Name.................................................................................................. Index No...............................

443/1

AGRICULTURE

PAPER 1

JULY/AUGUST 2016

**NAKURU SUB COUNTY SEC. SCHOOLS TRIAL EXAMINATION 2016**

AGRICULTURE

PAPER 1

2 HOURS

**INSTRUCTIONS TO CANDIDATES**

a) Write your name and Index number in the spaces provided above

b) This paper consists of three sections A, B and C.

c) Answer **all** the questions in section A and B

d) Answer **any two** questions in section C.

**For Examiners Use only**

|  |  |  |  |
| --- | --- | --- | --- |
| Section | Questions | Maximum score | Candidates score |
| A | 1-18 | 30 |  |
| B | 19-22 | 20 |  |
| C | 23-25 | 40 |  |
| TOTAL SCORE | | 90 |  |

***SECTION A – (30 marks) Answer all questions in this section in the spaces provided***

1. State any ***four*** disadvantages of intensive system of farming 2 marks)

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1. State any ***four*** methods of farming (2 marks)

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1. Define the following terms

(a) Nitrogen fixation (1 mark)

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***…………………………………………………………………………………………………………………***

(b) Phosphorus fixation (1 mark)

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1. State ***2 Effects*** of HIV/Aids on agricultural production (1 mark)

***…………………………………………………………………………………………………………………***

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1. State any ***four*** Reasons for organic farming (2 marks)

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1. Distinguish between soil structure and soil texture (2 narks)

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1. State any ***four*** examples of working capital (2 marks)

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1. What is Land reform: (1 mark)

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(b) State any ***four*** methods of land reform (2 marks)

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1. State any ***four*** ways of making land productive (2 marks)

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1. Distinguish between the following

(a) Fixed input and variable input (1 mark)

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(b) Journal and ledger book (**1 mark)**

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1. State ***any four*** factors contributing to the competitive ability of weeds (2 marks)

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1. Give four conditions of land which may make it necessary to carry out reclamation practices (2 marks)

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1. Name a***ny two*** physical weathering agents in the soil formation process (1mark)

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1. State t***wo*** Mechanical methods of separating soil particles according to size during soil analysis. (1mar***k)***

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1. State ***four*** functions of Boron in crop development (2marks)

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1. State f***our*** factors that should be considered when classifying crop pests (2 marks)

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***SECTION B 20 MARKS***

***Answer All Questions In This Section***

1. Different soil samples were tested and their pH values tabulated as shown below

|  |  |
| --- | --- |
| Soil sample | pH value |
| P1 | 4 |
| P2 | 5 |
| P3 | 6 |
| P4 | 7 |
| P5 | 8 |
| P6 | 9 |
| P7 | 10 |
| P8 | 11 |

(i) Which soil sample had the highest acidity 0

(½ mark)

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ii) Which soil is suitable for growing coffee (1 mark)

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iii) How would pH of soil sample P1 be increased (1 mark)

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iv) How would pH value of soil sample P8 be reduced? (1 mark)

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1. On 1st January 2009, Kaburu farm started farm operations with Kshs.30,000 cash. During the month, the farm made the following transactions. Study the transact ions and prepare a cash analysis for kaburu farm for the month of January. (5 ½ marks)

|  |  |  |
| --- | --- | --- |
| Date | Transactions | Amount Kshs |
| 05/1/09 | Livestock sales | 80,000 |
| 08/1/09 | Crop sales | 50,000 |
| 15/1/09 | Bought seed for planting | 75,000 |
| 20/1/09 | Paid K.F. A for fertilizer | 16,400 |
| 25/1/09 | Bought livestock feeds | 50,000 |
| 30/1/09 | Paid wages for planting & weeding | 56,000 |
| 31/1/09 | Received cash from K.C.C. for milk | 120,000 |
| 31/1/09 | Paid transport charges for milk | 9 ,000 |

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



(a) Identify the pests in the diagram labeled **A** and **B** (1 mark)

A…………………………………………….

B…………………………………………….

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

A……………………………………………………………………………………………..

B………………………………………………………………………………………………

(c) Give one way of controlling each of the pests in the field (2 marks)

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1. Describe the procedure which should be followed in spraying a crop of tomatoes using a fungicide in powder form, water and knapsack sprayer. (3 marks)

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(b) Name the fungal disease of tomatoes that can be controlled using the above procedure (1 mark)

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(c) State four safety measures that should be taken while spraying the crop with fungicide (2 marks)

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*SECTION C*

***Answer any two questions in the spaces provided after question*** 23.

1. Describe the management of cabbages under the following sub-headings.

(a) Nursery preparation (4 marks)

(b) Establishment in the nursery (3 marks)

(c) Management of seedlings in the nursery (5 marks)

(d) Transplanting of seedlings (8 marks)

1. (a) Outline factors necessary for proper functioning of farmers co-operative societies in Kenya(5marks)

(b) Explain how farmers overcome risks and uncertainties in a farming business (7 marks)

(c) Describe steps farmers’ should follow when planning a farm business. (8 marks)

1. Discuss the importance of irrigation in farming (12 marks)

(b) Explain the factors that influence the type of irrigation to be used in a farm (8 marks)

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