**NAME ………………………………………………………… DATE…………………………**

**ADM.NO ……………STREAM……………. CANDIDATE’S SIGNATURE ………………**

**233/1**

**AGRICULTURE FORM IV**

**(THEORY)**

**TIME: 2 Hours**

**CASPA AMUKURA PARISH EXAMINATION 2021**

**Instruction to candidates**

1. Write your name an index number in the space provided above
2. This paper consist of three sections **A B** and **C**
3. Answer **ALL** questions in section **A** and B and Any Two questions from section **C**
4. **ALL** answers must be written in the space provided after every question

**EXAMINERS USE ONLY**

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **QUESTIONS** | **MAXIMUM SCORE** | **CANDIDATES SCORE** |
| **A** | **1-15** | **30** |  |
| **B** | **16-23** | **20** |  |
| **C** | **24-26** | **40** |  |
|  | **TOTAL** | **90** |  |

**SECTION A (30 MARKS)**

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

1. Give **TWO** characteristics of intensive farming system ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………… (1mk)

 b) State **TWO** advantages of mixed cropping …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..……..(1mk)

1. State **TWO** roles of humus in the soil …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..………………………………(1mk)
2. List **FOUR** effects of temperature on crop growth …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..………………(2mks)
3. Diagram below shows an experiment carried out by Form 1 students. Study and answer the questions that follows.

 

1. What is the objective of the experiment ……………………………………………………………………………………(1/2mks)
2. What observation should be made after 12 hours in flask **A** and **B**(1mk)

**A** ……………………………………………………………………………………………

**B** ……………………………………………………………………………………………

 c) Give the reason for your observation …………………………………………………..............................................................................................................................................................................................................................................................................................................................................................................................(1mk)

1. Give **THREE** factors that determines the depth of ploughing in land preparation ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….………..………….(11/2mks)
2. what is minimum tillage ………………………………………………………………………………………………………………………………………………………………………………………………(1mk)

 (b) Give **FOUR** practices that encourages minimum tillage ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(2mks)

1. State **TWO** types of irrigation carried out in Kenya ………………………………………………………………………………………………………………………………………………………………………………………………(1mk)

 (b) List **FOUR** uses of water on the farm ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..………………………………………………………….. (2mks)

1. Give **THREE** reasons for keeping health record in the farm ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..…………………………………………..………………………………………………………………………………………………………………………………………………………………………………………………………………………………..………………………………………….. (11/2mks)
2. The diagram below shows a method of soil sampling



1. Name the method illustrated above …………………………………………………………………………………………(1/2mk)
2. State **THREE** precautions taken when collecting a soil sample …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(11/2mks)
3. Give **FOUR** reasons for testing soil ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..(2mks)
4. State **TWO** reasons for seed treatment ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………… (1mk)
5. .Give **TWO** factors that determine spacing of beans ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..(1mk)

12. State **FOUR** benefits of farmer having land tittle deed ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(2mk)

13. List **THREE** materials that can be used to construct a gabion …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..…………………………...(1 1/2mks)

14. List **FOUR** harmful effects of crop pests ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….…………………………..…(2mks)

15. Give **FOUR** ways by which a farmer can improve labour productivity on the farm ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(2mks**SECTION B (2O MARKS)**

16. Differentiate between cropping and harvesting in fish farming …………………………………………………………………………………………………………………………………………………………………………………………(2mks)

17. Give **THREE** factors that determine the quality of shading forage …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………… (3mks)

18. State **four** characteristics of extensive farming systems

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..…………………………………………(2mks)

19. State **TWO** factors that determine selectivity of herbicides ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(2mks)

20. Give **TWO** factors affecting the quality of hay ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(2mks)

21. State **four** physical factors in soil formation ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(2mks)

22. State **four** factors that determine the depth of planting. ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………… (3mks)

23. State **four** harmful affects ticks on livestock. …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….……………………..………….(2mks)

 **SECTION C (40MARKS)**

***Answer Any TWO questions in this section***

24 (a) Explain **FIVE** cultural methods of pest control (10mks)

 (b) Outline **FIVE** factors considered in timely planting of annual crops (10mks)

25 (a) Outline the process of land Adjudication (5mks)

1. (b) Discuss **five** reasons for carrying out minimum tillage. ( 5 marks)
2. Explain **5** ways in which soil losses fertility. ( 10 marks)

26 (a) Describe **seven** field management practices in tomato production. ( 7marks)

1. Outline **five** factors that determine water requirements in an animal’s body. ( 5 marks)
2. Describe the transplanting of tree seedlings. ( 8 marks)

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