



# EXAMINATIONS COUNCIL OF SWAZILAND

## Swaziland Primary Certificate Examination

CANDIDATE  
NAME

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NUMBER

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NUMBER

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AGRICULTURE

616/01

Paper 1

November 2018  
1 hour 45 Minutes

### READ THESE INSTRUCTIONS FIRST

1. Read **all** questions carefully
2. Answer **all** questions.
3. This paper consists of two sections: **Section A and Section B**
4. **Four** possible answers are given for each question. Choose the **best** answer and record your choice in **soft pencil** in the box provided.

**EXAMPLE:** 40. An insect has ...legs.

- A. 2  
B. 4  
C. 6  
D. 8

C

5. Section B consists of simple response on the question paper.
6. Answer **all** questions in the spaces provided.

<b>For Examiner's Use</b>	
<b>Section A</b>	<input type="text"/>
<b>Section B</b>	<input type="text"/>
<b>Total</b>	<input type="text"/>

This document consists of **16** printed pages and **1** blank page

**Section A (20 Marks)**

1. Which of the following refer to the three most common different kinds of weeds?

- A.** Parasitic, root weeds, invasive weeds
- B.** Parasitic weeds, leafy weeds, invasive weeds
- C.** Parasitic weeds, poisonous weeds, invasive weeds
- D.** Parasitic weeds, invasive weeds, witch weeds

2. Which one of the following types of soil hold more water?

- A.** Clay soil
- B.** Loam soil
- C.** Sandy soil
- D.** Silty soil

3. How would you recognize a cabbage plant that was damaged or attacked by the disease Black rot?

- A.** Leaves have transparent patches
- B.** Leaves develop black spots that have a v-shape
- C.** Leaves develop yellowish spots that have a v-shape
- D.** There are green caterpillars on the cabbage leaves

4. What do we call the type of farming where a farmer grows crops on a smaller scale to sell?

- A.** Cash crop farming
- B.** Commercial farming
- C.** Intensive farming
- D.** Subsistence farming

5. What is the practice of pest and disease control where crops are grown early?

- A.** Biological control of pests and diseases
- B.** Chemical control of pests and diseases
- C.** Integrated pest management
- D.** Natural control of pests and diseases

6. Which type of land involves the ownership of land for a specific period of time?

- A.** Communal
- B.** Swazi Nation Land
- C.** Title Deed Land
- D.** Freehold Land

7. Which of the following crops contains a lot of proteins?

- A.** Beans
- B.** Cotton
- C.** Maize
- D.** Potatoes

8. Which nutrient is needed by plants in smaller amounts?

- A.** Nitrogen
- B.** Phosphorus
- C.** Potassium
- D.** Zinc

9. When is the first flush of mushrooms harvested?

- A.** About 8 days after casting
- B.** About 10 days after casting
- C.** About 13 days after casting
- D.** About 17 days after casting

10. Which of the following vegetable pest feed on plant sap?

- A.** Aphid
- B.** Bollworm
- C.** Caterpillar
- D.** Cutworm

11. Figure 11.1 shows the structure of a flower

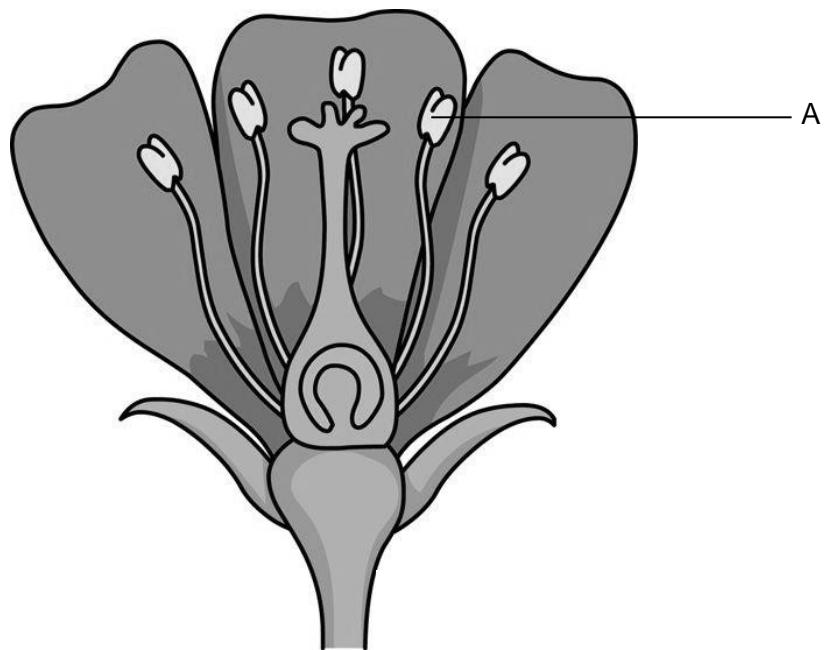


Fig. 11.1

What name is given to the part labelled A?

- A.** Anther
- B.** Filament
- C.** Ovary
- D.** Pistil

12. What is the special care and warmth provided to chicks after hatching?

- A.** Brooder
- B.** Brooding
- C.** Hatching
- D.** Incubation

13. Which layer of the soil is also known as the parent rock?

- A. A Horizon
- B. B Horizon
- C. C Horizon
- D. D Horizon

14. Which of the following are agents of soil erosion?

- A. Water and dust
- B. Water and gullies
- C. Water and streams
- D. Water and wind

15. Which method of planting is mostly used when planting maize?

- A. Direct planting
- B. Indirect planting
- C. Transplanting
- D. Row planting

16. When does the hatching of eggs occur?

- A. At 7 days of incubation
- B. At 14 days of incubation
- C. At 21 days of incubation
- D. At 28 days of incubation

17. Figure 17.1 below show a planted vegetable in the garden



**Fig. 17.1**

What activity is demonstrated in Figure 17.1?

- A.** Mulching
- B.** Planting
- C.** Shading
- D.** Transplanting



18. What does the term mothering ability mean in poultry production?

- A.** The rate at which chickens are produced
- B.** The ability to be a good mother and care for offspring
- C.** The ability of the mother to feed on dead or decaying matter
- D.** The ability of the chicken to produce big and healthy chicks



**19.** Which region is the most suitable region for sugar cane production?

- A.** Highveld
- B.** Middleveld
- C.** Lowveld
- D.** Lubombo

**20.** What causes mould in harvested crops?

- A.** Harvesting too early
- B.** Harvesting on time
- C.** Harvesting too late
- D.** Harvesting correctly

**SECTION B (80Marks)**

**1. (a)** Outline any **three** benefits of growing vegetables.

(i) .....

(ii) .....

(iii) ..... [3]

**(b)** Explain modern farming.

.....

.....

.....

..... [2]

**2. (a)** Differentiate between Swazi Nation Land (SNL) and Title Deed Land (TDL).

.....

.....

.....

..... [2]

**(b)** Explain how Agriculture developed.

.....

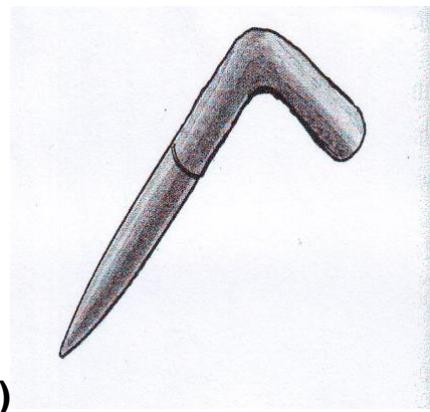
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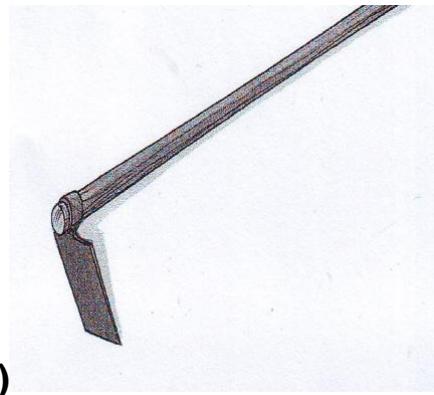
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..... [3]

3. Figure 3.1 shows garden tools



(a)



(b)

Fig. 3.1

(a) Name the tool labelled A

..... [1]

(b) What are the uses of the tool labelled B?

(i) .....

(ii) .....

(iii) ..... [3]

(c) Explain why it is important to use the correct garden tools.

.....

.....

..... [2]

4. (a) Give any three things needed by a vegetable in order to grow strong and healthy.

(i) .....

(ii) .....

(iii) ..... [3]

(b) (i) Define the term tilth as used in agriculture.

.....

..... [1]

(ii) Why is it necessary to prepare a fine tilth for sowing carrot seeds?

.....

.....

..... [1]

5. (a) What are the two types of compost.

(i) .....

(ii) ..... [2]

(b) Give any **three** materials which can be used when making a compost.

(i) .....

(ii) .....

(iii) ..... [3]

6. (a) Name the group for each of the following vegetables.

(i) Beetroot.....

(ii) Beans.....

(iii) Tomatoes .....

(iv) Spinach..... [4]

(b) Give any **two** ways in which plants make food?

(i) .....

(ii) .....[4]

7. (a) Describe the preparation done before the arrival of day-old chicks.

.....  
.....  
.....  
.....  
.....  
.....  
.....

[6]

8. (a) What is thinning?.

.....  
.....

[1]

**(b)** When should thinning be done?

.....

[2]

**(c)** What are the benefits of thinning?

**(i)**.....

**(ii)**.....

**(iii)**..... [3]

9. Explain how the following practices can be used to control pests:

**(a)** Weeding

.....

[1]

**(b)** Cultivation

.....

[1]

**(c)** Hand picking

.....

[1]

**(d)** Crop rotation

.....

[1]

**(e)** Early planting

.....

[1]

**10.(a)** What is a weed?

..... [1]

**(b)** Give one example of a parasitic weed.

..... [1]

**(c)** Outline the three main ways by which weeds can be spread.

**(i)** .....

**(ii)** .....

**(iii)** ..... [3]

**11.(a)** What is the function of the following plant parts?

**(ii) Leaves**

.....  
.....

**(ii) Stem**

.....  
.....

[2]

**(b)** Explain the process of photosynthesis.

.....  
.....  
.....

[3]

**12.(a)** A farmer had a broiler business in the farm. Sort the activities below and state whether the business made a profit or loss.

Bought 65 broilers @ E55 each; 3 bags grower pellets @ E260/bag; 2 bottles Newcastle vaccine @ E60/bottle; sold 45 broilers @ E60 each; sold 20 broilers @ E50 each; bought 4 bags starter crumbles @ E275/bag.

Income	E	C	Expenses	E	C
Total					
Profit/loss					

[6]

**13.(a)** State any three materials which can be used as a mushroom substrate.

(i) .....

(ii) .....

(iii)..... [3]

14. (a) What is a soil structure?

.....

..... [1]

(b) Name the soil types with the following characteristics.

Characteristics	Soil type
(i) Large particles	
(ii) Sticky particles	
(iii) Combines different particles	

[3]

15. (a) What is soil conservation?

.....

.....

..... [2]

(b) Explain how does soil erosion affect farming?

.....

.....

.....

..... [2]

(c) State any two ways of controlling erosion.

(i) .....

(ii) .....

(iii) .....

(vi) ..... [2]

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