

## EXAMINATIONS COUNCIL OF ESWATINI Eswatini General Certificate of Secondary Education

CANDIDATE NAME			
CENTRE NUMBER		CANDIDATE NUMBER	

#### AGRICULTURE

Paper 1 Specimen

6882/01 October/November 2021 1 hour

Additional Material: Calculator

Candidates answer:

Section A: Multiple Choice on the Question Paper Section B: Short Answer 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, highlighters, 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	

### 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 type of insect pest is a vector of maize streak?
  - A biting and chewing
  - **B** boring
  - **C** piercing and sucking
  - D sucking
- 2 Which of the following is a leguminous pasture plant?
  - A beans
  - B lentils
  - C lucerne
  - D peas
- 3 How can agriculture help to promote food security?
  - **A** by producing more food for export
  - **B** by providing more production taxes
  - **C** by relying less on government subsidies
  - **D** by self-sufficiency in food production
- 4 What could be the impact of HIV/AIDS on child headed families?
  - A increased land use
  - **B** increased productivity
  - **C** reduced mechanisation
  - D reduced production
- 5 What practice leads to desertification?
  - A afforestation
  - B deforestation
  - **C** irrigation
  - D silviculture

6 Which type of fence is ideal for cattle kraals and crushes?

- A electric fencing
- B post and barbed wire
- C post and diamond mesh
- D post and rail
- 7 Which process results in release of energy?
  - A osmosis
  - B photoperiodism
  - **C** photosynthesis
  - D respiration
- 8 What is the optimum pH range for plant growth?
  - **A** 1.5 2.5
  - **B** 3.5 4.5
  - **C** 5.5 6.5
  - **D** 7.5 8.5
- **9** Which is the main export of Swaziland?
  - A agricultural by-products
  - **B** agricultural products
  - **C** manufactured products
  - D minerals products
- 10 Why is lime added to the soil?
  - A to increase soil acidity
  - **B** to maintain alkalinity
  - **C** to reduce calcium levels
  - D to reduce soil acidity
- 11 Which soil structure is most suitable for agricultural cultivation?
  - A blocky
  - B crumb
  - **C** platy
  - D prismatic

- **12** Which substance is transported through the xylem vessels?
  - A air
  - B starch
  - **C** sugars
  - D water

13 What is the purpose of placing a foot bath at the entrance of the poultry house?

- A to control rodents
- **B** to cool the poultry house
- **C** to prevent spread of diseases
- **D** to prevent spread of pests
- 14 What is the importance of the relationship between supply and demand?
  - A to advertise products
  - **B** to determine competitors
  - **C** to determine markets
  - D to determine prices
- 15 What makes soil susceptible to erosion?
  - A high clay content
  - **B** high water content
  - C lack of minerals
  - D lack of ground cover

16 Which part of the reproductive system produces sperm cells?

- A ovary
- B penis
- C testes
- D vagina
- 17 What is the application of new and creative ideas to a business?
  - A budgeting
  - B enterprise
  - **C** entrepreneurship
  - D evaluation

- **18** The recommended dilution of a pesticide is 10 ml per 25 litre of water. What is the volume of pesticide needed for a 5 litre sprayer?
  - **A** 2 ml
  - **B** 5 ml
  - **C** 50 ml
  - **D** 250 ml
- 19 Which feed provides a high level of protein for poultry?
  - A fresh grass
  - B maize bran
  - **C** roughages
  - D soya meal
- 20 Which part of the calf should come out first during birth?
  - A back leg first
  - **B** front legs first
  - C head first
  - D tail first

	6	E
	Section B: Short Answer Response Items	
	Answer <b>all</b> questions in this section (40 marks).	
21	What term describes the estimation of income and expenses incurred in production?	1
22	State <b>one</b> environmental condition necessary for storing cereal crops.	
23	Why is grass included in crop rotation?	
24	Which nutrient is supplied by ash from burnt plant residues?	
25	What is the name of the "first" milk in ruminants which is rich in antibodies?	
26	In which soil horizon do most plant roots develop?	
27	What is the practice of growing crops in a nutrient solution rather than soil?	
28	Which major nutrient is most necessary for the development of tubers in sweet potato?	
29	Name <b>one</b> breed of fish that is commonly farmed in Swaziland.	
30	[1] Name <b>two</b> chemical substances applied on tools to keep them in good condition.	
	(i)[2	]
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31	What is the practice of growing a crop which is then dug into the soil before flowering?	
		[1]
32	Which soil property is damaged when working on a wet soil?	
		[1]
33	Suggest any <b>two</b> farming practices that encourage water to enter the soil.	
	(i)	
	(ii)	[2]
34	What type of erosion is characterised by small shallow furrows that run up and down a slope?	
		[1]
35	Name two changes that have taken place in Eswatini which make soil conservation	
	difficult.	
	(i)	
	(ii)	[2]
36	What happens to a plant when the rate of transpiration is greater than the rate	
	of absorption?	
		[1]
37	What is the process of cutting the sperm duct in testicles of livestock?	
		[1]
38	What term describes the reduction in value of an item over time?	
		[1]
39	Name the equipment used for pulling the wire tight during fence construction.	

40	What type of ration is given to a lactating animal?
41	What is the process by which plants roots take up water from the soil.
42	Which land tenure is characterised by tenants paying rent.
43	[1] Which term describes an exposed vertical section of soil?
44	
45	What is the process by which plants absorb carbon dioxide into their leaves.
46	[1] Which term describes the amount of seeds sown per unit area?
40	
47	Name <b>one</b> common insect pest that attacks maize seedlings soon after emergence. [1]
48	Which term describes a livestock disease that spreads rapidly and is difficult to control? [1]
49	What is the use of a living fence?
50	Which chemical is used to treat wooden posts against fungi?

51	Name any <b>one</b> possible career opportunity within the agricultural industry.
52	What term describes the movement of photosynthates from the leaves of a plant to its
	storage organs?
	[1]
53	What name is given to cut, dried grass for livestock winter feeding?
	[1]
54	Name the technique which involves depositing semen in the vagina of a cow using a catheter and syringe.
55	What term describes organisms whose genetic make-up have been changed to produce new traits?
	[1]
56	Give <b>one</b> possible cause of global warming.
	[1]
57	What is the practice of growing crops and raising livestock in the same farm?
	[1]

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