**NAME: ………………………………………..…………………… INDEX NO: …………………….……**

**SCHOOL: ………………………………………………………….. DATE: ……………..……….………**

**CANDIDATE’S SIGNATURE: ………………….………………**

**443/1**

**AGRICULTURE**

**PAPER 1**

**JULY/AUGUST 2014**

**TIME: 2 HOURS**

**KISUMU WEST SUB-COUNTY JOINT EVALUATION 2014**

***Kenya Certificate of Secondary Education (K.C.S.E)***

**AGRICULTURE**

**PAPER 1**

**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 section* ***A,B*** *and* ***C***
* *Answer* ***all*** *the questions in section* ***A*** *and* ***B***
* *Answer any* ***two*** *questions in section* ***C.***
* *Answers should be written in the spaces provided in this booklet.*

**FOR EXAMINERS USE ONLY**

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **QUESTIONS** | **MAX SCORE** | **CANDIDATES SCORE** |
| **A** | **1-16** | **30** |  |
| **B** | **17-20** | **20** |  |
| **C** |  | **20** |  |
|  | **20** |  |
| **TOTAL** |  | **90** |  |

*This paper consists of 8 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.*

**SECTION A (30 MARKS)**

***Answer all questions in this section in the spaces provided.***

1. Name **four** processes of biological weathering. (2mks)

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2. Name **four** types of records a maize farmer should keep (2mks)

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3. (a) What is mixed farming ? (1mk)

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(b)Give **three** disadvantages of mixed farming to a small scale farming. (1½mks)

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4. State **three** ways in which trees improve soil productivity. (1½mks)

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5. List **four** minimum tillage farming practices (2mks)

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6. Give **two** routine maintenance practices on water storage tanks. (1mk)

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7. List **four** examples of joint products in livestock production (2mks)

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8. State **four** examples of variable inputs in sorghum. (2mks)

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9. State **four** effects of pests with both piercing and sucking mouth parts on crops. (2mks)

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10. State **two** ways of breaking seed dormancy during the preparation of planting materials. (1mk)

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11. State **three** importance of tissue culture in crop production (1½mks)

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

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13. State **four** advantages of applying lime as a measure of improving soil condition (2mks)

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14. State **four** effects of mass wasting (2mks)

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15. Define the following terms as used in crop production. (3mks)

1. Capping

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1. De – suckering

…………………………………………………..………………………………………………………

1. Changing the cycle

…………………………………………………..………………………………………………………

16. List **three** sources of organic matter in the soil (1½mks)

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**SECTION B (20MARKS)**

***Answer all the questions in this section in the spaces provided.***

17. (a) The diagram below shows a method of forage preservation

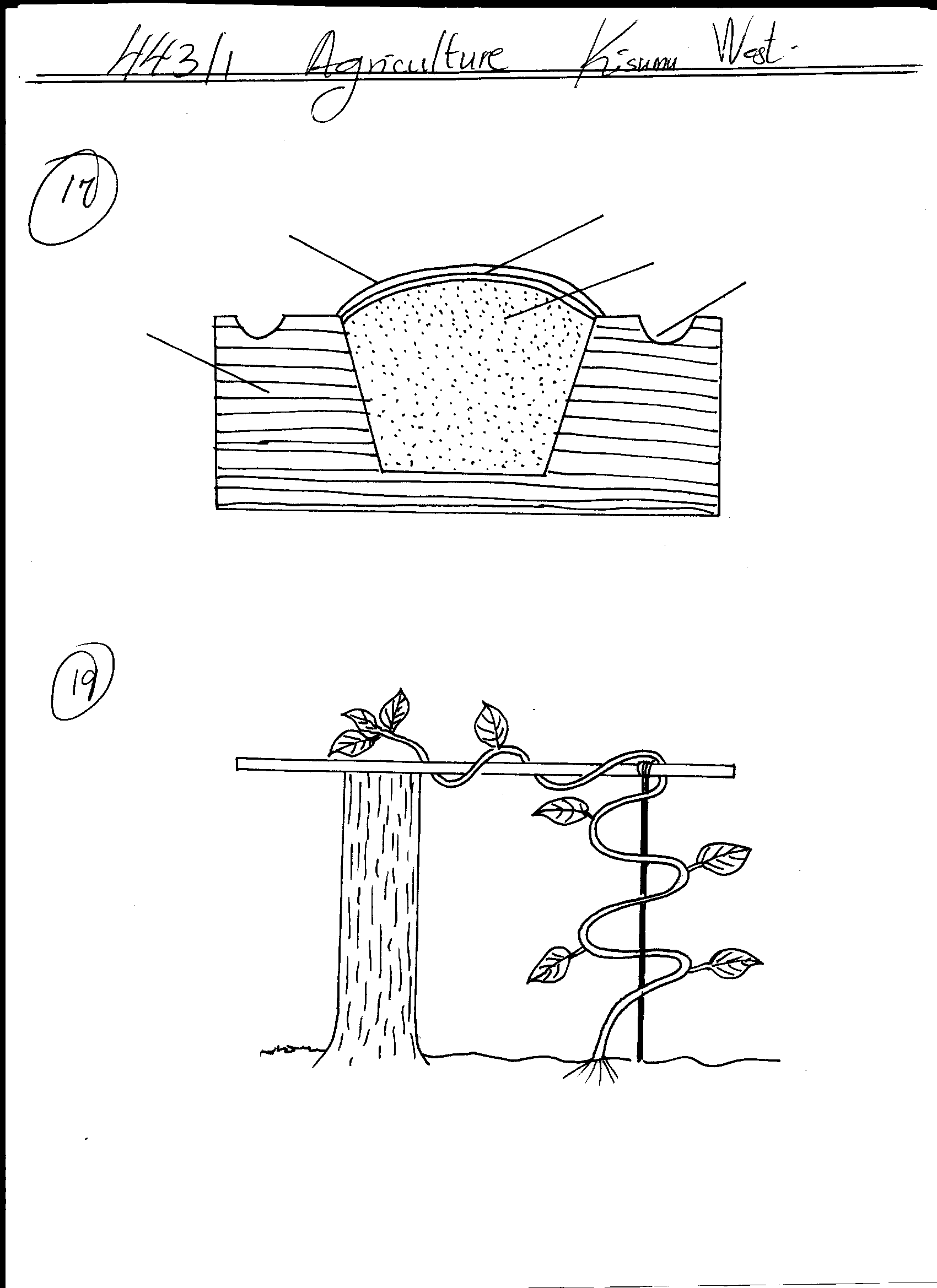
**Ground**

**Soil Layer**

**Drainage**

**Forage material**

**Polythene sheet**



(i)Identify the structure illustrated above (1mk)

…………………………………………………..………………………………………………………

(ii) State the form in which the forage is preserved as illustrated above. (1mk)

…………………………………………………..………………………………………………………

…………………………………………………..………………………………………………………

(iii) Give the role of each of the following in the structure above (2mks)

1. Polythene sheet: ………………….……………………………………………………………

…………………………………………………..………………………………………………………

ii Drainage:………………..……………………………………………………………………….

…………………………………………………..………………………………………………………

(b) Name **one** other method of forage preservation. (1mk)

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18. The following table gives the weekly demand and supply schedules of potatoes.

|  |  |  |
| --- | --- | --- |
| **Price per kg (shs)** | **Demand in millions of kgs** | **Supply in millions pf kgs** |
| 10 | 23 | 59 |
| 9 | 30 | 57 |
| 8 | 36 | 54 |
| 7 | 41 | 50 |
| 6 | 45 | 45 |
| 5 | 48 | 39 |
| 4 | 50 | 32 |
| 3 | 51 | 25 |

Use the table to answer the following questions

1. What is the equilibrium price? (1mk)

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1. State the effects of a government imposing a maximum price of:
2. Ksh 5 per kg: (1mk)

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1. Ksh. 7 per kg: (1mk)

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1. If the government guaranteed a potato supply at price of Ksh . 7 per kg , what quantity would it have to purchase to maintain this price? (1mk)

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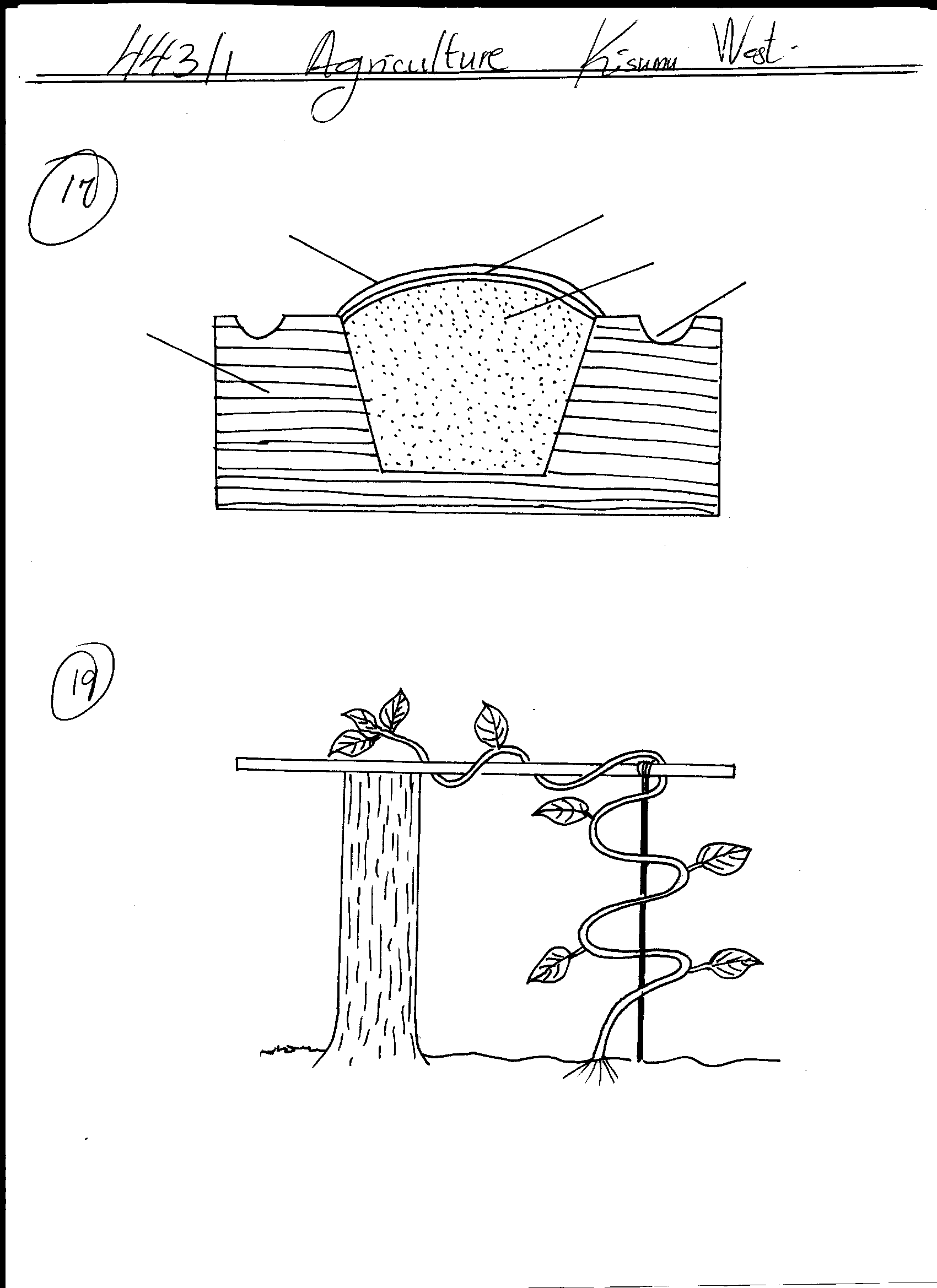
…………………………………………………..………………………………………………………

d) If alternatively the government bought all the potatoes on offer at Ksh. 7 kg , what price would

it have to change the consumers to dispose of this quantity? (1mk)

…………………………………………………..………………………………………………………

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19. (a) The diagram below illustrates a field management practice carried out on a fruit crop.

(i)Identify the practice illustrated above. (1mk)

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(ii) Give **two** reasons for carrying out the practice illustrated in the above diagram. (2mks)

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(b) Give a reason why it is not advisable to use manure in carrot production. (1mk)

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20. (a) What is land fragmentation ? (1mk)

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…………………………………………………..………………………………………………………

(b) State **three** causes of land fragmentation (3mks)

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(c)State **two** objectives of settlement and resettlement. (2mks)

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**SECTION C (40 MARK)**

***Answer any two questions in this section in the spaces provided at the end of the section***

21. (a) State and explain any **five** cultural methods of controlling weeds (10mks)

(b) Explain the harmful effects of pests on crops (10mks)

22. (a)Describe field production of dry beans under the following sub headings:

1. Land preparation: (4mks)
2. Planting (6mks)

(b) Explain **five** ways by which a farmer can adjust to risks and uncertainty. (10mks)

23. (a)Describe **ten** safety precautions that should be taken when using herbicides to control weeds.

(10mks)

(b)Explain **ten** farming practices which help to conserve soil on a farm (10mks)

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