

Candidate Name

Centre Number

Candidate Number

MATHS GUARDIOLA

+447852954215



For Performance Measurement

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL
General Certificate of Education Ordinary Level

AGRICULTURE

4001/2

PAPER 2

NOVEMBER 2023 SESSION

2 hours

Additional materials:

Answer sheet,

Scientific calculator.

TIME 2 hours

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces 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 **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.

FOR EXAMINER'S USE

Section A	
Section B	
TOTAL	

INFORMATION FOR CANDIDATES

The 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.

This question paper consists of 8 printed pages.

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[Turn over

SECTION A [60 MARKS]

Answer **all** questions in this section.

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

- 1 (a) State any **four** reasons for land preparation.

[4]

- (b) Identify classes of plants according to their life cycles.

[3]

- (c) Differentiate between photosynthesis and respiration.

[3]



- 2 (a) State the **four** types of organic fertilizers.

_____ [4]

- (b) Explain the causes of water pollution.

_____ [4]

- (c) Describe the following terms:

- (i) ammonification,

_____ [1]

- (ii) nitrification.

_____ [1]

- 3 (a) Explain any **four** methods of weed control.

_____ [4]



- (b) Discuss the precautionary measures taken when using agro-chemicals.

[3]

- (c) Differentiate between monocotyledons and dicotyledons.

[3]

- 4 (a) State any **four** conditions considered when designing a brooder house.

[4]



- (b) Identify any advantages of artificial brooding.

_____ [4]

- (c) Evaluate the nutritive value of fish farming.

_____ [2]

- 5 (a) Evaluate the use of metal sheets for roofing farm structures.

_____ [2]

- (b) Identify any **five** building materials used in the construction of a water trough for cattle.

_____ [5]

- (c) Describe any **three** properties of wood selected for making yokes.

[3]

- 6 (a) List any **four** risks in agriculture.

[4]

- (b) Explain any **four** principles of cooperatives.

[4]

- (c) Identify any **two** physical farm records.

[2]



SECTION B: [40 MARKS]

Answer **two** questions only, one question from each of **option 1** and **option 2**

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OPTION 1: CROP HUSBANDRY

- | | |
|---|---|
| 7 | <p>(a) State advantages of conservation tillage. [8]</p> <p>(b) Justify the use of hybrid seed in crop production. [7]</p> <p>(c) Discuss the beneficial effects of weeds. [5]</p> |
| 8 | <p>(a) (i) State any four cultural methods of weed control. [4]</p> <p style="padding-left: 20px;">(ii) Identify the planting systems for an orchard. [4]</p> <p>(b) Discuss maize streak disease under the following headings:</p> <p style="padding-left: 20px;">(i) mode of transmission, [2]</p> <p style="padding-left: 20px;">(ii) prevention, [2]</p> <p style="padding-left: 20px;">(iii) signs of infection. [3]</p> <p>(c) Discuss the importance of record keeping in cereal crop production. [5]</p> |
| 9 | <p>(a) Discuss factors considered when selecting a tree for an agro-forestry plot. [8]</p> <p>(b) Explain the advantages of overhead irrigation. [7]</p> <p>(c) Describe the fertilisation process in plants. [5]</p> |



OPTION 2: ANIMAL HUSBANDRY

- 10 (a) Explain any **four** functions of the digestive parts of a non-ruminant. [8]
- (b) Describe the symptoms of roundworm attack in farm animals. [7]
- (c) Discuss the difference between cross breeding and inbreeding. [5]
- 11 (a) Outline the process of egg formation in poultry. [8]
- (b) (i) Identify functions of seminal fluids. [3]
- (ii) Describe a suitable housing for rabbits. [4]
- (c) (i) Calculate the dressing out percentage of a rabbit with a live mass of **12kg** and a dressing weight of **10.5kg**. Show all working. [3]
- (ii) Identify **two** methods of castrating farm livestock. [2]
- 12 Discuss a **named** viral disease of a **named** ruminant under the following headings:
- (a) (i) signs of attack, [4]
- (ii) prevention and control, [3]
- (iii) treatment. [1]
- (b) (i) Explain reasons for identifying farm animals. [3]
- (ii) Identify nutrient deficient problems associated with livestock production. [4]
- (c) Identify any **five** by products of a ruminant farm animal. [5]



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