



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 2020

1 hour

Additional Material: Calculator

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 **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 **10** printed pages and **2** 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 What is the contribution of Eswatini agriculture to world trade?

- A food and clothing
- B foreign exchange
- C provide employment
- D skilled labour

2 WORMEX is used for deworming livestock. The dosage for WORMEX is 1ml per 4kg live weight.

How much WORMEX is needed to deworm a 30kg goat?

- A 2.5 ml
- B 4.0 ml
- C 7.5 ml
- D 30 ml

3 Which term describes a herbicide application carried out after germination?

- A biological spray
- B post-emergence
- C pre-emergence
- D seed dressing

4 How can farmers prevent denitrification occurring in the soil?

- A applying excessive synthetic fertilisers
- B applying excessive water
- C digging the soil frequently
- D practising intercropping

5 Which term describes a farming situation where outcomes might be disturbed?

- A demand
- B risk
- C supply
- D uncertainty

6 Fig. 6.1 shows the soil textural triangle.

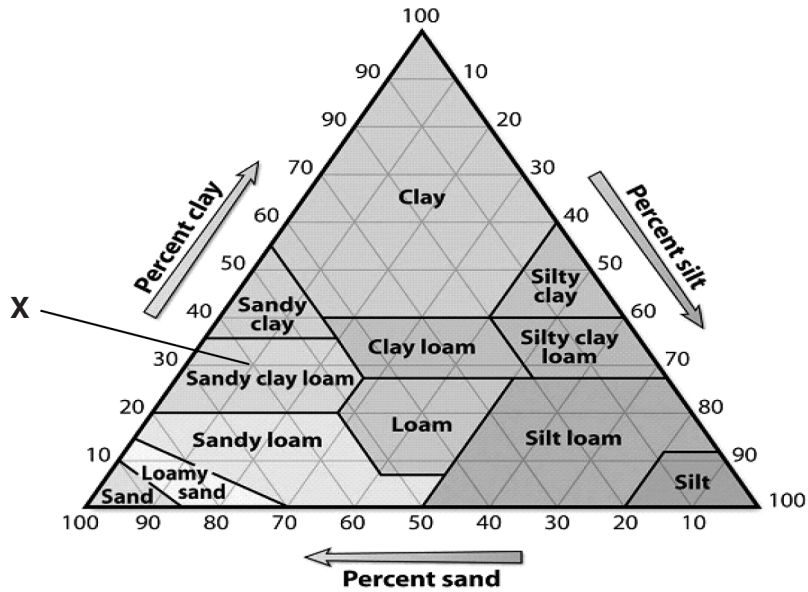


Fig. 6.1

What are the proportions of soil in point X on Fig. 6.1?

- A 10% sand, 60% clay, 30% silt
- B 60% sand, 40% clay, 10% silt
- C 70% sand, 20% clay, 10% silt
- D 90% sand, 0% clay, 10% silt

7 Which enzyme coagulates milk in young animals?

- A amylase
- B pepsin
- C rennin
- D trypsin

8 What term describes the period of raising chicks up to four weeks old?

- A adult period
- B brooding period
- C growing period
- D incubation period

9 What chemical can be used to neutralise soil with a pH of 4.8?

- A Ammonium Sulphate
- B Barium Sulphate
- C Calcium Carbonate
- D Magnesium Chloride

10 Which pest destroys the endosperm of grain crops?

- A aphid
- B cutworm
- C grasshopper
- D weevil

11 Which part of the leaf structure contains most chlorophyll?

- A epidermis
- B mesophyll
- C palisade
- D stomata

12 Which of the following livestock is a ruminant?

- A chicken
- B cow
- C pig
- D rabbit

13 Which farming system is best suited for a small scale farmer using low inputs?

- A intensive farming
- B intercropping
- C organic farming
- D permaculture

14 What indicates a deficiency of potassium in crop plants?

- A large dark green leaves
- B orange brown leaves
- C purple stunted leaves
- D white transparent leaves

15 Which term describes the movement of water from a dilute solution to a more concentrated solution through a semi permeable membrane?

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

16 Which system involves growing crops with livestock on the same farm?

- A crop rotation
- B intercropping
- C mixed cropping
- D mixed farming

17 Which breeding system maintains pure breeds in the short term?

- A cross breeding
- B hybridisation
- C inbreeding
- D selection

18 Which plant cells carry water up the stem?

- A guard cells
- B phloem cells
- C spongy cells
- D xylem cells

19 Which ration is given to a lactating cow?

- A cereal ration
- B dry ration
- C maintenance ration
- D production ration

20 Which type of soil is easily leached?

- A clay
- B loam
- C sand
- D silt

[20 Marks]

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

- 21 What type of weathering results from expansion and contraction of rocks?
..... [1]
- 22 Which soil constituent provides food for micro-organisms?
..... [1]
- 23 What type of soil structure has suitable aggregates for plant growth?
..... [1]
- 24 Which plant nutrient is supplied by bone meal?
..... [1]
- 25 What is the process by which carbon dioxide enters the plant leaves?
..... [1]
- 26 How does lack of water affect the rate of photosynthesis?
..... [1]
- 27 Why is it essential for rabbits to eat their soft pellets?
..... [1]
- 28 What term describes the feed with correct proportions of nutrients for livestock?
..... [1]
- 29 Which mineral is essential for high milk production?
..... [1]
- 30 What type of farm record list details of 'feed conversion ratios'?
..... [1]

31 Fig. 31.1 shows an equipment used in pest control.



Fig. 31.1

(i) Name the part labelled Y.

..... [1]

(ii) What is the function of the part labelled X on the equipment?

..... [1]

32 Give **two** soil conditions that could affect nutrient availability to plants.

(i) [1]

(ii) [1]

33 What practice is used to prevent viral disease in livestock?

..... [1]

34 Give any **one** property of concrete building blocks.

..... [1]

35 What term describes the gradual decline of productive land?

..... [1]

- 36 Name **two** ways by which soil could be harmed by high stocking rates.
- (i) [1]
 - (ii) [1]
- 37 State any **two** factors to be considered when selecting the site for a livestock building.
- (i)
 - (ii) [2]
- 38 Which part of a flower contains ovules?
- [1]
- 39 What term describes large scale farming for sale and export?
- [1]
- 40 Name any **one** notifiable disease for:
- (i) poultry
..... [1]
 - (ii) cattle
..... [1]
- 41 Which type of weeds complete their life cycle in a single year?
- [1]
- 42 What type of pathogen causes blight in potatoes?
- [1]
- 43 Which equipment can be used for castration?
- [1]
- 44 What term describes an organism that causes ecological or economic harm in a new environment where it is not native?
- [1]

45 Which term describes the difference between farm assets and liabilities?
..... [1]

46 Which plants process moves carbohydrates in the phloem?
..... [1]

47 What type of pollination involves the transfer of pollen grains from one flower to another in the same plant?
..... [1]

48 Give the general term for material placed on the soil surface to reduce water loss.
..... [1]

49 External parasites cause animal discomfort and loss of condition.
State **two** other effects of external parasites.
(i) [1]

(ii) [1]

50 Which structure found in the nucleus of cells carries genetic information in form of genes?
..... [1]

51 Which term describe a group of farm equipment which requires greater power to operate?
..... [1]

52 Fig. 52.1 shows a type of erosion.



Fig. 52.1

(i) Name the type of erosion shown in Fig. 52.1.

..... [1]

(ii) Suggest **two** methods of reducing the erosion in Fig. 52.1.

.....
..... [2]

[40 Marks]

