NAME………………………………………………………………………………INDEX NUMBER…………………………….

CANDIDATE’S SIGNITURE …………………………………………………DATE…………………………………………….

***@West practice papers-2021***

**AGRICULTURE**

**FORM 4**

**PAPER 1**

**443/1**

**INSTRUCTIONS TO CANDIDATES**

**(a). Write your name and index number in the spaces provided.**

**(b) Sign and write the date of the examination in the spaces provided above.**

**(c). This paper consists of three sections; A, B and C**

**(d) Answer all the questions in section A and B**

**( e) Answer any two questions in section C**

**(f) All the answers should be written in the spaces provided.**

**(g) Candidates should check the questions papers to ascertain that all the pages are printed as indicated and that no questions are missing.**

**(h) Candidate should answer all questions in English.**

**For examiner’s use only**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Question** | **Maximum score** | **Candidate’s score** |
| **A** | **1-11** | **30** |  |
| **B** | **12-15** | **20** |  |
| **C** |  | **20** |  |
|  | **20** |  |
| **TOTAL** | **90** |  |

**SECTION A ( 30 MARKS )**

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

1, State four factors determining farming systems ( 2 marks )

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2. State four advantages of extensive farming system. ( 2 marks )

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3. State four importance of optimum temperature in crop production. ( 2 marks )

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4(a) Name three physical properties of the soil. ( 1 ½ marks)

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b) State three importance of soil structure on production. ( 1 ½ marks)

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c) State four reasons why burning of vegetation as a method of land clearing is discouraged. (2 marks )

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5(a) State three factors influencing depth of cultivation. ( 1 ½ marks)

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b)i) What do you understand by the term sub-soiling. ( ½ marks)

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ii) State two reasons for sub-soiling ( 1 mark )

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6. State four features of a productive soil. ( 2 marks )

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7(a) State two deficiency symptoms of iron in crop production. ( 1 mark )

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b) Name two roles played by iron in crop production. ( 1 mark )

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8. State four advantages of using inorganic fertilizers over organic fertilizers. ( 2 marks )

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9(a) Name four sites to avoid when carrying out soil sampling. ( 2 marks )

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b) State four advantages of using vegetative materials for planting. ( 2 marks )

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10. Complete the table below ( 2 marks )

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| Plant part used for vegetative propagation material | Crop plant |
| 1.Splits |  |
| 2.Bulbils |  |
| 3. Suckers |  |
| 4.Crowns |  |

11. (i) State four advantages of using certified seeds in crop production. ( 2 marks )

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**SECTION B ( 20 marks )**

12. Study the diagram below carefully and answer the questions that follows.



(a)Identify the weed above. ( 1 mark )

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b) State two factors which contributes to the competitive ability of the above weed. ( 2 marks )

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c) State two harmful affects of the weed named in (a) above. ( 2 marks )

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d) Name one basis in which weed above is classified ( 1 mark )

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13. Two maize pests are shown in the diagram below. Study them and answer the questions that follow.



1. Identify the pests in the diagrams labelled X and Y. ( 2 marks )

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b).At what stage of maize production does each pest damage the crop. ( 2 marks )

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c). Give two ways of controlling each of the pests in the field. ( 2 marks )

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14. (a) The diagram below shows a method of forage preservation. (1 mark )



a.), Identify the structure above. ( 1 mark )

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(b).State the form in which the forage is preserved as illustrated above. ( 1 mark )

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(c), Name two other method of forage preservation apart from above. ( 2 marks )

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15.(i) Define the following terms as used in agroforestry

a) coppicing ( 1 mark )

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b).Pollarding ( 1 mark )

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ii). Name any two forms of agroforestry ( 2 marks )

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**SECTION C. 40 MARKS**

**Answer any two questions from this section in the spaces provided after question 15.**

16a) Explain five human factors influencing agriculture. ( 10 marks )

b). Describe the methods used to prepare planting materials before they are planted. (4 marks )

c) Describe the use of any three materials used in budding/grafting. ( 6 marks )

17a) Describe the importance of vegetable crop. ( 6 marks )

(b).Explain the cultural methods of pest control. ( 7 marks )

(c). Describe seven biological methods of soil and water conservation. ( 7 marks )

1 8(a) State seven reasons for pruning coffee . ( 7 marks )

(b) Highlight seven effects of land fragmentation ( 7 marks )

( c )Explain the basic concepts of economics. ( 6 marks )