**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

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1. Changing the cycle

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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)

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

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

 (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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