Candidate Name	Centre Number	Candidate Number
MATHS GUARDIOLA	+447852954215	

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

AGRICULTURE 4001/2

PAPER 2

NOVEMBER 2018 SESSION 2 hours

Additional materials:
Answer paper,
Scientific calculator.

TIME 2 hours

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided at the top of this page and on all separate answer paper used.

Section A

Answer **all** questions.

Write your answers in the spaces provided on the question paper.

Section B

Answer any **two** questions, **one** from each of Options 1 and 2.

Write your answers on the separate answer paper provided.

At the end of the examination, fasten the separate answer paper securely to the question paper.

INFORMATION FOR CANDIDATES

Marks are given in brackets [ ] at the end of each question or part question.

You are advised to spend no longer than **80 minutes** on Section A.

FOR EXAMINER'S USE	
Section	**A**
Section B	
TOTAL	

This question paper consists of 10 printed pages and 2 blank pages.

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Section A [60 marks]

Answer all questions in this section.

Candidates are advised to spend approximately 80 minutes on this section.

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1 (a) Outline **four** major farming activities practised in Agro-ecological Region 1.

_____

_____

_____

_____

_____

_____ [4]

(b) Explain why it is not advisable for a farmer to practice dryland farming in Agro-ecological Region V.

_____

_____ [2]

(c) Explain **two** reasons why deforestation is of major concern to a farmer.

(i) _____

(ii) _____ [2]

(d) Give the difference between rainfall distribution and rainfall intensity.

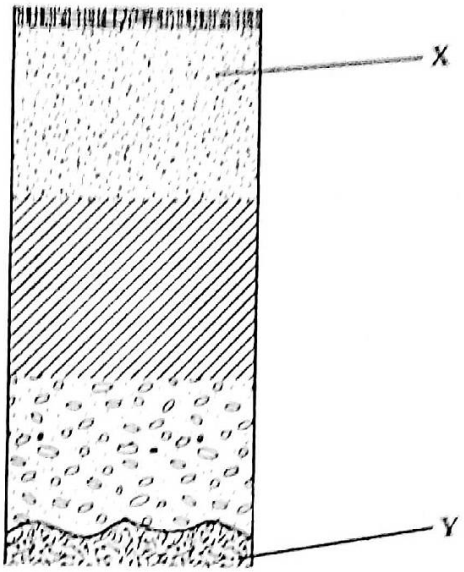
_____

_____ [2]

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2 (a) The diagram below shows different layers of a soil profile.



(i) Name the layers labelled **X** and **Y**.

X _____

Y _____ [2]

(ii) Name **two** environmental factors that cause damage to horizon **X**.

_____

_____

_____ [2]

(b) Identify the soil particle sizes given in the table below.

	Particle size	**Soil type**
(i)	2 to 0,2 mm	
(ii)	0,02 to 0,002 mm	

[2]

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(c) (i) State three types of water found in the soil.

_____

_____

_____ [3]

(ii) Define the term field capacity.

_____ [1]

3 (a) Explain **two** methods used by a farmer to reduce effects of extreme soil temperatures.

(i)_____

_____

(ii)_____

_____ [2]

(b) Describe **one** soil sampling method.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ [4]

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(c) List **four** causes of land degradation.

(i) _____

_____

(ii) _____

_____

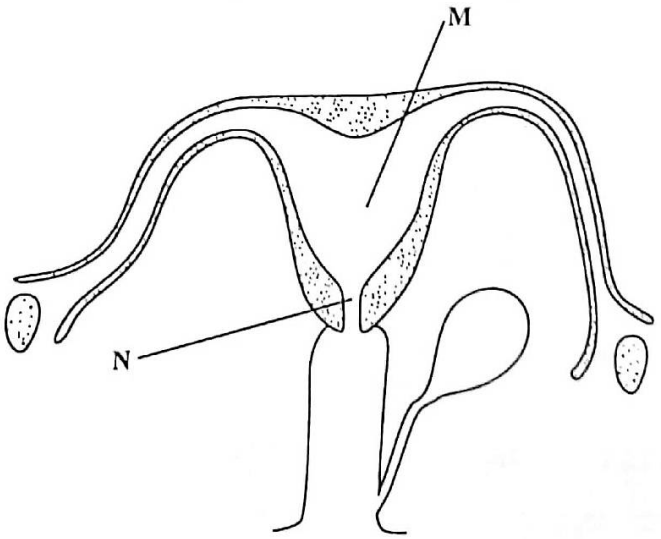
(iii) _____

_____

(iv) _____

_____ [4]

4 (a) The diagram below shows the reproductive system of a cow.



(i) Name the structures labelled **M** and **N**.

M _____. [1]

N _____. [1]

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(ii) Where does fertilisation take place?

_____

_____ [1]

(iii) Name the part where sperms are deposited during mating.

_____

_____ [1]

(b) Explain the function of the following animal nutrients:

(i) carbohydrates _____

_____, [1]

(ii) proteins _____

_____, [1]

(iii) calcium _____

_____ [1]

(c) Describe **three** factors that affect feed intake of a farm animal.

_____

_____

_____

_____

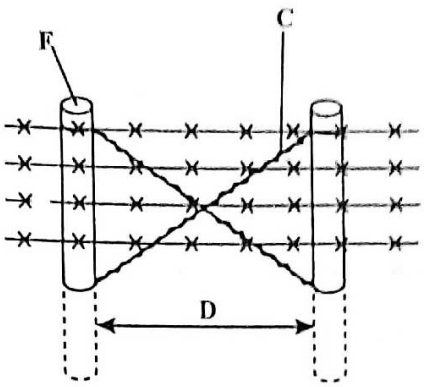
_____

_____ [3]

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5 (a) The diagram below shows a structure used in fencing.



Name the parts labelled **C** and **F**.

(i) **C** _____

_____

(ii) **F** _____

_____ [2]

(iii) State the distance marked **D**.

_____

_____ [1]

(iv) How many strands of wire are optimum for a boundary fence?

_____

_____ [1]

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(b) State **three** types of fences constructed to control movement of livestock.

(i) _____

(ii) _____

(iii) _____ [3]

(c) Give the functions of the following tools used in farm road siting:

(i) dumpy level _____

_____,

(ii) tape measure _____

_____,

(iii) a hammer _____

_____. [3]

6 (a) State **three** factors of production on a farm.

_____

_____

_____

_____

_____

_____

_____

_____ [3]

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(b) Describe **three** factors affecting agricultural marketing.

[3]

(c) Explain **four** principles of an agricultural cooperative.

[4]

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Section B [40 marks]

Answer two questions only, one question from each of Options 1 and 2.

OPTION 1: CROP HUSBANDRY

7 Discuss a **named** legume crop under the following headings:

(a) signs of maturity, [6]

(b) method of harvesting, [7]

(c) storage for marketing. [7]

8 Describe the management of a **named** cereal crop from land preparation to crop maturity. [20]

9 (a) Outline benefits of Integrated Pest Management (IPM). [10]

(b) Discuss safety and health measures in the use of agrochemicals. [10]

OPTION 2: LIVESTOCK HUSBANDRY

10 (a) Describe the important features of a selected type of an animal dip. [15]

(b) Outline factors considered when selecting a site for the construction of an animal dip. [5]

11 (a) Describe the rearing of a **named** non-ruminant animal from birth to weaning. [16]

(b) Explain the importance of creep feeding in the rearing of a young non-ruminant animal. [4]

12 (a) Analyse factors considered when designing a housing unit for a young ruminant animal. [10]

(b) Discuss reasons for practicing artificial insemination. [10]

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