**NAME……………………………………………………………… ADM NO.…………..**

**CANDIDATE’S SIGNATURE…………………………………DATE…………………..**

**AGRICULTURE**

**PAPER 1**

**444/1**

**TIME 2 HOURS**

**FORM 4**

**INSTRUCTIONS TO CANDIDATES:**

* Write your name and index number in the spaces provided above.
* Sign and write the date of examination in the spaces provided above.
* This paper consists of **THREE** Sections **A**, **B** and **C**.
* Answer all questions in Section **A** and **B**.
* Answer two questions in Section **C** in the spaces provided.

**FOR EXAMINER’S USE ONLY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Question** | **Maximum**  **Score** | **Candidate’s**  **Score** |
| **A** | **1 - 20** | **30** |  |
| **B** | **21 - 25** | **20** |  |
| **C** | **26 - 28** | **20** |  |
|  | **20** |  |
| **Total Score** | | **90** |  |

**SECTIONA:(30MARKS)**

##### Answer ALL the questions in this section in the spaces provided.

1. State **two** reasons why nitrogenous fertilizers are suitable for topdressing (1mark)

# ....................................................................................................................................................

## ................................... .................................................................................................................

2. Outline **four** factors that affect the effectiveness of pesticide (2marks)

3. State **six** factors to be considered when selecting implements for primary cultivation

(3marks)

4. State **two** reasons that lead to subsistence farming in Kenya (1mark)

5. State **four** factors that encourage rooting in tea stem cuttings (2marks)

6. List **two** tertiary operations that may be carried out on a seedbed (2marks)

7. State **six** advantages of mixed grass legume pasture over Apure grass pasture (3marks)

8. Give **four** types of records a poultry farmer should keep (2marks)

9. State **four** advantages of using organic manure over inorganic fertilizers in Kenya (2marks)

10. Name **four** forms of livestock farming in Kenya (2marks)

11. State **four** advantages of single stem pruning system in coffee production (2marks)

12. Give **four** benefits of practicing agro forestry in crop farming (2marks)

13. State **four** advantages of using polythene sleeves in the establishment of tree seedlings

(2marks)

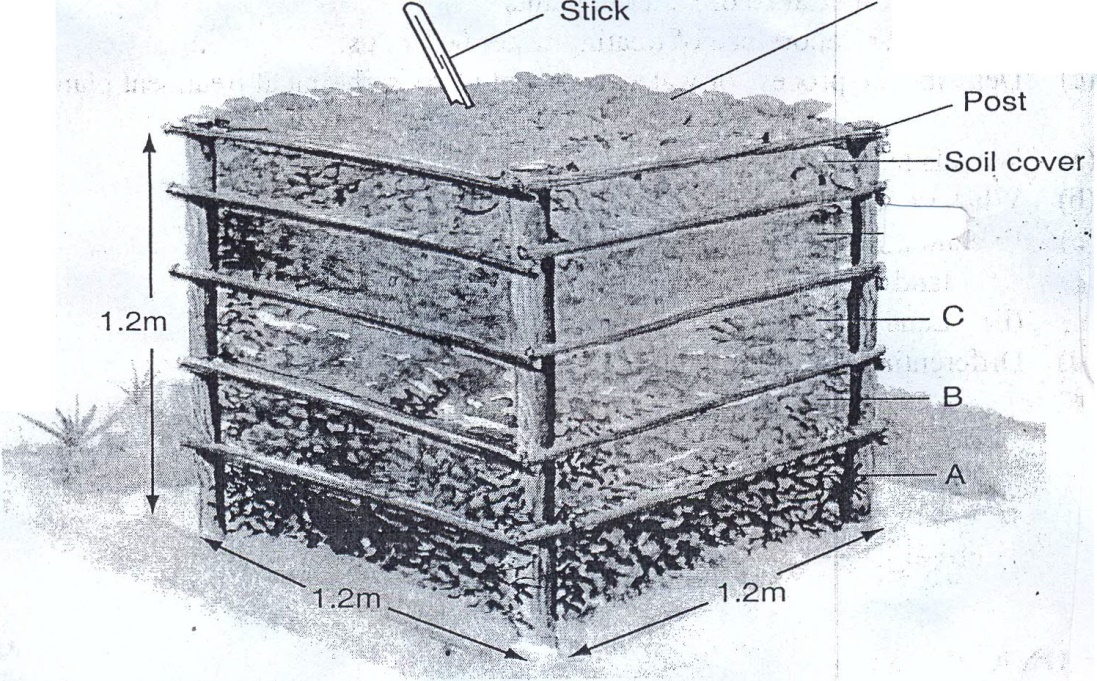
14. Give **four** conditions that favour the use of chemicals to control weeds (2marks)

1. State **four** ways in which herbicides can be classified (2marks)

**SECTION8:(20marks)**

##### Answer ALL the questions in the spaces provided

1. The diagram below shows a method of preparing compost manure

dry leaves

-··

a} Identify the method (1mark)

* 1. Identify the parts labeled AandB (2marks}

A ....................................................................................................................................... .

B....................................................................................................................................... .

* 1. Give function for part labelledC (1mark)
  2. Give the reason for inserting along sharp pointed stick into the pile (1mark)

1. ThediagrambelowlabelledG,H,JandKshowdifferentstagesofcottonfruitdevelopment



H-

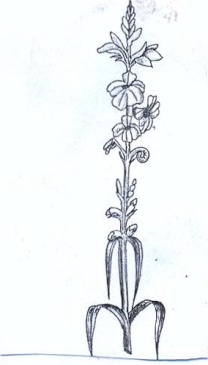
1. Re-arrangethelabelsG,H,JandKtoshowthecorrectsequenceinwhichthecottonfruit develops (1mark)
2. WhatwouldbetheeffectofattackbycottonbollwormsatthestagelabelledK

(1mark)

1. State**two**precautionsthatshouldbeobservedwhenharvestingtoensurethatcottonpickedisofhighquality (2marks)
2. Name **two** products which are obtained after processing cotton in a ginnery (1mark)

## ......................................................................,.................................................................................

1 a) Identify the weeds below;



#### A ............................................................ .............................................................

B .............................................. ........................................................................... .

* 1. Why is weed B difficult to control?
  2. Name **two** crops associated with weed A
  3. Other than use of herbicides, state **two** control measures for weed A

1. The table below shows a format of labour record

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No.ofhours  Worked | Livestock  Production | Crop  Production | Machinery  ··Mainteance | Dateof  Working | Remarks |
|  |  |  | .,.,... |  |  |
|  |  | , |  |  |  |
|  |  |  |  |  |  |
| ICost/hour |  | .. | T |  | .;. |
| lTotalcost |  |  |  |  |  |

* 1. Name the type of farm record illustrated above
  2. State **four** uses of the farm record shown above

(1mark)(1mark)(1mark)

(1mark)

(2marks)

(1mark)

(4marks)

**SECTIONC:(40marks)**

**Answerany TWO questions from this section in the spaces provided.**

1. a) Outline**five**waysinwhichlandfragmentationincreasesthecostoffoodproductioninKenya (5marks)

b) Explain**eight**soilconservationmeasuresthatcanbeusedtoconservesoilona

|  |  |  |
| --- | --- | --- |
|  | Sloping farmland | (8marks) |
| c) | Describe the procedure of silage making | (7marks) |

1. a) Describe the production of common beans under the following subheadings
   1. Planting
   2. Pest control
   3. Harvesting

(5marks)

(3marks)

(2marks)

b) State and explain **five** methods of applying fertilizer in crop production (10marks)

22. a)

b)

c)

Outline **five** benefits of timely planting in cereal production (5marks)Describe **five** ways in which wind negatively affect agricultural production(5marks)

Describe **ten** factors that should be consider when deciding on the crop to grow

(10mark