



EXAMINATIONS COUNCIL OF SWAZILAND
Swaziland General Certificate of Secondary Education

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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AGRICULTURE

6882/01

Paper 1

October/November 2018

1 hour

Candidates answer:

Section A: Multiple Choice on the Question Paper.

Section B: Short objective questions 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 ChoiceAnswer **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 insect is classified as piercing and sucking?

- A cutworm
- B grain weevil
- C leaf hopper
- D stalk borer

2 What term describes farm items of value?

- A assets
- B depreciation
- C liabilities
- D total returns

3 Which infectious disease is common in cattle?

- A brucellosis disease
- B newcastle disease
- C redwater disease
- D respiratory disease

4 How does the '*water act*' minimise the effects of drought?

- A introducing greater controls on effluent water
- B regulating the use of water for sports
- C requiring a permit to drill for groundwater
- D supporting water conservation

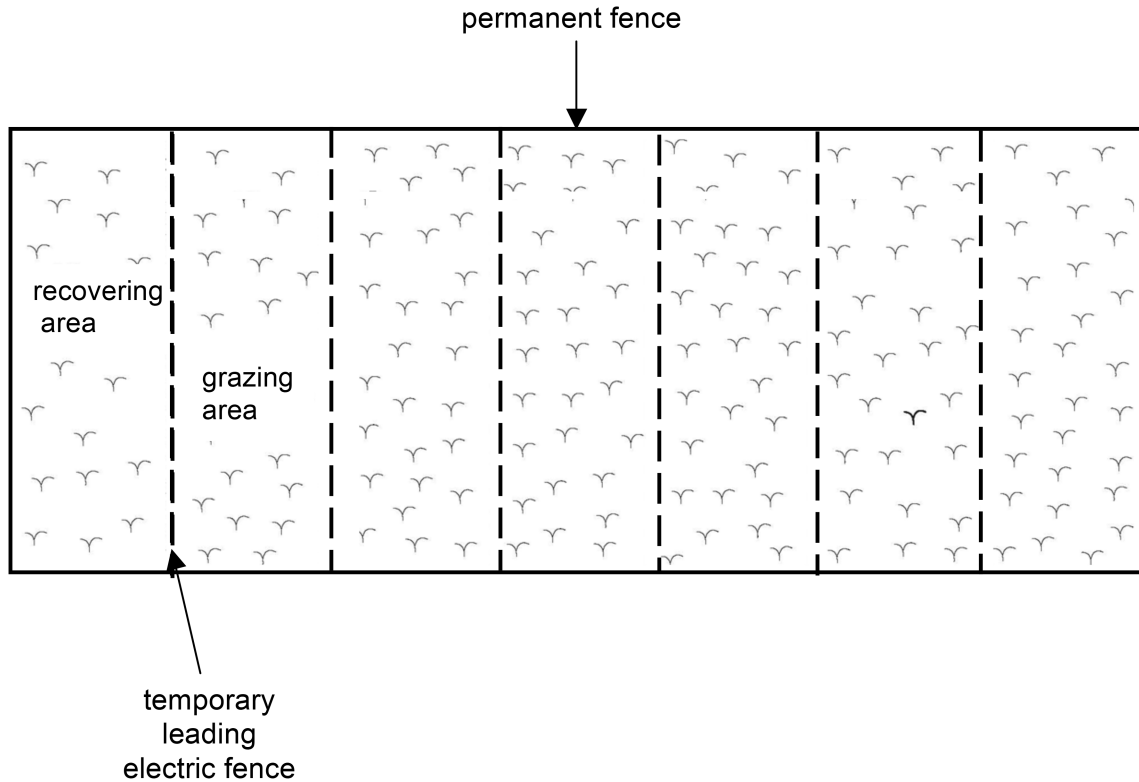
5 Which of the following crops is produced asexually?

- A bean
- B cabbage
- C cassava
- D maize

6 Which sign indicates a healthy cow?

- A clear eyes
- B reddish urine
- C shallow breathing
- D snoring sound

7 The diagram shows a grazing system.



What type of grazing system is shown in the diagram?

- A deferred
- B rotational
- C strip
- D zero

8 Which feature is directly determined by the proportion of sand, silt, and clay in soil?

- A fertility
- B profile
- C soil pH
- D texture

9 What can cause chemical weathering to rocks?

- A acid rain
- B animal tracks
- C freeze-thaw
- D plant roots

10 What advantage to crops does a live fence have over a wire fence?

- A acts as a wind breaker
- B creates humidity
- C prevents fire spreading
- D promotes erosion

11 Which land tenure is characterised by the sharing of resources?

- A communal
- B freehold
- C leasehold
- D title deed

12 Which farming practice could directly lead to eutrophication?

- A afforestation
- B irrigation
- C permaculture
- D recycling

13 What is the amount of nitrogen in a 50kg bag of 'Limestone Ammonium Nitrate' labelled 'LAN (28%)'?

- A 14g
- B 14kg
- C 28g
- D 50kg

14 Which process cools the plant?

- A photosynthesis
- B respiration
- C translocation
- D transpiration

15 What is the role of organic matter in the soil?

- A improve structure
- B increase clay content
- C reduce fertility
- D remove acidity

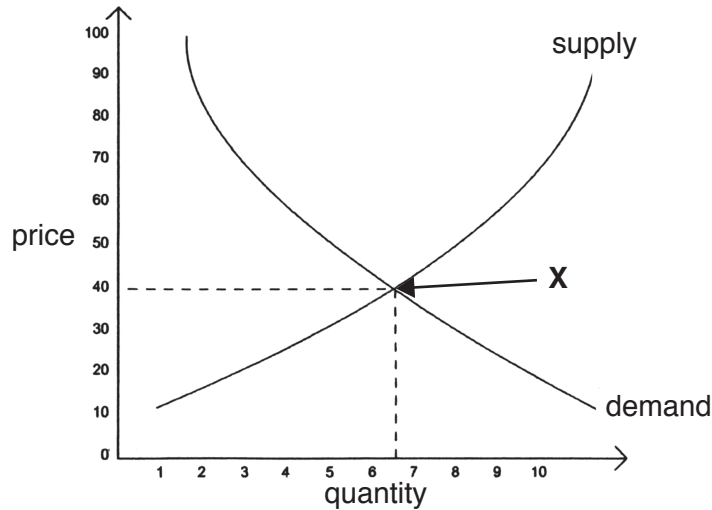
16 Which of the following is formed as a result of the breakdown of cellulose in the rumen?

- A amino acids
- B bacteria
- C fatty acids
- D fungi

17 Which of the following is a variable cost?

- A car depreciation
- B interest on loans
- C purchase of seeds
- D purchase of tractor

18 The graph shows a supply and demand curve.



What is point X?

- A cost price
- B equilibrium price
- C quantity demanded
- D quantity supplied

19 Which group of bacteria are responsible for fixing nitrogen in legumes?

- A azotobacter
- B denitrifying
- C nitrobacter
- D rhizobium

20 In which part of a ruminant stomach are foreign objects, like wire and nails, most likely to be trapped?

- A abomasum
- B omasum
- C reticulum
- D rumen

[20 marks]

Section B: Short Objective QuestionsAnswer **all** questions in this section (40 Marks)

- 21 What name is given to the process of obtaining plants with desired traits over many generations?
..... [1]
- 22 What is the type of weathering when plant roots cause rocks to split.
..... [1]
- 23 What is the practice of isolating livestock for monitoring and controlling diseases.
..... [1]
- 24 Which disease of beans is characterised by small white spots which later turn brown?
..... [1]
- 25 Give **one** reason why it is important to lubricate tools used for cultivation.
..... [1]
- 26 What name is given to the process of sorting agricultural products to given standards prior to packing and sending to market?
..... [1]
- 27 State **one** advantage of inbreeding in livestock.
..... [1]
- 28 Give **one** reason for market research.
..... [1]
- 29 What is the main gas released in photosynthesis?
..... [1]

- 30 Name **two** types of micro-organisms found in the rumen.
- (a)
- (b) [2]
- 31 Which type of cost describe the payment of permanent labour in farm accounts?
- [1]
- 32 Give any **two** signs of maturity in a maize crop.
- (a)
- (b) [2]
- 33 Which part of the ruminant digestive system squeezes water out of food?
- [1]
- 34 An allele whose expression is suppressed in the presence of another allele is called ...
- [1]
- 35 Describe a method of feeding shown by a grass hopper?
- [1]
- 36 Give **two** methods of establishing a grass paddock.
- (a)
- (b) [2]
- 37 Suggest **two** advantages of using certified seeds.
- (a)
- (b) [2]
- 38 Name the equipment used in administering medication to livestock to control internal parasites?
- [1]

- 39 Give any **one** expected benefit of crops grown from seeds with a GMO.
..... [1]
- 40 Name **one** mineral nutrient found in dolomitic lime.
..... [1]
- 41 Give **two** processes that can reduce soil fertility.
(a)
(b) [2]
- 42 What name is given to cut, dried grass preserved for feeding livestock?
..... [1]
- 43 State **two** types of germination.
(a)
(b) [2]
- 44 Give **one** advantage of cross pollination.
..... [1]
- 45 Name a parasitic weed of maize.
..... [1]
- 46 Which feature of a cell is responsible for the continued existence of living things?
..... [1]
- 47 Which process describes the union of the male and female sex cells?
..... [1]
- 48 Name the practice that describes the process of stopping suckling in young animals.
..... [1]

49 Where is a zygote implanted after fertilisation in cattle?

..... [1]

50 Outline **two** characteristics of quality silage.

(a)

(b) [2]

51 State **two** advantages of permaculture.

(a)

(b) [2]

52 Name a planting medium for hydroponics.

..... [1]

[40 marks]

