



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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AGRICULTURE

6882/01

Paper 1

October/November 2022

1 hour

Additional Material: Calculator

Candidates answer:

Section A: Multiple Choice on the Question Paper.

Section B: Short Answers on the Question Paper.

READ THESE INSTRUCTIONS FIRST

Write your Name, Centre Number and Candidate Number 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).

1 What controls gaseous exchange in a plant leaf?

- A chloroplast
- B cuticle
- C guard cells
- D xylem

2 What term describes the ability of the soil to provide enough nutrients for plant growth?

- A soil erosion
- B soil fertility
- C soil structure
- D soil texture

3 Which legislation ensures proper management of bio-diversity in Eswatini?

- A agricultural policy
- B environmental policy
- C forest policy
- D national policy

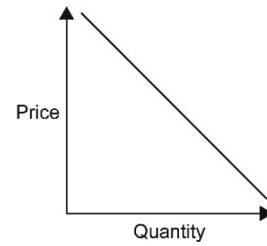
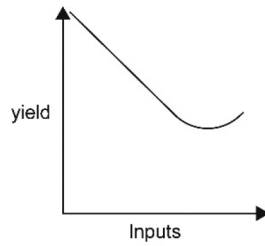
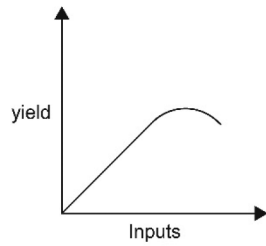
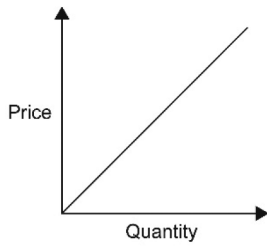
4 Which marketing function adds value to milk?

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

5 What could be a direct economic effect of *Solanum mauritianum* (bugweed) to the government of Eswatini?

- A contaminates produce
- B costly to control
- C dries water sources
- D reduces arable land

6 Which graph illustrates the law of diminishing returns?



7 How does an increase in rainfall over several years influence soil pH?

- A soil pH increases
- B soil pH is maintained
- C soil pH neutralises
- D soil pH reduces

8 What term describes an organism that depends on another for survival?

- A host
- B parasite
- C pathogen
- D pest

9 What prevents wave erosion on a dam?

- A concrete slab
- B grass cover
- C overflow pipe
- D rip rap

10 Which water source is the safest to drink?

- A borehole
- B dam
- C spring
- D well

11 Which is a sure way of preventing Newcastle disease in poultry?

- A footbath usage
- B good sanitation
- C manage litter
- D vaccinate birds

12 **Table 12.1** shows a farmer's financial statement.

Table 12.1

Income	Expenses
7.5 tonnes of maize @ E1000.00/ton	– Chemicals @ E2000.00
	– Permanent labour @ E1500.00
	– Seeds @ E1000.00

What is the farmer's total variable costs?

- A E1500.00
- B E3000.00
- C E4500.00
- D E7500.00

13 Which record measures profitability of a livestock enterprise?

- A breeding record
- B diary record
- C financial record
- D production record

14 **Fig. 14.1** shows a maize seed.

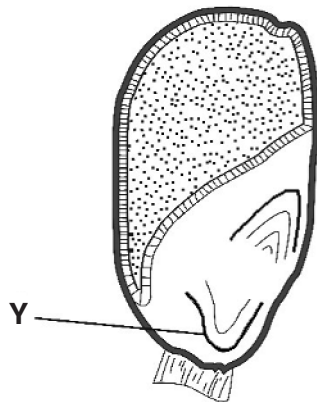


Fig. 14.1

What is the function of part **Y**?

- A to develop into leaves
- B to develop into roots
- C to protect the plumule
- D to protect the radicle

15 What is the correct sequence for these environmental processes?

- A climate change, greenhouse effect, global warming
- B global warming, greenhouse effect, climate change
- C global warming, climate change, greenhouse effect
- D greenhouse effect, global warming, climate change

16 Which equipment is used in the artificial pollination of plants?

- A long needle
- B plastic straw
- C small syringe
- D soft brush

17 Which acid is produced during silage making?

- A carbonic acid
- B hydrochloric acid
- C lactic acid
- D sulphuric acid

18 What type of farming involves high use of inputs per unit area?

- A arable farming
- B extensive farming
- C intensive farming
- D organic farming

19 Which term describes the proportion of sand, silt, and clay in a soil?

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

20 What process involves the movement of mineral ions against their concentration gradient?

- A active transport
- B diffusion
- C osmosis
- D translocation

Section B: Short Objective Questions

Answer **all** questions in this section (40 marks).

- 21** Which developmental stage of agriculture is characterised by leaving infertile land to cultivate a new area?
..... [1]
- 22** What type of weathering is oxidation?
..... [1]
- 23** Give an example of a creeping cultivated pasture grass.
..... [1]
- 24** Which vascular tissue conducts water and mineral salts up the plant?
..... [1]
- 25** Which term describes the fusion of a male and a female gametes?
..... [1]
- 26** Which general term describes chemicals that are used to control weeds?
..... [1]
- 27** Which disease of tomato plants can be identified by cutting a length of stem and recording the release of a milky substance when it is placed in water?
..... [1]
- 28** What name is given to a group of plants produced asexually?
..... [1]
- 29** Name the first milk calves get from their mother after birth?
..... [1]
- 30** Which term describes the removal of unproductive chickens from a flock?
..... [1]

- 31 Give any **two** reasons for the inclusion of lucerne in a pasture.
- (i)
- (ii) [2]
- 32 Which part of a knapsack sprayer controls the release of the chemical?
- [1]
- 33 Name the posts that are placed at intervals between standard posts.
- [1]
- 34 Which soil type could be used to prevent seepage in an earth dam?
- [1]
- 35 What term describes the debts of a farm business?
- [1]
- 36 Name the equipment used for dehorning cattle.
- [1]
- 37 Which group of pests are aphids classified under?
- [1]
- 38 What name describes the state of ownership of land?
- [1]
- 39 What name is given to dried cut grass that is used for livestock feeding?
- [1]
- 40 Which term describes the growing of crops in a nutrient solution?
- [1]
- 41 Name the equipment used for tightening wire fences.
- [1]

- 42 Which 'Act' controls the importation of GMOs into Eswatini?
..... [1]
- 43 What name is given to an area that collects rainwater into a reservoir?
..... [1]
- 44 Which process is responsible for the loss of water from land surfaces into the atmosphere?
..... [1]
- 45 Name the process given to sorting agricultural products to given standards prior to packing and sending to market?
..... [1]
- 46 What term describes mating unrelated animals of the same breed?
..... [1]
- 47 What is the percentage of phosphorus in a 50 kg bag of 2:3:2 (35) fertiliser?
..... [1]
- 48 Name a career opportunity in the field of plant protection.
..... [1]
- 49 Which major plant nutrient is contained in dried blood?
..... [1]
- 50 What term describes the transfer of pollen grains from the anther to the stigma in the same plant?
..... [1]
- 51 Which pasture management practice involves sowing of seeds to improve a pasture?
..... [1]
- 52 What name is given to the process of giving birth in cows?
..... [1]

53 Name an accessory gland that produces seminal fluid.
..... [1]

54 Which chemical substances fight off infection in the body of livestock?
..... [1]

55 Give any **two** common chicken vices.
(i)
(ii) [2]

56 What type of record lists all physical and monetary assets in the farm?
..... [1]

57 What economic term describes the loss of potential gain when one particular alternative is chosen over the others?
..... [1]

58 Give any **one** example of a root tuber.
..... [1]

