**NAME: ……………………………………..…… DATE: ……………………………………….....**

**Adm. NO: .…………….……….……..…..… CANDIDATE’S SIGNATURE: …………..…**

**443**

**AGRICULTURE**

**FORM TWO**

**TIME: 2 HOURS**

***Kenya Certificate of Secondary Education***

**INSTRUCTIONS TO CANDIDATES**

1. **Write your name and admission number in the spaces provided above.**
2. **Answer ALL the questions in the spaces provided.**

**FOR EXAMINERS USE ONLY**

|  |  |  |
| --- | --- | --- |
| **QUESTIONS** | **MAXIMUM SCORE** | **CANDIDATES SCORE** |
| **1 – 26** | **90** |  |

1. Name four examples of micro nutrient used in an agricultural farm (2 mks)

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1. Outline four properties of nitrogenous fertilizer (2 mks)

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1. Give two functions of nitrogen in crops of nitrogen in crops (1 mk)

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1. State two main types of planting materials used in establishing of crops (2 mks)

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1. Give four factors determining the spacing of crops (2 mks)

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1. Give four conditions under which shifting cultivation is practiced (2 mks)

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1. Name four factors determining seed rate (2 mks)

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1. Give four factors determining soil forming processes (2 mks)

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1. Give four importance of maintaining farm tools and equipment (2 mks)

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1. Give two ways of achieving tertiary operations (1 mk)

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1. Using definitions only differentiate between fertilizer grade and fertilizer ratio (2 mks)

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1. Give four climatic factors influencing agriculture (2 mks)

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1. Name two main farming systems (1 mk)

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1. State four factors considered when choosing a type of irrigation (2 mks)

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1. Give four importance of soil pH to crop production (2 mks)

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1. Edna a farmer in Kama Village happens to buy a certified seed of 95% germination percentage and planted at a spacing of 20CM by 10CM in a 2 hectares piece of land. Estimate the plant population.

(3 mks)

1. What is scarcity (1 mk)

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1. List four types farm records that can be used in bean production (2 mks)

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1. Outline four uses of farm records in the farm (2 mks)

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1. List four soil constituents of soil (2 mks)

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1. Identify four tools used in masonry work (2 mks)

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1. State two causes of hard pan (2 mks)

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1. Give four characteristics of plantation farming (2 mks)

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1. Name four methods of irrigating land (2 mks)

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1. Define a fertile soil (1 mk)

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1. Give two types organic manure (1 mk)

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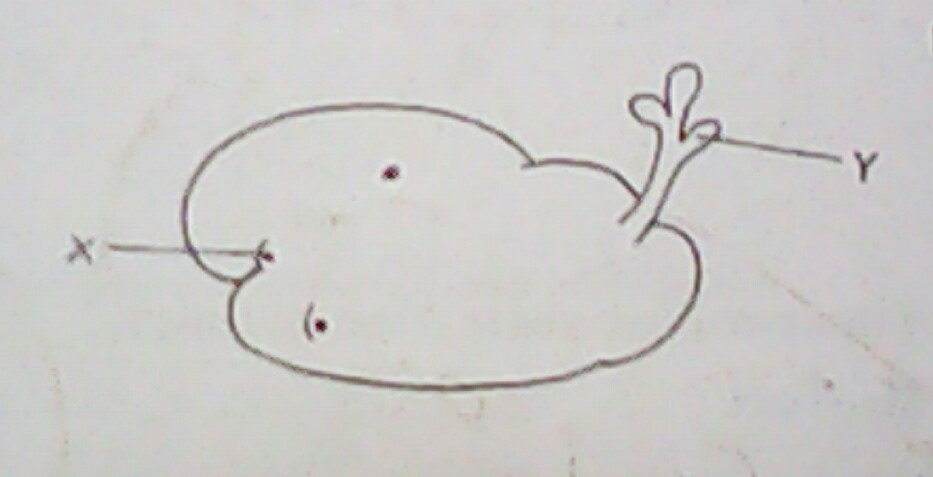
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1. A compound fertilizer bag has the labels 20-10-0.
2. What do the figures 10 and 0 stand for (1 mk)

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1. Calculate the quantity of nitrogen required in 450 Kg of Ammonium Sulphate (2 mks)
2. The diagram below illustrates a planting material. Study it carefully and answer the question that follow;



1. Identify the organ (1 mk)

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1. Label the parts X and Y (2 mks)

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1. Name the method that was used in preparing the above planting material (1 mk)

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1. Give one environmental condition that is necessary for the success of this method of preparing a planting material (1 mk)

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1. State two ways in which agriculture contributes to industrial development (2 mks)

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1. State four ways by which wind affects the growth of crops (2 mks)

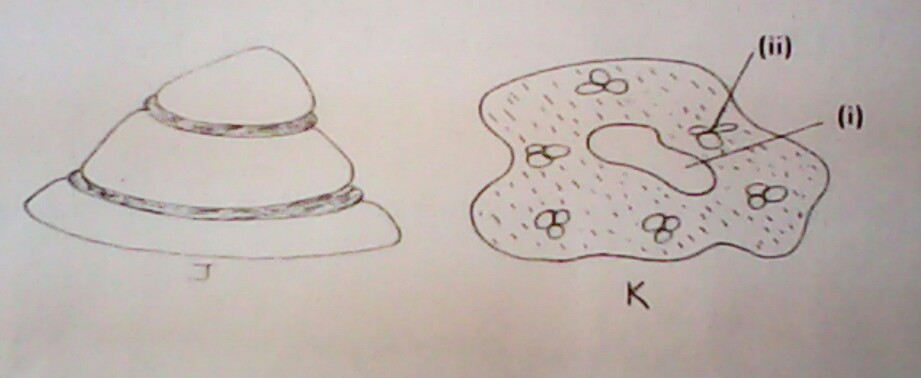
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1. The diagram below illustrates some types of soil structure. Study and answer the questions that follow;



1. Identify the types of soil structure illustrated in the diagrams J and K (2 mks)

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1. Name the parts labeled (i) and (ii) in the diagram K (2 mks)

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1. State two effects of soil structured labeled J in crop production (2 mks)

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1. State four importance of sub soiling as tertiary operation (2 mks)

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1. Outline four advantages of rolling in seedbed preparation (2 mks)

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1. Give four importance of drainage as a method of land reclamation (2 mks)

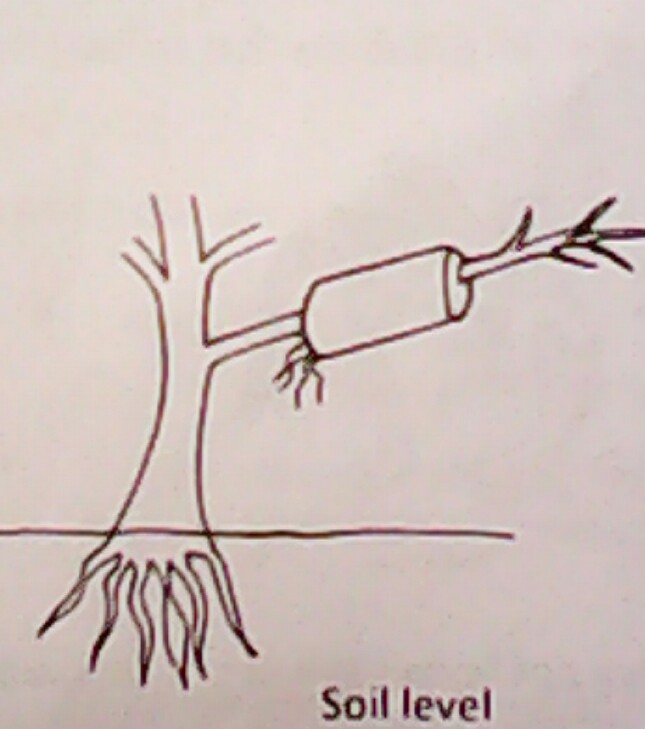
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1. The diagram shows a method of crops;



1. Identify the propagation method illustrated above (1 mk)

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1. State two ways of initiating faster root development in propagation method illustrated

(2 mks)

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1. Give four methods of harvesting water in the farm (2 mks)

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1. State two factors considered when siting compost manure heap (2 mks)

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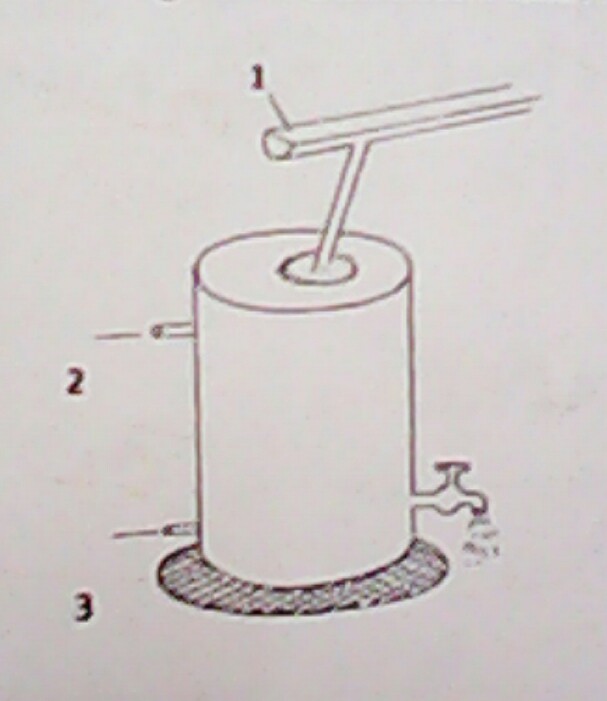
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1. State two methods of increasing soil pH (2 mks)

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1. Below is a diagram of a domestic tank. Study it and answer the questions that follow;



1. Name the parts labeled 1, 2 and 3 (3 mks)

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Outline four qualities of clean water (2 mks)

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1. Outline two importance of tissue culture in crop production (2 mks)

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1. State the difference between a seedling bed and a seedbed (2 mks) …………………………………………………………………………………………………………………………………………………

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