NAME………………………………………………………INDEX NO………………………….

SCHOOL……………………………………………...…….CANDIDATE’SSIGNATURE………

DATE…………………………….

443 / 1

AGRICULTURE

PAPER 1

MARCH / APRIL 2015

2 HOURS

**KABONDO DIVISION JOINT EVALUATION TEST**

*Kenya Certificate of Secondary Education*

**INTRODUCTION TO CANDIDATES**

1. Write your name and index no in the spaces provided
2. Put your signature in the spaces provided above
3. Write your answers in the spaces provide after every question

For examiner’s use only

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Marks |  |  |  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Question | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| Marks |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

***This paper consists of 10 printed pages. Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing***

SECTION A (30 MKRS)

1. What is nomadic pastoralism as a method of farming ? (1/2)

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1. State two reasons why it is necessary to cultivate land before planting (1mk)

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1. Give two reasons why leguminous plants are prefered for green manure (1mk)

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1. State two methods of increasing soil PH (1mk)

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1. State two effects of pests in crop production (1mk)

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1. Give two forms in which nappier grass may be used to feed livestock (1mk)

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1. List three signs shown by crops when nitrogen is deficient in the soil (1mk)

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1. State four factors that determine the choice of an irrigation system to use in a farm (2mks)

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1. Give four advantages of using zero grazing system (2mks)

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1. State four factors considred in selection of planting materials (2mks)

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1. State four factors that determine the quality of grass hay (2mks)

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1. Give four roles of trees in soil and water conservation (2mks)

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1. State the importance of each of the following in a farm (1mk)
2. Strip cup

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1. Ball pen hammer

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1. State two cultural weed control measures in maize plantation (1mk)

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1. Give four factors that determine the method of fertilizer application (2mks)

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

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1. State four advantages of crop rotation practice in a farm (2mks)

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1. State four factors that affects the efficiency of psetcides (2mks)

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1. Explain two ways monocropping leads to soil infertility (2mks)

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1. Name four farming practices farmers can use to achieve minimum tillage (2mks)

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SECTION B (20 MKS)

1. A) A farmer in Kabondo was advised to apply 80 kg of nitrogen to his maize plantation during top dressing. The fertilizer available was calcium ammonium nitrate (20% N) .Calculate the amount of this fertilizer in kilograms the farmer should purchase (2mks)

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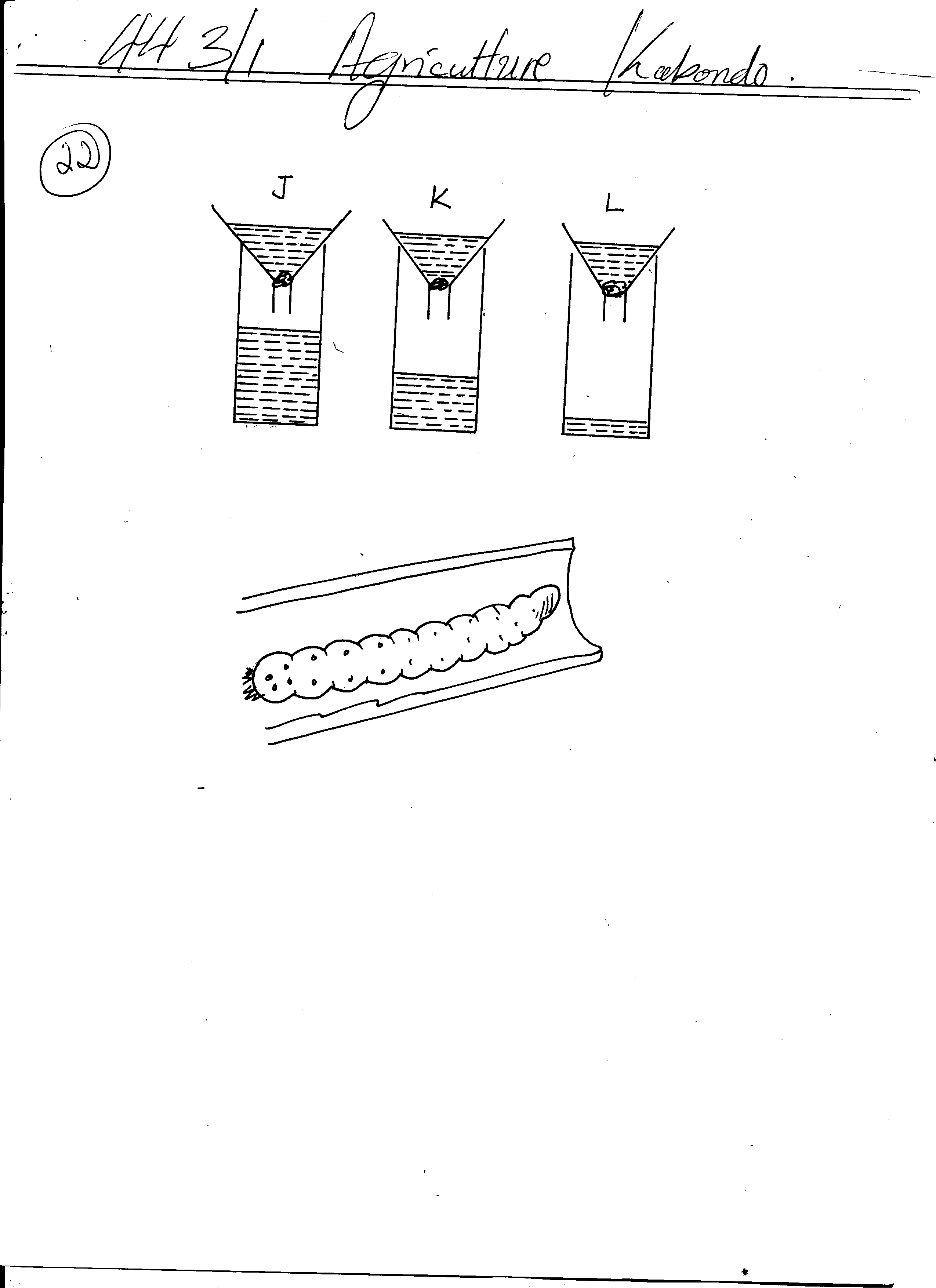
B. At what stage should the farmer top dress his maize crop

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C. State three applications practices the farmer should consider to maximize the use of the fertilizer by the crop for top dressing (3mks)

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1. The diagram below illustration an investigation on property of soil using samples labeled J,K and L



1. If the level of water drained into the test tubes were observed after two hours, name the property of soil being investigated (1mk)

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1. What is the relationship between this property of soil and the size of soil particles (1mk)

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1. Which soil sample will be suitable for growing paddy rice ? (1mk)

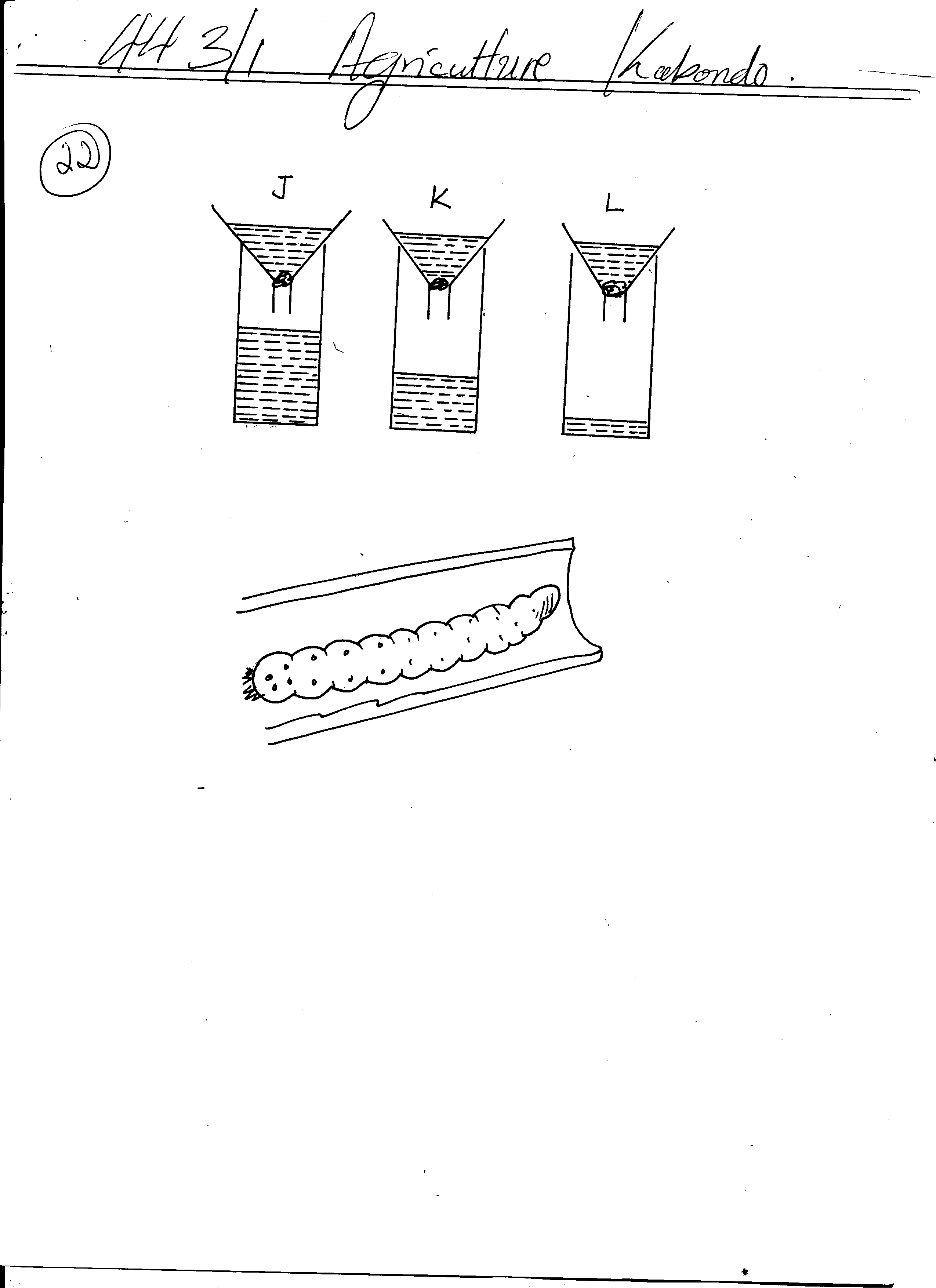
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1. Name the type of soil labeled (2mks)

J. ……………………………………………………………………………………

L. ……………………………………………………………………………………





The diagram above shows a pest in production of cereal crops ,use it to answer the question below.

* 1. Identify the pest

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* 1. Give two damages caused by the pest indentified in (a) above…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………
  2. Give two control measures of the pest above (1mk)

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* 1. Give four reasons why pest control practices should be effectively implemented in a farm. (2mks)

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SECTION C

1. A. Explain six cultural methods of controlling crop diseases (12mks)

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B. Describe the effects of land fragmentation and subdivision (8mks)

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1. a. Explain how five factors leads to loss of soil fertility (10mks)

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b. Explain five ways by which farmers minimizes grain loses in stores (10mks)

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1. a. Explain three reasons for pruning coffee (3mks)

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b. Discuss the production of kales under the following sub headings (12mks)

* + Transplanting

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* + Weed control

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* + Pests and diseases

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c. State five factors that would influence soil erosion (5mks)

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