



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 2023

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 Candidate 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 **11** printed pages and **1** blank page.

Section A: Multiple Choice

Answer **all** questions in this section (**20 marks**).

1 What is the first stage in the development of agriculture?

- A domestication
- B gathering/hunting
- C nomadic herding
- D settled agriculture

2 Which land tenure system is owned by the community?

- A communal
- B customary
- C freehold
- D leasehold

3 Which farming practice is most diversified?

- A hydroponics
- B intercropping
- C mixed farming
- D monoculture

4 Which organisation issues permits for genetically modified seed imports?

- A Eswatini Environmental Authority
- B Eswatini National Trust Commission
- C Eswatini Seed Companies
- D National Agricultural Marketing Board

5 **Fig. 5.1** shows a type of physical weathering on the surface of a rock.

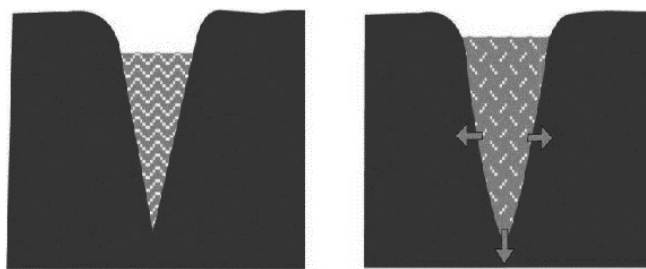


Fig. 5.1

Name the type of weathering shown in **Fig. 5.1**.

- A exfoliation
- B freeze-thaw
- C hydrolysis
- D pressure release

6 Fig. 6.1 shows a pie chart of four soil constituents.

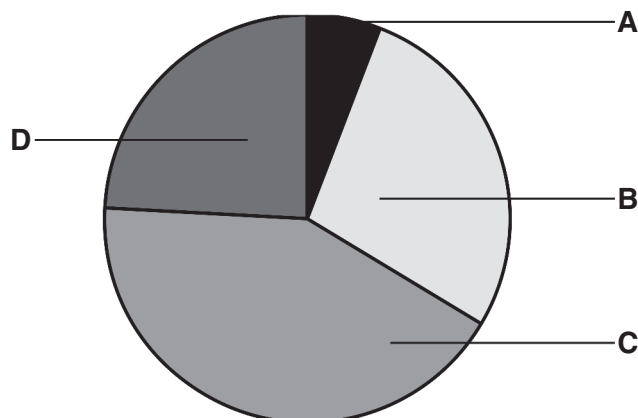


Fig. 6.1

Which segment on the pie chart represents minerals in Fig. 6.1?

7 What soil structure is made up of vertical, cylindrical-shaped aggregates?

- A crumb
- B loam
- C platy
- D prismatic

8 Which of the following is an organic fertiliser?

- A ammonium nitrate
- B ammonium sulphate
- C cotton seed meal
- D potassium sulphate

9 Which method of conserving the soil uses stones in a wire netting?

- A barriers
- B gabions
- C terracing
- D tie-ridging

10 Which part of a plant leaf controls the exchange of gases?

- A chloroplast
- B phloem
- C stoma
- D xylem

11 Which of the following is a parasitic weed of maize?

- A bug weed
- B pig weed
- C star grass
- D witch weed

12 Which is the planting material for sweet potatoes?

- A leaves
- B seeds
- C stem cuttings
- D stem tubers

13 What type of pest is an armyworm larva?

- A biting and chewing
- B boring pest
- C cutting and chewing
- D piercing and sucking

14 Which crop disease can be identified by dark brown patches on leaves?

- A bacterial wilt
- B blight
- C damping-off
- D maize streak

15 Which of the following is a pasture legume?

- A kikuyu
- B lucerne
- C rye grass
- D star grass

16 What phenotypic ratio for a single gene effect is obtained when breeding heterozygous individuals?

- A 1:1
- B 1:2
- C 2:1
- D 3:1

17 Fig. 17.1 shows a set of farm tools.

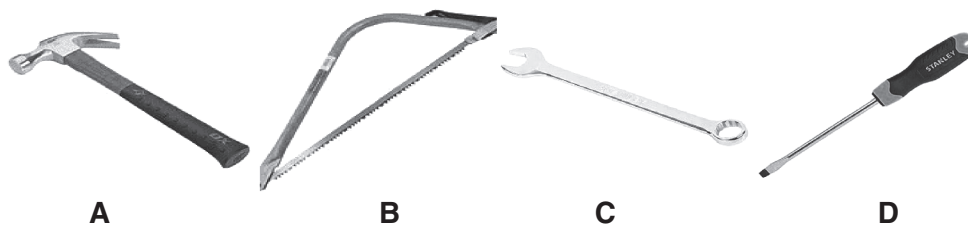


Fig. 17.1

Which tool is used for removing nails in Fig. 17.1?

18 In an automatic watering system in a glasshouse, what would trigger the start of irrigation?

- A humidity
- B light
- C temperature
- D wind

19 Fig. 19.1 shows the law of diminishing returns.

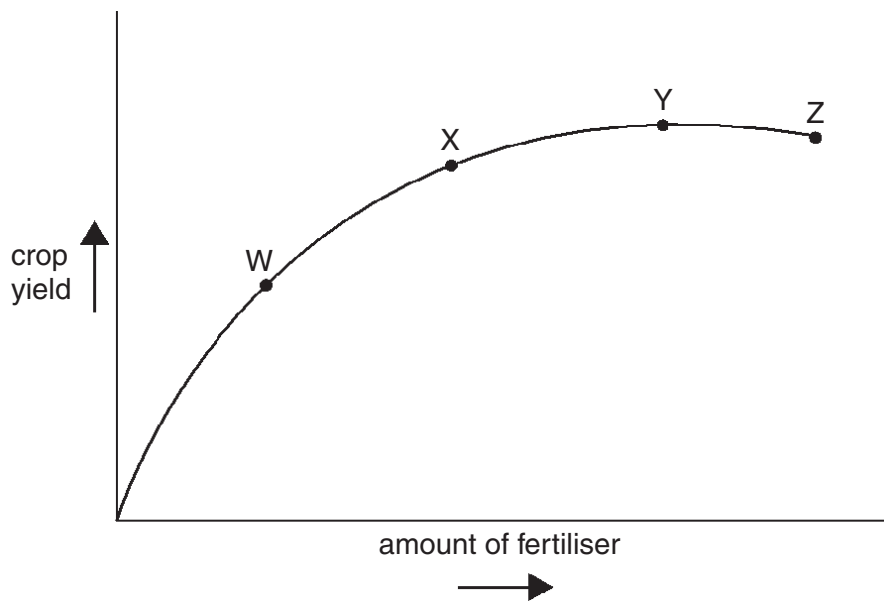


Fig. 19.1

Which point of fertiliser application represents the best use for money?

- A W
- B X
- C Y
- D Z

20 What can farmers do to reduce the effects of risk and uncertainty?

- A acquire more credit
- B intensify marketing
- C minimise depreciation
- D ration inputs

Section B: Short Response Questions

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

- 21** Name the term that describes having enough nutritious and affordable food.
..... [1]
- 22** What is the key role of the Regional Development Fund in the Agriculture of Eswatini?
..... [1]
- 23** Give the scientific name for bug weed.
..... [1]
- 24** Give **two** soil amendments that could be used to improve the soil structure.
- 1 [2]
- 2 [2]
- 25** List any **two** ways through which nitrates can be lost from the soil.
- 1 [2]
- 2 [2]
- 26** Name **two** types of bacteria that are responsible for the nitrification process.
- 1 [2]
- 2 [2]

27 Fig. 27.1 shows soil testing.

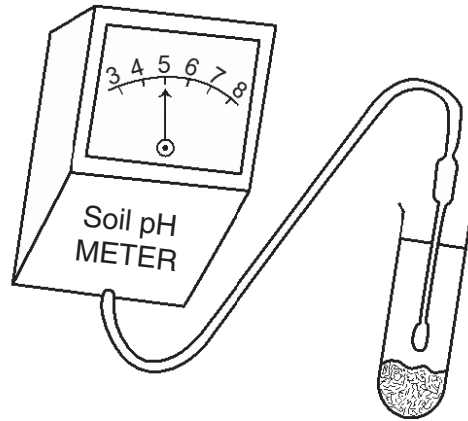


Fig. 27.1

What is the pH condition of this soil?

..... [1]

28 Fig. 28.1 shows a root hair cell.

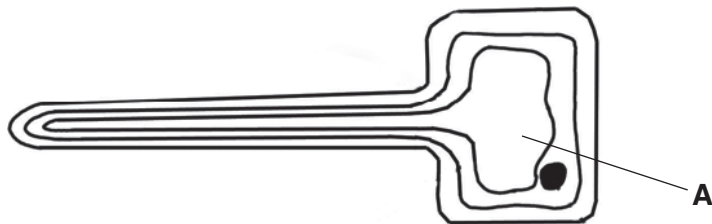


Fig. 28.1

Name part A in Fig. 28.1.

..... [1]

29 Complete this word equation for respiration:

Carbohydrate + Oxygen gives Carbon dioxide + Water +

..... [1]

30 What is the main agent of pollination in maize?

..... [1]

31 State any **one** use of beetroot by-products.

..... [1]

- 32 What type of herbicide is applied once the crops have started to grow?
..... [1]
- 33 Which method of pest control uses natural enemies?
..... [1]
- 34 State **two** possible impacts of chemical pest control to the environment.
1
2 [2]
- 35 What is the function of the pancreas in the digestive system of a ruminant?
..... [1]
- 36 Which hormone loosens the cervical muscles at birth in a farm animal?
..... [1]
- 37 Name the type of ration given to bulls during the breeding season.
..... [1]
- 38 Which method of checking for pregnancy in rabbits is done on day 12 after mating?
..... [1]
- 39 What method of identification uses a marked hot iron on the body of a cow?
..... [1]
- 40 What name is given to the management practice carried out on bulls that acts both to calm them down and prevent them breeding?
..... [1]
- 41 Which venereal disease causes abortion and barrenness in cattle?
..... [1]
- 42 What term describes the organisms that transmit pathogens in crops and livestock.
..... [1]

43 Which legislative measure involves isolating imported livestock?
..... [1]

44 State **one** deficiency symptom of the following nutrients in livestock.
(a) Phosphorus
..... [1]

(b) Vitamin A
..... [1]

45 What term describes the mating of closely related animals?
..... [1]

46 What term describes offspring that are the result of two unrelated parents?
..... [1]

47 Give any **two** ways of maintaining a saw.
1
2 [2]

48 Fig. 48.1 shows a moveable farm structure with corrugated iron roof.

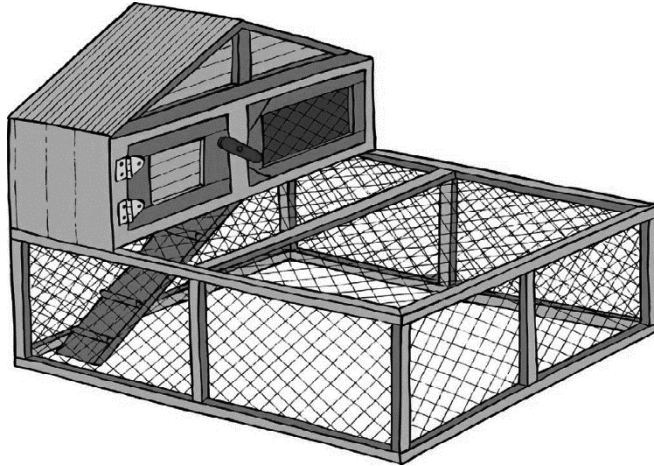


Fig. 48.1

- (a) What name is given to the system of keeping chickens shown in Fig. 48.1?
..... [1]
- (b) State any **one** advantage of the roofing material used in Fig. 48.1.
..... [1]
- (c) Give any **one** substance that can be used to protect the wood from rotting.
..... [1]

49 Fig. 49.1 is a diagram of the water cycle in nature.

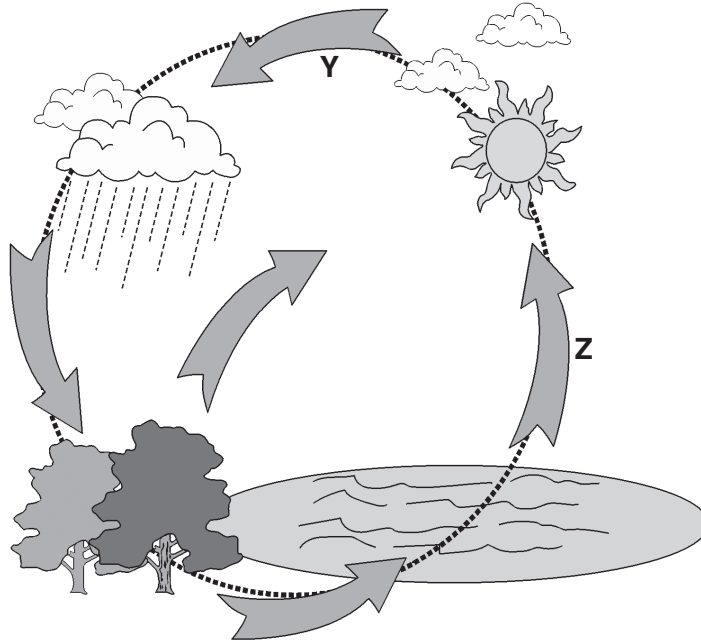


Fig. 49.1

Label the processes represented by arrows Y and Z in Fig. 49.1.

Y

Z [2]

50 Which feature of a dam wall prevents wave erosion?

..... [1]

51 Which type of cost in a balance sheet describes the payment for seeds to be used in a farm?

..... [1]

[40 marks]

