



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

CANDIDATE
NAME

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CENTRE
NUMBER

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AGRICULTURE

6882/01

Paper 1

October/November 2019

1 hour

Candidates answer:

Section A: Multiple Choice on the Question Paper.

Section B: Short answers on the Question Paper.

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 a soft pencil for any diagrams or graphs.
Do **not** use staples, paper clips, glue or correction fluid.

Answer **all** questions.

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 | |
|--------------------|--|
| Multiple Choice | |
| Short Answers | |
| Total Marks | |

This document consists of **9** printed pages and **3** blank pages.

Section A: Multiple Choice

Answer **all** questions in this section (20 Marks)

For each of the following questions, place the appropriate letter in the box to indicate the correct answer.

1 Which soil structure is characterised by small rounded aggregates?

- A clay
- B crumb
- C platy
- D prismatic

2 Which plant nutrient deficiency results in the purpling of leaves?

- A magnesium
- B nitrogen
- C phosphorus
- D potassium

3 Which of the following are end products of photosynthesis?

- A carbohydrates and oxygen
- B carbohydrates and water
- C carbon dioxide and oxygen
- D carbon dioxide and water

4 Which part of a maize seed provides protection from diseases?

- A cotyledon
- B endosperm
- C radicle
- D testa

5 Which group of insect pests does the leaf hopper belong to?

- A biting and chewing
- B boring
- C nematodes
- D piercing and sucking

- 6 What could be a characteristic of redwater infection in cattle?
- A coffee coloured urine
 - B continuous sweating
 - C heavy breathing
 - D straw coloured urine
-
- 7 What is a characteristic of a building roof made of thatch?
- A it is good adaptor
 - B it is good conductor
 - C it is good insulator
 - D it is poor insulator
-
- 8 What is the relative size of silt particles?
- A 0.002 – 0.05 mm
 - B 0.02 – 0.05 mm
 - C 0.2 – 0.5 mm
 - D 2.0 – 5.0 mm
-
- 9 Which plant species is an example of an invasive plant in Eswatini?
- A black jack
 - B elephant grass
 - C lucerne
 - D trifid weed
-
- 10 Which soil type would result in a U-shaped sausage when rolled between fingers and thumbs?
- A clay
 - B loam
 - C sand
 - D silt
-
- 11 Which part of the female reproductive system produces oestrogen?
- A ovary
 - B oviduct
 - C uterus
 - D vagina
-

12 Which part of the leaf structure controls water loss?

- A epidermis
- B guard cells
- C mesophyll
- D stomata

13 Which farming system depends on low population density?

- A intensive farming
- B modern farming
- C organic farming
- D shifting cultivation

14 A laying bird has a greatly increased requirement for which mineral?

- A calcium
- B iron
- C magnesium
- D zinc

15 Which marketing function could increase the shelf life of a product?

- A advertising
- B financing
- C grading
- D processing

16 Calculate the maximum number of chickens that can be kept in a 10 m × 10 m poultry house if each bird requires 0.2m².

- A 10
- B 20
- C 100
- D 500

17 What type of weathering occurs when micro-organisms dig and burrow in the ground?

- A biological
- B chemical
- C freeze/ thaw
- D physical

18 Fig. 18.1 shows the longitudinal section of a root.

Which part of the root is responsible for absorption of water and minerals?

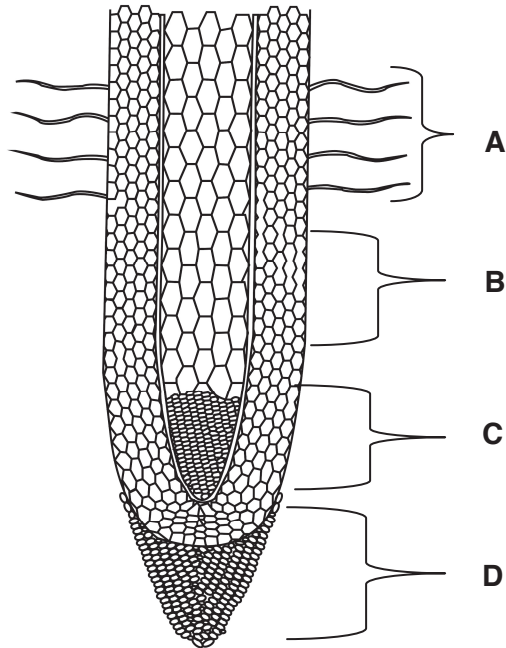


Fig. 18.1

19 What is the name of the process of changing nitrites to nitrates?

- A ammonification
- B decomposition
- C denitrification
- D nitrification

20 Which part of the knapsack sprayer controls the spray strength?

- A cap
- B pump
- C tank
- D trigger

[20 Marks]

SECTION B: Short Answer Response ItemsAnswer **all** questions in this section (40 Marks)

- 21 Which chemical is used to regulate an acid soil?
..... [1]
- 22 In farm credit which type of interest is calculated on a remaining balance?
..... [1]
- 23 Which term describes the breeding of livestock which are of the same breed but not closely related?
..... [1]
- 24 What is the process of returning food into the mouth for further chewing in ruminants?
..... [1]
- 25 Which term describes assets rendered to the bank as security for a farm loan?
..... [1]
- 26 What is the role of the Eswatini Environmental Authority?
..... [1]
- 27 Name any **one** effect of soil erosion on agricultural land.
..... [1]
- 28 Name the feature of the cell membrane in plants that allows osmosis to take place?
..... [1]
- 29 What term is given to the application of new and creative ideas in business?
..... [1]

30 Which type of livestock ration is used to keep animals alive and healthy?
..... [1]

31 Which disease of maize results in yellow veins and stunting?
..... [1]

32 Name the type of herbicide that kills all types of weeds.
..... [1]

33 What is the process of setting up a sprayer to use a chemical accurately and efficiently when spraying?
..... [1]

34 Fig. 34.1 shows a flower.



Fig. 34.1

State **two** adaptations this flower shows for the mechanism of pollination.

- (i)
- (ii) [2]

35 Which law monitors the distribution of water in Eswatini?
..... [1]

- 36 What term describes the loss of nutrients in solution through the soil profile?
..... [1]
- 37 Name any **one** notifiable disease of poultry.
..... [1]
- 38 Which term describes the expression of a gene in the presence of a corresponding gene?
..... [1]
- 39 What term describes the use of mechanical devices to carry out specific farm operations?
..... [1]
- 40 Which term describes planning and estimating ahead the yield and income of crops and livestock?
..... [1]
- 41 What term describes permanent separation of the young cow from a diet of milk?
..... [1]
- 42 State any **one** characteristic of a healthy cow.
..... [1]
- 43 Name the process used to control grain weevils.
..... [1]
- 44 State any **two** precautions that should be taken when handling chemicals.
(i)
(ii) [2]
- 45 Outline any **two** ways of preventing the spread of diseases in crops.
(i)
(ii) [2]

- 46 Which type of grazing system involves the use of a movable fence in a paddock?
..... [1]

- 47 What term is used to describe a cost benefit that a person could have received but gave up to take another course of action?
..... [1]

- 48 Which term is used when the future outcome cannot be predicted?
..... [1]

- 49 How do farmers make the public aware of what they are selling?
..... [1]

- 50 What term describes the number of seeds sown in a given area?
..... [1]

- 51 Give any **two** benefits of transpiration to plants.
 - (i)
 - (ii) [2]

- 52 In which part of the plant does respiration take place?
..... [1]

- 53 Name the equipment used for dehorning calves.
..... [1]

- 54 Name the method of controlling weeds which involves the use of good farming practices.
..... [1]

- 55 Which part of a dam wall takes out excess water?
..... [1]

- 56 Which term describes the quantities of goods and services available to the consumer?
..... [1]

[40 Marks]

