



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini 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 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 Answer	
Total Marks	

This document consists of **12** printed 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 soil texture is difficult to cultivate?

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

2 What is a problem of extensive pasture management?

- A compaction
- B overgrazing
- C selective grazing
- D veld reinforcement

3 A homozygous white female rabbit (**RR**) is mated with a homozygous red male rabbit (**rr**). The offspring from this cross were allowed to interbreed.

What is the probability of obtaining a heterozygous white rabbit in the second filial generation?

- A 25%
- B 50%
- C 75%
- D 100%

4 Which livestock feed is the best for a two week old broiler chick?

Feed	Carbohydrate (%)	Calcium (%)	Protein %
A	55	5	40
B	58	2	40
C	62	3	35
D	65	5	30

- 5 Fig. 5.1 shows a corner post.

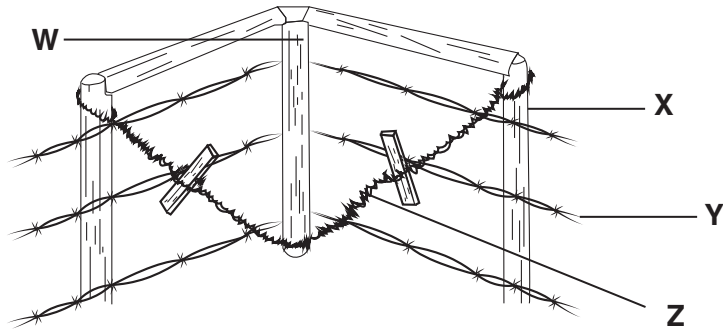


Fig. 5.1

What is the purpose of the wire labelled Z?

- A it braces post W from opposing forces
- B it holds post X in position
- C it pulls wire Y tight when twisted
- D it keeps post W firmly in the ground

- 6 Which of the following loans can be classified as a long term loan?

- A loan for field cultivation
- B loan for paying casual labour
- C loan for purchasing a tractor
- D loan for purchasing seeds

- 7 What could be a benefit of using a drip irrigation system?

- A decreases water loss
- B improves soil texture
- C minimises use of fertilisers
- D reduces incidence of pests

8 Which hand tool is used to prepare a fine tilth?

- A fork
- B hoe
- C rake
- D spade

9 Which disease is recognised by blood stains in the droppings?

- A brucellosis
- B coccidiosis
- C Newcastle
- D red-water

10 Which of the following is a characteristic of insect pollinated flowers?

- A feathery stigmas
- B loose anthers
- C small petals
- D sticky pollen

11 Which programme in Eswatini builds on farmers' knowledge in promoting agricultural development?

- A agricultural extension
- B agricultural research
- C environmental authority
- D regional development fund

12 Which substances are needed for a nitrate nitrogen test in a school laboratory?

- A nitrate nitrogen extract and nutrient reagent
- B nitrate nitrogen reagent and soil extract
- C nitrogen nitrate extract and soil extract
- D nitrogen nitrate reagent and nutrient extract

13 Which substance is a chemical and physical weathering agent?

- A oxygen
- B plants
- C water
- D wind

14 Which of the following is considered a major plant nutrient?

- A boron
- B magnesium
- C manganese
- D zinc

15 Which element is lacking in acidic soils?

- A aluminium
- B iron
- C manganese
- D phosphorus

16 Fig. 16.1 shows the cross section of a root.

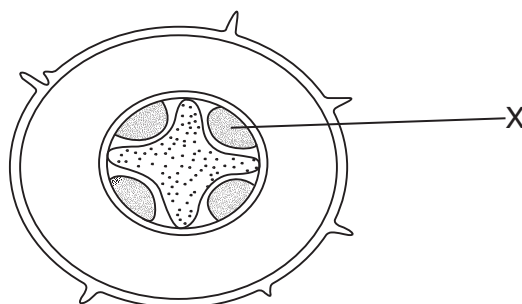


Fig. 16.1

What is tissue X?

- A cortex
- B phloem
- C pith
- D xylem

17 What is the end product of protein digestion in a ruminant?

- A amino acids
- B fatty acids
- C glycerol
- D glucose

18 Which hormone causes the pelvis of a cow to widen at birth?

- A oestrogen
- B progesterone
- C relaxin
- D testosterone

19 Fig. 19.1 shows two water drinkers, X and Y, in a poultry deep litter house.

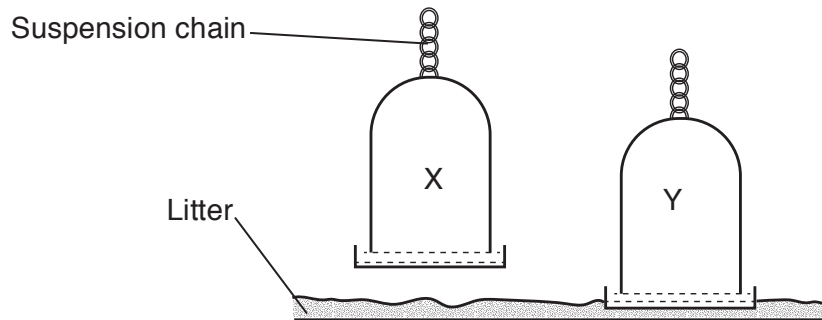


Fig. 19.1

Why is X preferred to Y?

- A because chickens are less able to perch
- B because it contains more water
- C because litter underneath becomes wet
- D because water contamination is less

20 Which paddock has the highest stocking rate?

Paddock	Number of hectares	Number of animals
A	10	5
B	10	10
C	20	5
D	20	10

SECTION B: Short Response Questions

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

- 21** Name a major nutrient that increases plant resistance to diseases.

..... [1]

- 22** State the function of the cuticle of a leaf.

..... [1]

- 23** Name the method of determining the spray volume of a sprayer.

..... [1]

- 24** What type of land tenure is characterised by faster land degradation?

..... [1]

- 25** Which term describes the amount of moisture in the atmosphere?

..... [1]

- 26** Fig. 26.1 shows a structure of a flower.

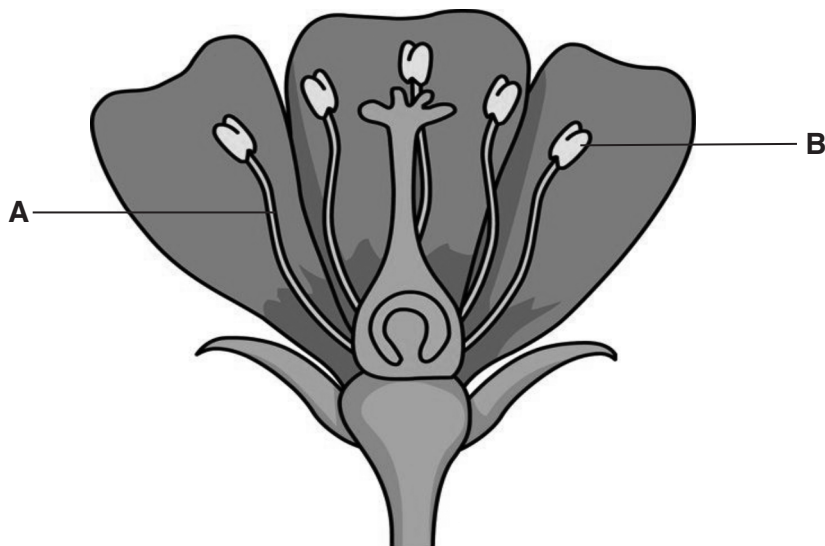


Fig. 26.1

Name structures **A** and **B**.

A **B** [2]

27 Fig. 27.1 shows an annual weed.



Fig. 27.1

What type of weed killer would be used to control this weed in a young crop of maize?

..... [1]

28 How are bush plants controlled biologically in a pasture?

..... [1]

29 Name the organism that spreads the maize streak virus.

..... [1]

30 Which muscle pulls back the penis into the sheath after mating in bulls?

..... [1]

31 What name is given to extra feed that makes up for nutritional deficiencies in the normal diet?

..... [1]

32 What term describes the occurrence of two identical alleles at the same locus on a chromosome?

..... [1]

33 List **two** methods of collecting rain water for the purpose of irrigation.

1

2 [2]

34 Which marketing function would ensure each of the following?

1 availability of product throughout the year

.....

2 easy handling of the product

..... [2]

35 What type of cost relates to levels of production?

..... [1]

36 Which term describes output per unit input factor?

..... [1]

37 State **any** source of information needed for budgeting.

..... [1]

38 Name any **one** surface irrigation method.

..... [1]

39 What name is given to the affordable and non-complex farm equipment that improves production efficiency?

..... [1]

40 What is the type of disease that is caused by lack of some nutrients in livestock rations?

..... [1]

41 Give any **two** examples of pasture legumes.

1

2 [2]

42 State any **two** methods of conserving water in a field.

(i)

(ii) [2]

43 Fig. 43.1 shows a grazing pasture.



Fig. 43.1

Give **one** good feature of the pasture shown in Fig. 43.1

..... [1]

44 Fig. 44.1 shows a farmer using a knapsack sprayer.

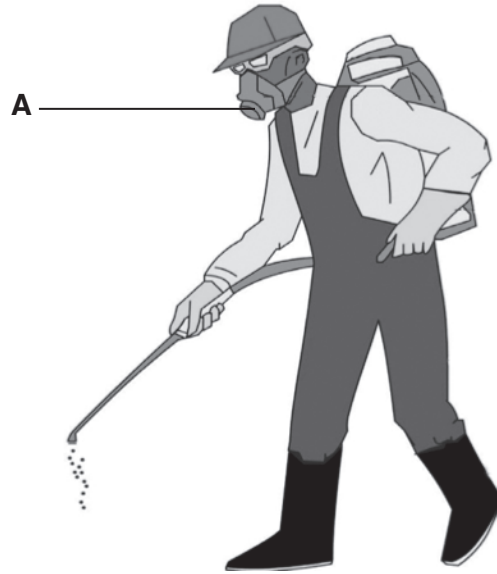


Fig. 44.1

What is the name of the protective wear labelled **A**?

..... [1]

45 State any **two** sources of farm credit that are made available for farmers.

1

2 [2]

46 Give **two** soil sampling methods.

1

2 [2]

47 Fig. 47.1 shows the germination of a maize seed at different stages.

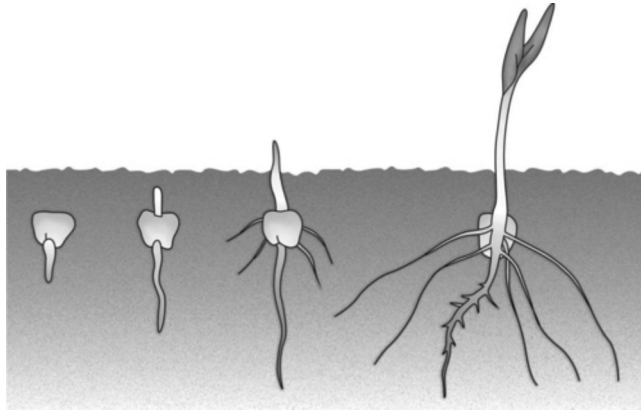


Fig. 47.1

What type of germination is shown by the seed above?

..... [1]

48 Name the sheath that protects the plumule when it emerges from the soil?

..... [1]

49 Name the practice of using superior animals as parents of future generations?

..... [1]

50 What term describes the running of different enterprises at once, so that if one fails the farmer can benefit from the other?

..... [1]

51 What name is given to a person who is passionate about a project and identifies a market opportunity?

..... [1]

52 Name **one** common invasive plant species in the kingdom of Eswatini.

..... [1]

53 Give **one** technological advancement that could be used when using a sprinkler system in a green house.

..... [1]

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