit trees.

.....

..... (1)

12. (a) The amount of water needed by a vegetable crop depends on many things. Give any **three** of these things.

(i) .....

(ii) .....

(iii) ..... (3)

- (b) State **one** reason why watering of vegetables should be avoided in the late afternoon?

.....

(1)

- (c) Give **one** reason why mulch should be removed as soon as seedlings germinate.

.....

(1)

13. (a) Why are the following processes necessary in plant growth and development?

(i) Respiration .....

.....

(ii) Photosynthesis .....

.....

(iii) Transpiration .....

.....

(3)

- (b) Give **two** ways in which the soil help plants to grow well.

(i) .....

(ii) .....

(2)

14. List any **five** ways how a farmer would change a crop's environment to improve yield.

(i) .....

(ii) .....

(iii) .....

- (iv) .....
- (v) ..... (5)

15. (a) Give **one** reason why a farmer should build a concrete floor in a goats house? .

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

(b) State **two** reasons why goats should be protected from bad weather.

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

(c) Which method would you use to control movement of goats? Explain your choice.

Method .....

Reason .....

..... (2)

16. (a) What is a simple fertiliser?

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

(b) How would you correct the following problems in vegetable production?

(i) Plants are smaller, pale and the older leaves turn yellow and drop off.

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

(ii) Plants are cut at seedling stage at the base of the stem and falling over.

.....

(1)

(iii) Tomato leaves with dark circular rings around black spots.

.....

(1)

(c) How can you apply molybdenum in vegetable production? State **one** method.

.....

..... (1)

17. (a) State **three** reasons why you would advise a farmer to keep Nguni breeds of cattle.

(i) .....

.....

(ii) .....

.....

(iii) .....

..... (3)

(b) Use the following characteristics / features to describe a healthy cow.

(i) Dung .....

.....

(ii) Skin .....

..... (2)

18. (a) List **two** benefits of resting grazing areas.

(i) .....

.....

(ii) .....

..... (2)

(b) State **three** ways grass survives the harmful effects of grazing.

(i) .....

.....

(ii) .....

.....

(iii) .....

..... (3)

19. (a) State any **two** questions that guide a farmer when making decisions during planning of a farm business.

(i) .....

(ii) ..... (2)

(b) Is 5 kg of Dithane a fixed cost or a variable cost? Explain your choice.

Type of cost .....

Reason .....

..... (2)

- (c) Suggest a reason why a price of cabbages would be different in different places in the same country.

..... (1)

20. (a) Namboard is one marketing board we have in Swaziland. State **two** of its functions.

(i) .....

.....

(ii) .....

..... (2)

- (b) (i) Name **one** governmental organisation concerned with conservation of indigenous plants and animals in Swaziland.

..... (1)

- (ii) Briefly describe the work done by Rural Development Areas (RDA) programme in Swaziland.

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..... (2)

