

**SUKELLEMO PREMOCK EXAM**

**443/1**

**AGRICULTURE**

**PAPER 1**

**JUNE 2022**

**TIME 2 HOURS**

**CANDIDATES NAME----- INDEX NUMBER-----**

**INSTRUCTIONS TO CANDIDATES**

write your name and index number in the spaces provided.

this paper consists of three sections A, B and C

answer all the questions in the spaces provided.

answer two questions from section C.

**EXAMINERS USE ONLY**

<b>SECTION</b>	<b>MAXIMUM SCORE</b>	<b>CANDIDATES SCORE</b>
<b>A</b>	<b>30</b>	
<b>B</b>	<b>20</b>	
<b>C</b>	<b>40</b>	
<b>TOTAL</b>		

**SECTION A 30 MKS**

1. State **four** factors that one consider when selecting planting materials (2mks)

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2. Explain the term agro-forestry as used in crop production. (1/2)

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b) Name **five** sites for agro-forestry trees.(2 1/2mks)

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3. State two crop production practices carried after planting to achieve optimum plant population.(1mk)

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4. At what stage in the growth of beans should mechanical /weed control be avoided.(1mk)

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5. Name **one** vegetative material used to propagate each of the following crops.(2mks)

i. Irish potatoes

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ii. Pineapples

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iii. Bananas

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iv. Pyrethrum

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6. Explain **two** ways through which temperature leads to formation of soil. (1mk)

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7. List **four** financial books that should be kept on a farm.(2mks)

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8. Give **two** reasons for drying grain crops before storage. ( 1mk)

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9. Give **two** sources where farmers get capital to start an enterprise. (1mk)

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10. Explain how monocropping leads to a loss of soil fertility.(1mk)

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11. What is opportunity cost?(1mk)

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12. Outline **two** conditions that favours nomadic pastoralism in Kenya. (1 mark)

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13. State **four** reasons why it is important to keep livestock health records. (2mks) .

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14. Give **four** advantages of mixed pasture. (2mks) .

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15. Give **two** ways by which losses are incurred in silage. (1mk)

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16. List **two** methods used to drain farm land. (1mk)

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17. Give **two** varieties of carrots (1mk)

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18. State **two** roles of water in plants. (1 mark)

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19. Why is drainage important in water logged land? (2mks)

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20. State two reasons why top soil layer of the soil profile should be maintained?( 2mks)

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21 Distinguish between extensive and intensive farming. (2marks)

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**SECTION B ANSWER ALL THE QUESTIONS (20MKS)**

22. Sample weighing 200gm was heated in an oven at 1050C. The dry soil was weighed and the weight

recorded as 188 gm. The soil was then heated strongly after which was recorded as 180gms.

i) Calculate the percentage content of water in the initial soil sample. (2 marks)

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ii) Why was the soil not heated strongly initially? (1 mark)

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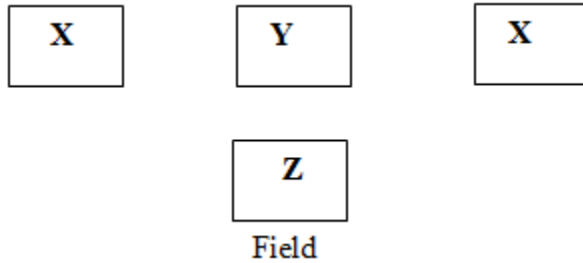
iii) Calculate the weight of humus in the sample. (1 mark)

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iv) Find the percentage content of humus in the soil sample. (2marks)

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23. The illustration below shows a four heap system of making compost manure. Study it and answer the questions that follow.



a) By use of arrows indicate on the diagram above how materials should be transferred from one heap to another till the material is applied in the field. (1 mark)

(b) State two indicators of a well decomposed manure. (2mks)

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(c) Give reasons for

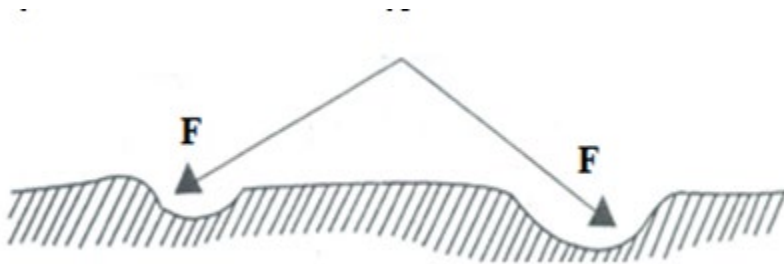
i. Adding ash.(2mks)

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ii. Regular turning of the compost manure. (2mks)

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24. Study the illustration below of a type of terrace.



(i) Name the type of terrace. (1mk)

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(ii) Identify part labeled F.(1mk)

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(iii) Ways in which terrace controls soil erosion. (2mks)

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(iv) Disadvantages of using this type of terrace.(1mk)

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c) Describe the process involved in water treatment using a chemical treatment system. (11marks)

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26a) Describe the practices that a farmer should carry out to ensure uniform germination of seeds. (8 marks)

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b)i) Differentiate between land subdivision and land fragmentation.(2mks)

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ii) Explain **ten** effects of fragmentation and sub-division of land. (10 marks)

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27. a)state **five** objectives of the million scheme.(5mks)

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b)what information should be included in field operation records.? (8mks)

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c) Describe **seven** factors that should be considered when classifying crop pests.(7mks)

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