NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ INDEX NO\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

443/1

AGRICULTURE PAPER 1

TIME 2 HOURS

PERIOD – JULY/AUGUST 2017

3KNT FRATERNITY EXAMINATION

INSTRUCTIONS

1. Answer all the questions in section A and B
2. Section C has 3 questions, choose 2 questions
3. Answer all the questions in the spaces provided

|  |  |  |
| --- | --- | --- |
| SECTION | QUESTIONS | MARKS |
| A | 1 – 18 |  |
| B | 19202122 |  |
| C | 232425 |  |

**SECTION A 30 MKS**

**IN THE SPACES ANSWER ALL THE QUESTIONS IN THIS SECTION PROVIDED**

1. State **four** factors considered when identifying a farming system in an area (2mks)
2. Give **four** advantages of intensive farming (2mks)
3. What is soil structure? (1mk)
4. Write **four** reasons for early land preparation (2mks)
5. Why is burning discouraged in land clearing? (2mks)
6. Write **three** characteristics of a fertile soil (1 ½ mks)
7. Give **two** ionic forms in which nitrogen is absorbed by plants (1mk)
8. Differentiate between straight and compound fertilizers (1mk)
9. Write f**ou**r advantages of row planting (2mks)
10. Give **four** pieces of information in a land title deed . (2mks)
11. Highlight the meaning of the following terms
12. Mixed cropping
13. Monocropping
14. Intercropping
15. Write **4** factors considered in choosing seed rate (2mks)
16. Give **4** factors that contribute to the competitive ability of weeds (2mks)
17. What is crop disease ( ½ mk)
18. Give t**hre**e methods of utilizing maize as fodder (1 ½ mks)
19. Write the meaning of the following terms (2mks)
20. monopoly
21. Monopsony
22. State **4** sites for agro forestry trees (4mks)
23. Write **4** benefits of agro forestry to a maize crop (2mks)

**SECTION B ANSWER ALL THE QUESTIONS**

1. The diagram below illustrates a method of collecting soil samples from a field

8

7

6

5

4

3

22

1 1

1. Identify the method illustrated above (1mk
2. State 3 precautions a former should take when collecting a representative soil sample from the field for testing (3mks)
3. Give one reason for soil testing (1mk)

20) The photograph below illustrates a method of irrigation



1. Identify the method of irrigation illustrated above (1mk)
2. State two maintenance practices that are carried out on the equipment used in the method illustrated above. (2mks)

c. Give two advantages of drip irrigation have over the method of irrigation illustrated above in crop disease control. (2mks)

21. The diagram below illustrates a condition that affects carrots in the field.



1. Identify the disorder on the carrot illustrated above. (1mk)
2. State **one** factor that could lead to the condition above. (1mk)
3. Outline **three** field management practices that is done to carrots (3mks)

22. At the end of the year ended 31:12:2015 the following information was recorded in Upendo farm.

 Kshs

Perennial crops 250,000

Bank loans 30,000

Cash at hand 5,000

Bank overdrafts 15,000

Land 350,000

Unpaid wages 3,000

Debts receivable 20,000

Stocks in store 25,000

Livestock 200,000

Bank balances 100,000

1. Prepare a balance sheet as at 31.12.2015 (4mks)
2. Did Upendo farm qualify for a loan? Give a reason for your answer (1mk)

**SECTION C ANSWER ANY OF THE TWO QUESTIONS**

23. Describe the production of sorghum under the following sub-headings

a) Ecological requirement (4mks)

b) Land preparation and planting (6mks)

c) Pest and disease control (6mks)

d) Harvesting and marketing (6mks)

24. a) Explain Eight cultural methods of soil and water conservation (8mks)

 b) Explain **four** ways in which

 i) HIV/Aids limits agricultural production (4mks)

 ii) Government policy improves agricultural production (4mks)

 iii) Low levels of Education and technology influences Agriculture (4mks)

25. a) Explain **seven** physical methods of pest control (7mks)

 b) Explain **eight** factors that contribute to competitive ability or weeds (8mks)

 c) Describe harvesting of coffee 5mks)