Candidate Name	Centre Number	Candidate Number
MATHS GUARDIOLA	+447852954215	

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

AGRICULTURE

PAPER 2

5034/2

NOVEMBER 2014 SESSION

2 hours

Additional materials:
Answer paper

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 **two** questions from any **one** of Options **1, 2, 3** or **4**.

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

The number of marks is 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 11 printed pages and 1 blank page.

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Section A [70 marks]

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Answer **all** questions in this section.

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

1 **(a)** Explain the following terms:

(i) Effective rainfall, _____

_____

_____ [1]

(ii) Relative humidity. _____

_____

_____ [1]

(b) **Fig. 1** below illustrates a water cycle. Name the processes labelled A, B and C.

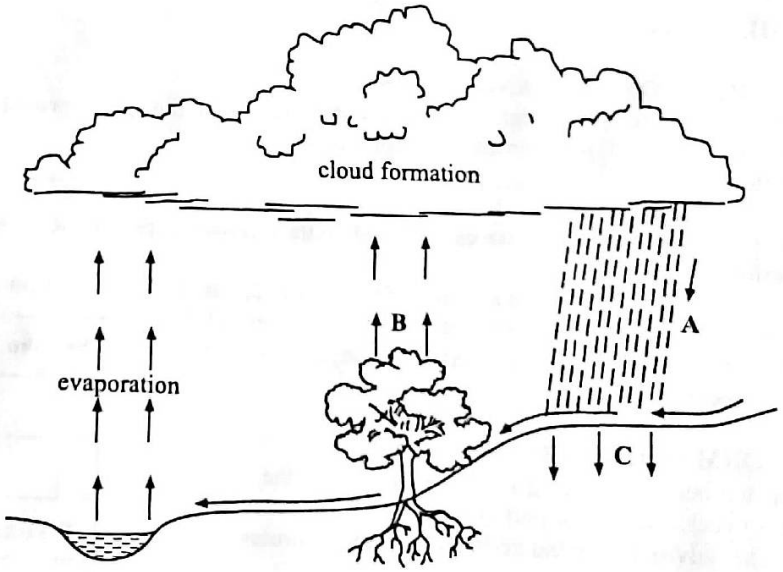


Fig.1

Process; **A** _____ [1]

B _____ [1]

C _____ [1]

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(c) Explain any **three** measures that can be used to improve soil [illegible]

[3]

3 (a) (i) Ammonium Nitrate contains **34,5%** nitrogen. Calculate the amount of nitrogen applied onto a maize crop if it received **400 kg/ha** of ammonium nitrate. (show all working).

[3]

(ii) Explain any **three** reasons why it is important for a farmer to read labels before applying chemicals.

[3]

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(c) Explain any **three** measures that can be used to improve soil temperature.

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_____

_____

_____

_____

_____

_____ [3]

3 (a) (i) Ammonium Nitrate contains **34,5%** nitrogen. Calculate the amount of nitrogen applied onto a maize crop if it received **400 kg/ha** of ammonium nitrate. (show all working).

_____

_____

_____

_____ [3]

(ii) Explain any **three** reasons why it is important for a farmer to read labels before applying chemicals.

_____

_____

_____

_____

_____

_____

_____ [3]

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(b) (i) State **three** factors necessary for photosynthesis to take place.

_____

_____

_____ [3]

(ii) Give any **one** product of photosynthesis.

_____ [1]

4 (a) State the functions of the following parts in a male reproductive system:

(i) Vas deferens, _____

_____

(ii) Epididymis, _____

_____

(iii) Semiferous tubules. _____

_____

_____ [3]

(b) Explain the role of chromosomes in animal reproduction.

_____

_____

_____

_____

_____

_____ [3]

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(c) Describe the deficient symptoms of the following minerals in animals.

(i) Phosphorus _____

_____

_____ [2]

(ii) Iron _____

_____

_____ [2]

5 (a) Distinguish **three** differences between the digestive systems of a ruminant and a non ruminant animal.

Ruminant	Non ruminant
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____ [3]

(b) (i) Describe any **four** factors which should be considered when selecting a male animal for breeding.

_____

_____

_____

_____ [4]

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(ii) Explain **three** reasons for the practice of nail clipping in rabbits **or** debeaking in layers.

Name of Practice: _____

Reasons: _____

_____

_____ [3]

6 (a) Describe the major stages involved in fence construction.

_____

_____

_____

_____

_____

_____ [3]

(b) Explain routine maintenance of a groundnut or maize sheller.

_____

_____

_____

_____ [3]

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(c) A farmer intends to fence **2 km** of land with barbed wire. The distance apart for straining posts is **400 m** and standards is **16 m**.

Calculate the number of straining posts and standards required to fence the area. Show your working.

(i) straining posts _____

_____

_____

_____ [2]

(ii) standards _____

_____

_____

_____ [2]

7 (a) State any **three** factors to consider when making a decision on a farming enterprise.

_____

_____

_____ [3]

(b) Explain the importance of preparing budgets in farming.

_____

_____

_____

_____

_____

_____

_____

_____ [3]

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(c) Discuss the problems associated with marketing of agricultural products in Zimbabwe.

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[4]

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Section B [30 marks]

Answer any **two** questions only from any **one** of **Options 1, 2, 3 or 4.**

OPTION 1: CROP HUSBANDRY

8 (a) For a **named** root or tuber, describe a suitable land for sowing the crop. [8]

(b) Describe how a planter operates. [7]

9 (a) Discuss the advantages of conservation tillage. [10]

(b) Describe the biological methods of controlling weeds. [5]

10 (a) Explain any **four** management practices carried out in a named legume crop before harvesting. [8]

(b) Describe cultural ways of preventing pests and diseases. [7]

OPTION 2: LIVESTOCK HUSBANDRY

11 (a) Describe a **two** host tick under the following headings:

(i) life cycle, [9]

(ii) control. [2]

(b) Explain the following terms:

(i) production ration, [2]

(ii) maintenance ration. [2]

12 Discuss a **named** non-ruminant animal under:

(a) Management from birth to weaning. [10]

(b) Types of records kept for the named animal. [5]

13 (a) Describe signs and symptoms of a **named** bacterial disease of a ruminant animal. [5]

(b) Discuss measures taken by government to prevent the outbreak of notifiable diseases. [10]

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