



ZIMBABWE SCHOOL EXAMINATIONS COUNCIL
General Certificate of Education Ordinary Level

AGRICULTURE
PAPER 1 Multiple Choice

4001/1
1 hour

NOVEMBER 2024 SESSION

Additional materials:
Multiple Choice answer sheet,
Soft clean eraser,
Soft pencil (type B or HB is recommended),
Mathematical tables/ Electronic calculator (optional).

INSTRUCTIONS TO CANDIDATES

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

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

Read very carefully the instructions on the answer sheet.

INFORMATION FOR CANDIDATES

There are **forty** questions in this paper. Each correct answer will score **one** mark. Any rough working should be done on this question paper.

This question paper consists of 9 printed pages.
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[Turn over

- 1 International convention assist in wildlife management by
- A allowing trading of all animal products.
 - B promoting the hunting of wild animals.
 - C facilitating trading of both plants and animals.
 - D setting laws and policy framework.
- 2 The practice of growing crops and rearing animals for sale is called
- A subsistence farming.
 - B commercial farming.
 - C communal farming.
 - D shifting farming.
- 3 An ecological importance of forests is the
- A provision of food.
 - B creation of employment.
 - C prevention of soil erosion.
 - D indication of soil characteristics.
- 4 Tied ridges in arable land can be maintained by
- A mulching.
 - B removing silt.
 - C draining the pot holes.
 - D applying organic manures.
- 5 1 kg gum seed is sown in 1 000 pockets.

Calculate number of pockets required for $2\frac{1}{4}$ kgs.

- A 1 000
 - B 2 200
 - C 2 250
 - D 2 500
- 6 Calculate plant population of a tree plantation measuring 1ha using a spacing of 2,5m x 2,5m.
- A 4000
 - B 1600
 - C 2500
 - D 1000

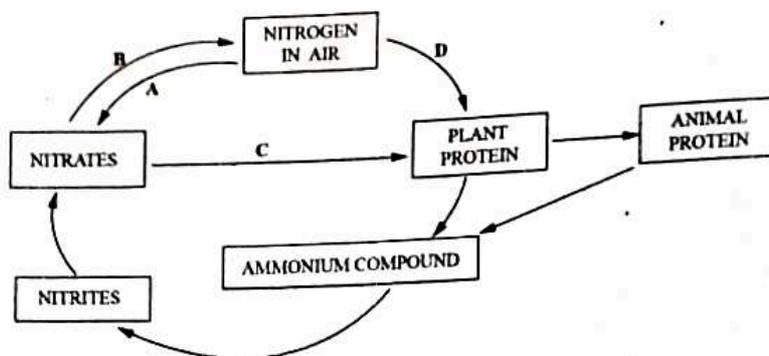
25
 104
 260
 1100



- 7 Permission to use water for agricultural purpose is called
- A Water Authority.
 - B Water Right.
 - C ZINWA Act.
 - D Water Act.
- 8 Soil water that is absorbed direct from atmospheric vapour is called
- A field capacity.
 - B capillary water.
 - C hygroscopic water.
 - D gravitational water.
- 9 Maize growing in waterlogged soils wilt due to shortage of
- A oxygen.
 - B calcium.
 - C phosphorus.
 - D carbon dioxide.
- 10 Which soil forming factor influences the chemical composition of the soil?
- A Parent rock
 - B Organisms
 - C Climate
 - D Slope
- 11 **Fifty** seeds weighing **30** grams were soaked overnight in water and weighed **48** grams the following day. Calculate the percentage of water imbibed?.
- A 18
 - B 37,5
 - C 60
 - D 96



- 12 The diagram illustrates the nitrogen cycle. Study the diagram and answer questions 12 and 13.



Identify the process labelled A.

- A nitrification
 B decomposition
 C denitrification
 D nitrogen fixation
- 13 Which process A, B, C or D is denitrification?
- A D
 B C
 C B
 D A
- 14 A farmer who faces challenges of seed germination needs to destroy soil
- A pans.
 B caps.
 C profile.
 D structure.
- 15 What type of variety is progeny XY, if two pure maize breeds X and Y are the parents?
- A monohybrid
 B trihybrid
 C top cross
 D hybrid

- 16 The major disadvantage of borehole water as a source of irrigation is serious built up of
- A fungal diseases.
 - B silts in the soil.
 - C storage pests.
 - D nitrates.
- 17 The process of weak stems clinging onto other plants for support is
- A haptotropism.
 - B hydrotropism.
 - C chemotropism.
 - D geotropism.
- 18 Why are farmers encouraged to apply lime soon after harvesting their crops?
- A Allows time for lime to react with soil.
 - B Controls perennial weeds.
 - C Conserves soil moisture.
 - D Controls soil pests.
- 19 How much nitrogen is supplied by 700 kg of Compound D, if the NPK values are 7:14:7?
- A 49 kg
 - B 98 kg
 - C 49.5 kg
 - D 449 kg
- 20 In a stem, which part is responsible for the transportation of nutrients up the plant?
- A xylem
 - B phloem
 - C pith
 - D cortex
- 21 The maintenance ration of an empty doe is 100g per day and the requirement for a pregnant doe is 25% more. Calculate the production ration for the doe.
- A 25g
 - B 100g
 - C 125g
 - D 2500g
- 22 Formulate a ration that contains 10% crude protein using a mixture of maize grain having 6.5% crude protein and cotton seed having 17% crude protein.
- A 2:1
 - B 1:2
 - C 4:1
 - D 1:4



- 23 The live mass of a small livestock is **2,5kgs** .The animal losses **23%** of its body weight when dressed. Calculate its carcass mass
- A 0.575kgs
 - B 1.925kgs
 - C 2.35kgs
 - D 2.52kgs
- 24 How many grammes of pesticide are required to mix with **15 litres** of water, if the rate of dilution is **1 kg to 500 litres**?
- A 20 g
 - B 45 g
 - C 30 g
 - D 50 g
- 25 Which part of the egg serves as a food reserve and protective layer for the developing embryo?
- A egg shell
 - B albumen
 - C chalaza
 - D yolk
- 26 Antibiotics in poultry production are mostly used to treat
- A protozoan diseases.
 - B infectious diseases.
 - C bacterial diseases.
 - D viral diseases.
- 27 From the following list of chemicals, which one is used for treating poultry against diseases?
- A dimethoate
 - B terramycin
 - C acaricides
 - D aldrin
- 28 Concentrates are mixed with maize meal to
- A decrease digestibility of food.
 - B increase concentration of salts.
 - C reduce concentration of salts.
 - D increase digestibility of food.
- 29 What is the cause of initial low food consumption for fattened steers?
- A Animals are not used to the new feed.
 - B The animals refuse to be penned.
 - C Animals are now too crowded.
 - D Animals are given rotten feed.



30 A characteristic of plants or shrubs used as hedge is

- A prone to drought.
- B single stemmed.
- C very poisonous to animals.
- D fast growth and establishment.

31 Which type of fence is used in game parks?

- A diamond mesh wire
- B barbed wire
- C live wire
- D plain wire

32 Which method of timber treatment lasts longer?

- A application of used oil
- B coating with paint
- C use of creasote
- D deluging

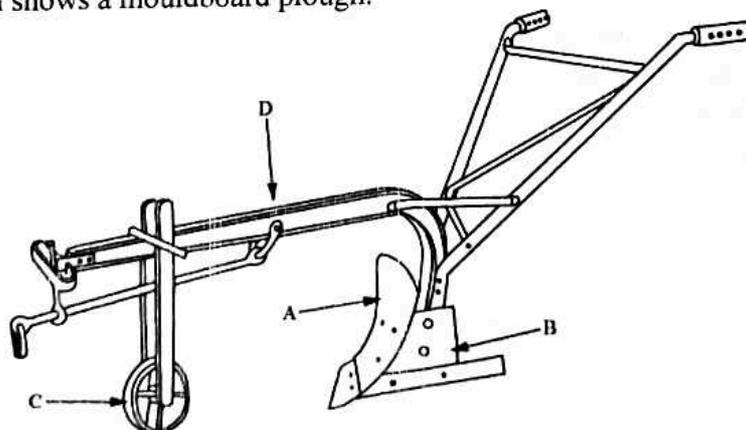
33 Which one is a maintenance requirement for shellers?

- A brushing bearings
- B painting bearings
- C greasing bearings
- D washing bearings

34 Farm roads should be cambered to

- A add beauty.
- B maintain gradient.
- C reduce slipperiness.
- D maintain surface drainage.

35 The diagram shows a mouldboard plough.



Identify the part which is greased regularly.



The table shows a gross margin budget for a maize enterprise (1 ha) yielding 5t/ha. Study the table and answer questions 36 and 37.

Inputs	Cost/ha \$
2kg seed	60-00
300kg comp D	150-00
250kg AN	180-00
Ploughing costs	110-00
Pesticides	10-00
Labour	100-00
Packaging	100-00
Transport	200-00
Total variable costs	910-00
Gross Income	1350-00

- 36 Calculate gross margin for the maize enterprise.
- A \$440
 - B \$910
 - C \$1300
 - D \$2210
- 37 Calculate net profit for the maize enterprise.
- A \$500
 - B \$2 000
 - C \$2 500
 - D \$4 500
- 38 Which factor influences farmer's choice of an enterprise?
- A income of consumers
 - B taste and preference
 - C availability
 - D season



- 39 The information pertains to a partial budget.

Gains		Losses	
New income	\$3000	Income lost	\$700
Cost saved	\$400	New costs	\$250
Total	\$3400	Total	\$450

Calculate net gain

- A \$2950
B \$3850
C \$7550
D \$7555
- 40 Which statement best describes a partial budget?
- A total income from sales
B total gross margin for all farming enterprise
C introducing a minor change in any line of farm production
D an estimate of total income and expenditure for a single enterprise