**TERM 2 - 2023**

**AGRICULTURE**

**FORM THREE (3)**

**Time: 2 Hours**

**Name: …………………………………………………………. Adm No: ……………….**

**School: ……………………………………………………….. Class: …………………..**

**Signature: …………………………………………………….. Date: …………………...**

**INSTRUCTIONS TO CANDIDATES:**

1. *Write your* ***name, -******school*** *and* ***admission number*** *in the spaces provided.*
2. *Sign and write the date in the spaces provided above.*
3. *Answer* ***all*** *the questions in section* ***A*** *and* ***B***
4. *Answer any* ***two*** *questions in section* ***C.***
5. *Answers should be written in the spaces provided in this booklet.*

For Examiner’s Use Only:

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **QUESTIONS** | **MAXIMUM SCORE** | **CANDIDATES SCORE** |
| A | 1-16 | 30 |  |
| B | 17 | 20 |  |
| C | 25 - 27 | 20  20 |  |
|  | **TOTAL** | **90** |  |

*This paper consists of 9 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.*

**SECTION A (30 MARKS)**

***Answer all questions in this section in the spaces provided.***

1. List **three** methods of castrating farm animals. (1½ marks)

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2. List **two** appropriate tools used for deworming of animals during routine management practices. (1 mark)

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3. (a) State any **three** advantages of multiple stem pruning over single stem pruning in

coffee. (1½ marks)

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(b) State any **three** post-harvest practices carried out on grains (1½ marks)

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4. Name the tool used together with each of the following tools. (2 marks)

(i) Canula\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(ii) Wood Chisel\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(iii) Screw Driver\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(iv) Brace \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Give the functional differences between a rasp and bastard file. (2marks)

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6. State **four** signs of heat in pigs. (2 marks)

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7. State **four** desirable features of a rabbit hutch. (2 marks)

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8. State **two** uses of phosphorous in livestock nutrition. (1 mark)

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9. Name one vegetative material used to propagate each of the following crops. (2 marks)

(a) Bananas \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(b) Pineapples \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(c ) Irish potatoes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(d) Pyrethrum \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. State **four** sources of nitrogen in the soil. (2 marks)

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11. A bull gained 100kg of live weight after eating 400kg of beef concentrates over a period of time. Calculate the feed conversion ratio. (1 mark)

12. State **four** advantage of artificial calf rearing in dairy cattle management. (2 marks)

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13. State **three** advantages of upgrading. (1½ marks)

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14. State **four** reasons for treating timber used for fencing. (2 marks)

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15. Give **four** reasons for docking a young ram. (2 marks)

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16. Give **four** reasons for using certified seeds for planting (2 marks)

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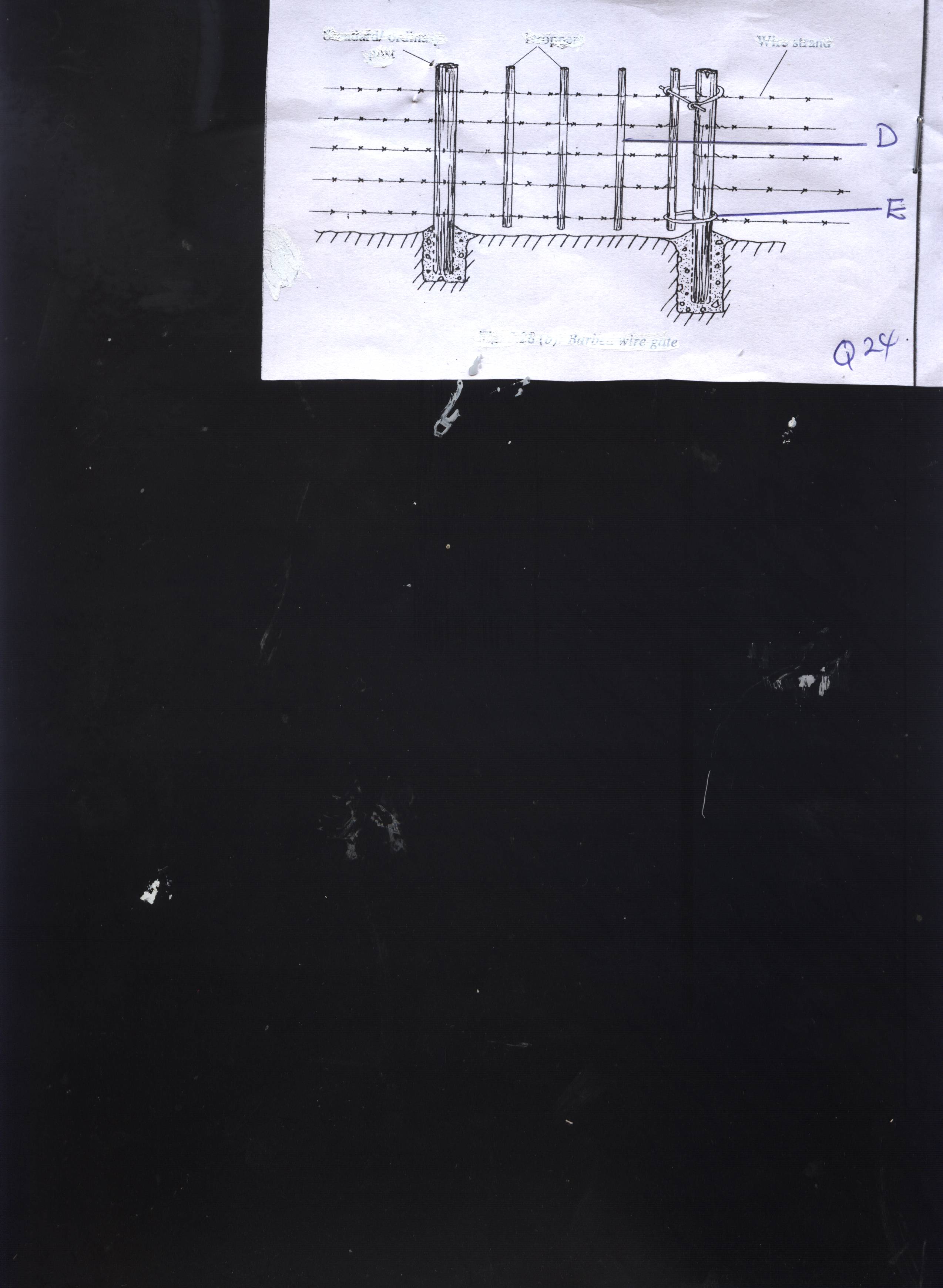
17. Give two farming practices that help to reduce water stress in crop. (1marks)

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**SECTION B (20 MARKS)**

***Answer all questions in the section in the spaces***

18. The diagram below shows a type of a farm gate. Study the diagram and answer the questions that follow.

1. 

E

D

a) Identify the type of gate shown. (1 mark)

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b) Name parts labelled **D** and **E**. (2 marks)

**D\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**E\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

c) i) State **two** functions of the part labelled E. (2marks)

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ii) State **two** functions of the gate illustrated above. (2 marks)

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19. The diagram below illustrates a calf rearing practice.



a) Identify the practice illustrated above. (1 mark)

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b) i) Describe the procedure followed in the feeding practice named in (a) above. (4 marks)

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ii) Give **two** precautions taken while using the rearing practice stated in (a) above. (2 marks)

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20. Calculate the plant population in a 5.4 hectares plot of a bean crop planted at the

Spacing (45cm x 20cm) assume 1 plant per hole. (2 marks)

21. (a) Give the meaning of the term land tenure. (1 mark)

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(b) Differentiate between

(i) Communal land tenure and co-operative land tenure. (2 marks)

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(ii) Concession and state ownership. (2 marks)

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**SECTION C ( 40 MARKS )**

***Answer any two questions only***

22. (a) List various methods of harvesting water in a farm (5 marks)

(b) Outline farming activities which may encourage soil erosion (5 marks)

(c) Explain how various farming practices would help to conserve soil in a

farm. (10 marks)

23. (a) Outline **six** desirable features of a good grain store. (6 Marks)

(b) Outline **six** maintenance practices carried out on saws. (6 Marks)

(c) Describe the digestion of grass in the rumen of an adult cattle. (8 marks)

24 a) Explain **five** methods of drainage. (5 marks)

b) Outline the procedure of castrating a bull using a burdizzo. (7 marks)

c) Describe eight reasons why bees may abscond from a beehive. (8 marks)

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