**Name: ………………………………………Admission Number: …………………**

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

**Date:……………………………………………………Sign:…………………………………**

**FORM TWO**

**AGRICULTURE**

**TIME: 2 HOURS**

**INSTRUCTIONS TO CANDIDATE**

*1. Write your name and admission number in the spaces provided above.*

*2. Sign and write date of examination in spaces provided.*

*3.* *This paper consists of three sections* ***A, B*** *and* ***C****.*

*4.* *Answer* ***ALL*** *questions in section* ***A,B*** *and* ***C.***

*5. Candidate must answer the questions in English.*

*6. All answers should be written in spaces provided.*

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **QUESTION** | **MAXIMUM SCORE** | **CANDIDATE SCORE** |
| **A** |  **1-17** |  **40** |  |
| **B** |  **18-22** |  **20** |  |
| **C** |  **23-26** |  **40** |  |
| **TOTAL** |  |  **100** |  |

**SECTION A [40 MARKS]**

1. Name **four** beneficial biotic factors in Agricultural production. (2marks)

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

2. State **four** aspects of rainfall and describe their effect on agricultural activities (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

3. List **four** methods of fertilizer application (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

4. State and describe **three** tertiary operations (3marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

5. State **four** advantages of drip irrigation (2marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………........................................................................

6. State **four** characteristics of plants used as green manure (2marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..................................................................................

7. Differentiate the following terms as used in crop production

i) Thinning and pricking out (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..........................................................................................................................................

ii) Nursery bed and seedling bed (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

8. List **four** fresh market varieties of tomatoes (2marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….............................................................................................................................................................................................

9. Name **two** types of inventory records that are kept in the farm (2marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

10. Outline **two** importance of vegetable crops (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

11. Outline **four** advantages of seed for crop propagation (2marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….............................................................................................................................................................................................

12.a) Name the most appropriate tools used in the following operations (2marks)

(i) Branding-

…………………………………………………………………………………………………

(ii) Cutting woods along the grains

…………………………………………………………………………………………………

(iii) Removing metal chippings in the field.

…………………………………………………………………………………………………

 (iv) Cutting soft branches of coffee during prunning

………………………………………………………………………………………………..

 b) Name **four** complimentary tools in livestock production (2marks)

………………………………………………………………………………………………….…………………………………………………………………………………………………............................................................................................………………………………………………………………………………………………….…………………………………………………………………………………………………..............................................................

13. Outline **four** ways in which the government policies encourage the growth and development of local Agricultural industries (4marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………............................................................................................................................................................

14. Name **four** soil structures (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………............................................................................................................................................................

15. Write down **one** distinguishing characteristic of the following livestock breeds.(2marks)

a) Jersey

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

b) Saddleback/Wessex

…………………………………………………………………………………………………………………………………………………………………………………………………….............................................................................................

c) Earlops

……………………………………………………………………………………………………………………………………………………………………………………………………............................................................................................

d) Toggenburg

……………………………………………………………………………………………………………………………………………………………………………………………………............................................................................................

16. Give **four** advantages of organic farming (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..............................................................................................................................................................................................

17. Name **two** agricultural activities that make Agriculture as an art (1mark) …………………………………………………………………………………………………………………………………………

**SECTION B(20 MARKS)**

18. A farmer wishes to prepare 100kg starter meal containing 20% DCP using wheat containing 10% DCP and sunflower cake 35% DCP. Using the Pearson’s Square Method, show how that ration is computed (5marks)

19. The diagram below show various nursery propagation practise. Study them carefully and answer the questions that follow





**M**

**O**



**N**

i) Name the practice labelled (3marks)

 M………………………………………………… N…………………………………………………

 O-……………………………………………………

ii) State **two** importance of carrying out practice M (1mark)

…………………………………………………………………………………………………

iii) State **two** advantages of practice N, over other propagation practices. (1mark)

……………………………………………………......................................................................

……………………………………………..................................................................................

20. The diagram below illustrates the stages of life cycle of a tick. Study the diagram and answer the following questions that follows



a) Describe the development of tick at **1, 2, 3** and **4** (4marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………............................................................................................................................................................

b) Classify the tick on the basis of the life cycle (1mark)

…………………………………………………………………………………………………………………………………………………………………………………………………

21. Name **two** functions of calcium in dairy cows (2marks)

…………………………………………………………………………………………………………………………………………………………………………………………………......

22. Give **three** characteristics of succulent roughages (3marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

**SECTION C (40 MARKS)**

23.a) Explain why minimum tillage is recommended (5marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

b) State **five** Uses of water in the farm (5marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………................................................................................................................................................

24. Describe **five** field management practises for tomatoes (10marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

25. Describe **five** methods of farming (10 marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

26. State and give examples of **five** predisposing factors of livestock (5marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

b) Give importance of keeping livestock healthy (5marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………………………………………………………….

…………………………………………………………………………………………………………………………………………………………………………………………………….

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………