



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
General Certificate of Education Ordinary Level

**AGRICULTURE**

PAPER 1 Multiple Choice

**4001/1**

**SPECIMEN PAPER**

1 hour

Additional materials:

- Multiple choice answer sheet,
- Soft pencil (type B or HB is recommended),
- Soft clean erase.

**TIME** 1 hour

**INSTRUCTIONS TO CANDIDATES**

**Do not open this booklet until you are told to do so by the invigilator.**

Write your name, Centre number and candidate number on the answer sheet in the spaces provided unless this has already been done for you.

There are **forty** questions in this paper. Answer **all** questions. For each question there are four possible answers, **A, B, C, and D**. Choose the **one** you consider correct and record your choice in **soft pencil** on the separate answer sheet.

**Read very carefully the instructions on the answer sheet.**

**INFORMATION FOR CANDIDATES**

Each correct answer will score **one** mark.

A mark will **not** be deducted for a wrong answer.

Any rough working should be done in this booklet.

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**This question paper consists of 7 printed pages and 1 blank page.**

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©ZIMSEC SPECIMEN PAPER

**[Turn over**

- 1 In which natural farming region of Zimbabwe is Chiredzi town located?
- A 2
  - B 3
  - C 4
  - D 5
- 2 Rainfall intensity is measured by
- A surface run off
  - B leaching of soil nutrients.
  - C high percentage of soil moisture.
  - D soil caps which are prolonged.
- 3 Harvesting of timber is done in early spring because it
- A is easier to strip the bark of the poles.
  - B is easy to control pests.
  - C conserves soil moisture.
  - D avoids rotting of timber.
- 4 Which of the following statement describes communal land tenure system?
- A Land belongs to an individual or company.
  - B Period of use is specified.
  - C Land may be sold.
  - D Traditional leaders allocate the land.
- 5 Meteorological department assists in disaster risk management by
- A evacuating people from flooded areas.
  - B constructing wind breaks against strong winds.
  - C giving weather reports to the public.
  - D providing raincoats to the public.
- 6 Which horizon of the soil profile is rich in organic matter?
- A horizon A
  - B horizon B
  - C horizon C
  - D horizon D
- 7 Soil sampling is done to determine
- A rooting depth of most crops.
  - B erosion levels of the soil.
  - C the nutrient status of the soil.
  - D the water movement within the soil.

- 8 Nitrogen is lost from arable lands into the atmosphere by
- A leaching.
  - B evaporation.
  - C lighting.
  - D denitrification.
- 9 A condition which leads to waterlogging in arable land is
- A constructing dams and weirs.
  - B poor drainage.
  - C mulching.
  - D adding organic manure.
- 10 Which statement is correct for inorganic manures?
- A contain known quantities of nutrients.
  - B are less expensive.
  - C conserve soil moisture.
  - D are bulky to transport.
- 11 An experiment was carried out on a wet soil by rubbing soil particles between two fingers. The conclusion showed that, it was clay soil because particles were
- A coarse.
  - B fine.
  - C powdery.
  - D rough.
- 12 Which group has biting and chewing pests only?
- A Aphids and scale insects.
  - B Maize stalk borer and American bollworm.
  - C Locust and grasshopper.
  - D Termite and weevil.
- 13 The most sensitive stages in the growing of a maize crop are
- A germination and grain filling.
  - B germination and flowering.
  - C flowering and harvesting.
  - B flowering and grain filling.
- 14 Which of the following statement best describes cross pollination? It is pollination
- A which fails to produce viable plant.
  - B designed to produce a new plant.
  - C between flowers on different plants of the same type.
  - D between flowers on the same plant.

- 15 Why is it advisable to practice integrated pest management when controlling pests?
- A combines a number of methods that increase effectiveness.
  - B easy to use.
  - C requires no expertise.
  - D used in A2 farms only.
- 16 Temporary wilting in plants is noted by
- A stopping plant growth.
  - B plant cells remaining flaccid.
  - C plant returning to normal after irrigation.
  - D disturbing photosynthesis.
- 17 Why is it advisable to correctly dispose empty chemical containers?
- A People do not need empty containers
  - B People and animals can be contaminated through leftover chemicals.
  - C Containers can easily catch fire.
  - D Containers can cause degradation.
18. How much ammonium nitrate is applied to a **0,75** ha field when the application rate is **250** kg/ha?
- A 187,5 kg
  - B 280,3 kg
  - C 150 kg
  - D 145 kg
- 19 After top dressing Mr Dube realises that his maize crop had thick stems, dark green leaves and could easily lodge. This could have been caused by
- A excessive rains.
  - B excessive nitrogen.
  - C attack by pests.
  - D excessive winds.
- 20 Ruminants are different from non-ruminants because they
- A walk long distances.
  - B move faster.
  - C chew the cud.
  - D provide quality meat.
- 21 One disadvantage of paddocking system in grazing is
- A selective grazing is promoted.
  - B grasses do not have time to recover.
  - C animals hammer out emerging grasses.
  - D large areas are needed for paddocks.

- 22 Which of the following is a function of proteins in animals?
- A building up of new tissues.
  - B maintaining body temperature.
  - C forming of bones.
  - D preventing night blindness.
- 23 Laying birds should be provided with nest boxes because
- A hens will hide away from cocks.
  - B this reduces egg breakages.
  - C hens like to lay eggs in dark places.
  - D it discourages broodness.
- 24 Meiosis is best defined as a
- A process that brings similarities between parents and off springs.
  - B reduction process.
  - C process responsible for sex determination.
  - D process which divides the nucleus to produce two daughter nuclei.
- 25 Roughage should be included in the diet of animals because it
- A allows easy movement of food in the digestive tract.
  - B helps to strengthen bones
  - C helps animals to produce more enzymes.
  - D helps in the production of oxygenated blood.
- 26 Poultry manure is known to be rich in nitrogen as compared to kraal manure. The reason is
- A dropping and urine are mixed during voiding.
  - B feed consumed is sweet.
  - C dropping contain less moisture.
  - D dropping are produced once per day.
- 27 What is the reason for mixing roughages and concentrates in food rations?
- A increase the percentage of digestible nutrients in roughages.
  - B increase the moisture content of roughages.
  - C improve the appetite of animals.
  - D increase the amount of droppings per animal.

- 28** The maximum length of a plough yoke is
- A** 180 cm
  - B** 170 cm
  - C** 240 cm
  - D** 150 cm
- 29** What is the function of a harrow?
- A** Scatter seeds.
  - B** Level the soil.
  - C** Make ridges.
  - D** Harvest crops.
- 30** Which term best describes a knapsack sprayer?
- A** Low pressure pump.
  - B** Medium volume spray
  - C** High volume spray.
  - D** Multipurpose spray.
- 31** The depth of cut of a mouldboard plough is made deeper by
- A** shortening the trek chain.
  - B** tightening all the bolts of a plough.
  - C** sliding the hitch assembly to the left.
  - D** lengthening the trek chain.
- 32** Why is it necessary to lay a damp proof course material on farm buildings?
- A** prevents capillary moisture from rising through the brick wall.
  - B** to make the foundation strong.
  - C** to make the work easier when raising the walls.
  - D** to beautify the foundation of buildings.
- 33** How many standards are required to fence a straight boundary of 2000m long?
- A** 143
  - B** 5
  - C** 150
  - D** 137
- 34** A farmer can overcome risk by
- A** growing long season varieties.
  - B** producing crops of low market value.
  - C** exporting all crops.
  - D** ensuring crops against failure.

- 35** An estimated income and expenditure is
- A** a profit .
  - B** a loss.
  - C** an asset.
  - D** a budget.
- 36** The process of making choices among possible alternatives is
- A** budgeting.
  - B** opportunity cost.
  - C** balance sheet.
  - D** decision making.
- 37** What is the advantage of keeping farm records?
- A** To avoid unnecessary expenditure.
  - B** To implement laws of the business.
  - C** To destroy them at the end of the growing season.
  - D** To increase mortality of predators.
- 38** In controlled marketing
- A** all products have to be sold to consumers only.
  - B** there is need to have high storage facilities.
  - C** all produce have to be sold to recognised boards in Zimbabwe.
  - D** grow crops on contract farming only.
- 39** What is Mr Tshuma’s net profit if he grew 2 ha of maize and harvested 8 tonnes/ha, his total variable cost were \$1 600 and fixed costs amounted to \$2 500, selling price was \$390 per tonne?
- A** \$ 2 140, 00
  - B** \$ 4 740, 00
  - C** \$ 3 840, 00
  - D** \$ 4 100, 00
- 40** Consumers are going to benefit from command agriculture through
- A** low prices resulting from increased output from farmers.
  - B** high prices resulting from high costs of production.
  - C** low prices resulting from high cost of production.
  - D** high prices resulting from low cost of production.

Candidate Name

Centre Number

Candidate Number



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
General Certificate of Education Ordinary Level

**AGRICULTURE**  
PAPER 2

**4001/2**

**SPECIMEN PAPER**

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	/
<b>TOTAL</b>	

**This question paper consists of 9 printed pages and 3 blank pages.**

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1 (a) Explain the importance of practising Agroforestry.

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[4]

(b) Describe the following resettlement models in Zimbabwe.

(i) A1 \_\_\_\_\_

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[2]

(ii) A 2 \_\_\_\_\_

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[2]

(c) Evaluate problems faced by beneficiaries of the land reform programme in Zimbabwe.

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[2]

2 (a) With the aid of diagrams, explain how soil sampling is done.

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[4]

(b) Define a straight fertilizer and give an example.

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[2]

(c) Comment on the effectiveness of a grass mulch in reducing evaporation.

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[2]

(d) List any **two** biological methods of controlling soil erosion in arable lands.

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[2]

3 (a) Explain why a fine tilth is vital in seedbed preparation.

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[4]

(b) State **four** ways in which pests damage plants.

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[4]

(c) Write down symptoms of oversupply of potassium in cereal crops.

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[2]

- 4 (a) Explain functions of the following parts of the female reproductive system of a ruminant:

Ovary \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

Cervix \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

- (b) State **four** reasons why water is important in the animal body.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [4]

- (c) Demonstrate how chicks behave when the brooder temperature is low.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

5 (a) Describe the uses of the following in fence construction.

(i) Anchor,

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[1]

(ii) Droppers,

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[1]

(iii) Standards.

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[1]

(b) List **three** tillage implements.

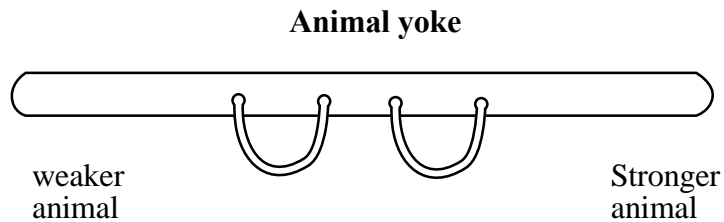
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[3]

(c) On the diagram of the yoke, show how trens are adjusted for the two animals. [2]



(d) Identify **one** tool used during fencing.

\_\_\_\_\_ [1]

6 (a) State the law of supply.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

(b) Discuss the importance of farm budgets.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [4]

(c) A poultry farmer kept **90** birds and sold them at **\$5,00** each. The total expense for the project was **\$312-00**.

Determine the profit or loss of the enterprise. [3]

**8**  
**SECTION B**

*Answer **two** questions in this section. **One** question from each option.*

**OPTION 1**

- 7** (a) Outline a method of planting a named cereal crop. [10]
- (b) The recommended fertiliser application is **350kg/ha**, calculate the cost of fertiliser required for a field measuring **500m x 400m** if a **50kg** bag costs **\$33**. [5]
- (c) Justify the effectiveness of split application of ammonium nitrate. [5]
- 8** (a) Describe the operations of a planter. [7]
- (b) Explain the adjustment of either an ox drawn or tractor drawn mouldboard plough for depth and width of cut. [8]
- (c) Describe the functions of a:
- (i) harrow, [3]
- (ii) ridger. [2]
- 9** (a) Describe pre-emergence and post-emergence herbicides. [4]
- (b) Outline advantages and disadvantages of using mechanical weed control. [9]
- (c) Discuss factors considered when determining spacing of a **named** crop. [7]

**OPTION 2**

- 10** (a) Justify the importance of hygiene in livestock husbandry. [8]
- (b) Outline methods used to identify livestock in Zimbabwe. [7]
- (c) (i) Using the Pearson Square method, calculate the mixing ratio of feed stuff with **10% DCP** using cotton seed cake **17% (C.P)** and maize **6,5% (C.P)**. [3]

- (ii) An animal weighing **500kg**, consumes **3%** of its body weight per day. Calculate the daily feed requirement of the animal. [2]
- 11** (a) Describe factors considered when selecting breeds of livestock to keep on a farm. [8]
- (b) Outline the major causes of diseases in farm animals. [7]
- (c) The mixing ratio of oxyvet is **200ml** in **20** litres of water.
- (i) calculate the amount of oxyvet needed to mix in **5** litres of water. [2]
- (ii) recommend **three** ways to administer antibiotics to farm animals. [3]
- 12** (a) Distinguish between cross-breeding and in-breeding. [8]
- (b) Assess the impact of ticks on livestock farming in Zimbabwe. [12]