NAME………………………………………….. INDEX NO…………………………………………..

 Candidates signature………………………………….

 DATE…………………………………..

MOCK AGRICULTURE 2013

PAPER 1

TIME: 2HOURS

 **INSTRUCTIONS**

The paper consists of **three** sections A , B and C

Answer all questions in section A and B in the spaces provided

Answer **any two** questions from section C on foolscalps provided

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|  |  |  |  |
| --- | --- | --- | --- |
|  section | Question | Maximum score | Candidates score |
|  A  |  1- 18 |  30 |  |
|  B |   19 -22 |   20 |  |
|  C |  23 24 25 |  40 |  |
|   TOTAL  |   90 |  |  |

**SECTION A (30marks)**

 Answer all questions from this section in the spaces provided

1. State **three** advantages of compound fertilizer (1 ½ marks)

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2(a) Give **two** characteristics of Diammonium phosphate fertilizer (1 mark)

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 b) Why is Diammonium phosphate fertilizer considered to be acidic? ( ½ marks)

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3. List **three** factors that affect quality of Farm yard manure (1 ½ marks)

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4. State **four** factors that would influence the supply of casual labour in a farm.

(2marks)

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5. State **three** importance of soil to crops (1 ½ marks)

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6. State **two** control measures of weaver birds in a rice field. (1mark)

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7. Name **three** pasture legume species in medium altitude areas. (1 ½ marks)

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8. What **six** ways should a farmer consider in order to improve the yield of his maize crop? (3 marks)

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9. Differentiate between a corm and a rhizome as storage organs for propagation. (2marks)

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10( a) State **two** importance of per capita income in economics. (1mark)

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 b) List **two** characteristics of variable inputs (1mark)

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 c) State the law of diminishing returns (1mark)

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11. Give **three** advantages of adding organic matter to sandy soils. (1 ½ marks)

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12. Give **two** symptoms of viral diseases to crops. (1 mark)

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13 List **three** factors that influence crop rotation programs. (1 ½ marks)

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14. Give **three** reasons why sweet potatoes need to be earthed up. (1 ½ marks)

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15. State **two** benefits of a land title deed to a farmer. (1 mark)

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16. Give **three** ways through which nematodes damage crop plants. (1 ½ marks)

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17. State **one** control method for each of the following crop diseases. (1 mark)

 a) Leaf spot …………………………………………………………………..

 b) Panama disease ………………………………………………………….

18. List **three** biological weed control measures that have been used in Kenya and for each give an example of a weed. (3 marks)

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**SECTION B (20 marks)**

Answer all questions in the spaces provided

19(a) Identify the following methods of pruning tea (1 ½ marks)

 b) Give **three** reasons of pruning tea (1 ½ marks)

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 c) (i) Why is it essential to maintain a tea plucking table? (1 mark)

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 (ii) Explain the **three** types of tea plucking. (3 marks)

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20(a) What is a land slide? (1mark)

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 b) Name the following methods of landslides (1 ½ marks)

 c) List **three** effects of solifluction (1 ½ marks)

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21(a) Identify the following methods of irrigation A , B and C (1 ½ marks)

 b) State **three** advantages of method labeled A (3 marks)

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 c) Tabulate **two** differences between method B and C. (2marks)

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22(a) Identify the soil and water conservation structure below. ( ½ marks)

 b) Name the type of soil erosion that is controlled by the method above. ( ½ mark)

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 c) State **two** ways in which the structure helps to control soil erosion. (1mark)

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S**ECTION C: (40marks)**

Answer **any two** questions **only** from this section on foolscaps provided

23(a) Describe the field production of beans under the following subheadings

 i) Ecological requirements (2 marks)

 ii) Planting (3 marks)

 iii) Diseases and their control (5 marks)

 b) Discuss factors that affect spacing in crops (10 marks)

24(a) Describe the procedure of finding the amount of air in given soil sample. (5 marks)

 b) Outline the factors to consider in choosing water pipes for irrigation. (5 marks)

 c) List five advantages of vegetative propagation in crop production. (5marks)

 d) State five objectives of land tenure reform. (5marks)

25(a) Explain the importance of gapping in crop production. (4marks)

 b) Describe the factors that would lead to many gaps in a crop field. (7marks)

 c) Outline the steps you would use to carry out gapping in spinach production.(4marks)

 d) List ten pieces of information that should be recorded in a field operation record.

 (5marks)