443/1
AGRICULTURE
PAPER 1
JULY/AUGUST 2016
TIME: 2 HOURS

KIGUMO SUBCOUNTY CLUSTER EXAMINATION 2016
KENYA CERTIFICATE OF SECONDARY EDUCATION.

INSTRUCTIONS TO ALL CANDIDATES:
(a) Write your name and index No in the spaces above
(b) This paper consists of section A, B and C
(c) Answer ALL the questions in section A and B
(d) Answer any TWO questions in section C
(e) Answers should be written in the spaces provided

FOR EXAMINERS USE ONLY

Section	Question	Maximum score	Candidates Score
A	1- 17	30	
B	18-23	20	
C		20	
		20	
	Total	90	

1. Give **three** ways in which inorganic fertilisers are classified $(1\frac{1}{2}mks)$
   (i) ....
   (ii) ....

2. State **four** advantages of communal land tenure   (2mks)
   (i) ....
   (ii) ....
   (iii) ....
   (iv) ....

3. List **four** factors that affect the quality of silage   (2mks)

   (i) ....
   (ii) ....
   (iii) ....
   (iv) ....

4. State **three** advantages of using sleeved tree seedlings $(1\frac{1}{2}mks)$
   (i) ....
   (ii) ....
   (iii) ....
   (iv) ....

5. Name **four** details that can be entered in a dairy cattle production record   (2mks)
   (i) ....
   (ii) ....
   (iii) ....
   (iv) ....

6. Give **four** characteristics of horizon A in a soil profile   (1mk)
   (i) ....
   (ii) ....
   (iii) ....
   (iv) ....

7. State **four** factors that influence the seed rate in maize production   (2mks)
   (i) ....
   (ii) ....
   (iii) ....
   (iv) ....

8. Give **three** desirable characteristic of agroforestry trees and shrubs $(1\frac{1}{2}mks)$
   (i) ....
   (ii) ....
   (iii) ....
   (iv) ....

9. Identify the most suitable method of irrigation in each of the following cases : (2mks)
(a) Growing tomatoes in a green house .... ($^1/_2$mks)
(e) Growing paddy rice .... ($^1/_2$mks)
(c) Raising seedlings in nursery bed .... ($^1/_2$mks)

10. List **three** post harvest practices that may be carried out in French beans (2$^1/_2$mks)
(i) ....
(ii) ....
(iii) ....
(iv) ....

11. State **four** importance of undertaking primary tillage in crop production (2mks)
(i) ....
(ii) ....
(iii) ....
(iv) ....

12. A farmer requests a seed company to supply him with seeds. Name **four** financial documents that may be drawn for the transaction (2mks)
(i) ....
(ii) ....
(iii) ....
(iv) ....

13. Give **two** cultural methods of controlling pests in an established field of cabbages (1mk)
(i) ....
(ii) ....
....

14. List **four** ways in which organic manures improve soil fertility (2mks)
(i) ....
(ii) ....
(iii) ....
(iv) ....
(v) ....

15. Name **three** types of capital that a farmer requires in the management of his farm (1$^1/_2$mks)
(i) ....
(ii) ....
(iii) ....
(iv) ....

16. State **four** government policies that influence Agriculture in Kenya (2mks)
    (i) ....
    (ii) ....
    (iii) ....
    (iv) ....

17. List **four** farming practices that encourage soil erosion (2mks)
    (i) ....
    (ii) ....
    (iii) ....
    (iv) ....

SECTION B (20 MKS)
Answer all the questions in this section is the spaces provided

18. Below is a diagram of a type of soil structure. Study it and answer the questions that follow

    (a) Identify the soil structure illustrated above (1mk)

    ....

    (b) Give **two** ways in which the structure illustrated above limit crop yields (2mks)

    (i) ....
    (ii) ....

19 A farmer applied 500 kg of compound fertiliser 20-10-10 on his farm

    (a) Calculate the amont of K_2O that he applied (1mk)
    ....
    ....

    (b) How much filler material did he apply (2mks)
    ....
    ....
    ....

    (c) Work out the fertliser ratio of the fertiliser applied (1mk)
    ....
    ....

20.   Below are diagrams of **planting materials** used in crop production. Study them and answer the
        questions that follow : -
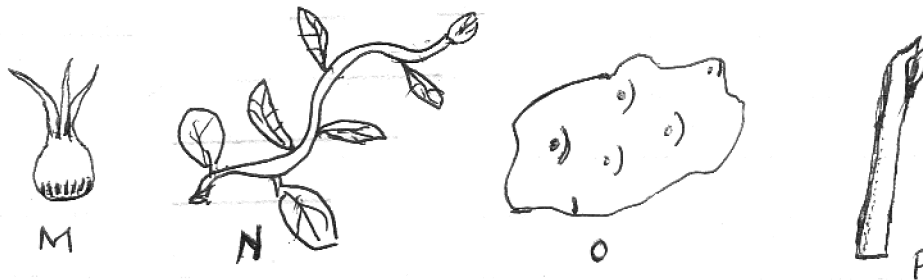
        (a) Identify the planting materials M, N, O and P   (2mks)
        M...
        N...
        O...
        P...

(b)   State **one** treatment given to material given to material O in preparation for planting   (1mk)
        ....

(c)   Name **one** crop that is propagated using the material labelled N   (1mk)
        ....

21.   The diagrams below represent methods of drainage used on the farm . Study them and answer the
        questions that follows:
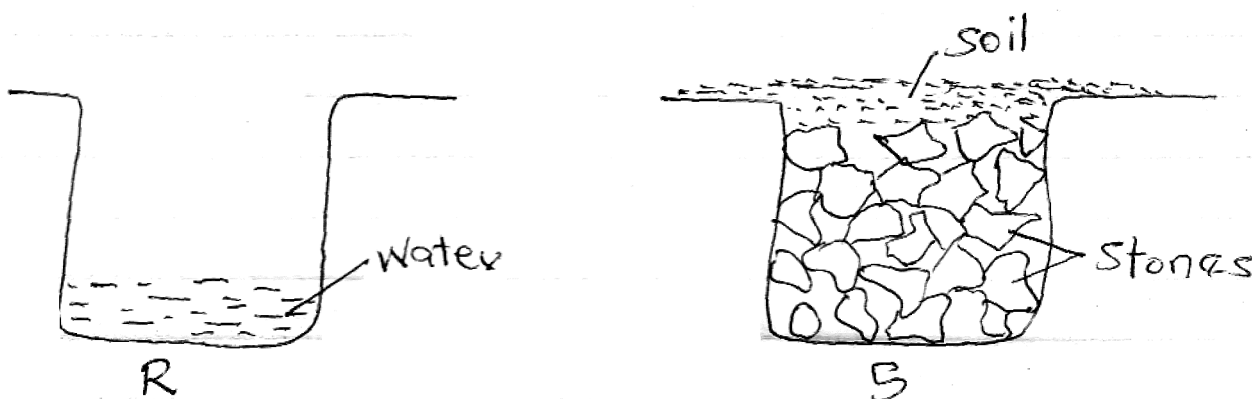
a)   Identify the drainage methods R and S
        R _____ ($\frac{1}{2}$mk)

        S _____ $\frac{1}{2}$mk)

b)   Give **one** advantage of method S over method R   (1mk)
        ....

                                                                                            .

(c)   Name **two** other methods of drainage used on the farms   (1mk)
....
....

22.   When the price of eggs per tray dropped from Ksh. 250 to Ksh. 200 eggs sales increased from fifty
        to sixty trays . Calculate elasticity of demand   (3mks)
....
....
....
....

23.   Below are diagrams illustrating common weeds. Study them and answer the questions that follow

(a)   Identify weeds P and Q
        P_____ ($^1/_2$mk)
        Q_____ ($^1/_2$mk)

(b)   For each of the weeds above give one harmful effects to livestock   (2mks)
        P_____
        Q_____

SECTION C (40 MARKS)
Answer any two questions in this section in the spaces provided after question 26

24   (a) Ezplain five ways through which soil can lose fertility   (10mks)
        (b) Describe **five** ways by which a farmer can adjust to risks and uncertainity   (5mks)
        (c) Describe **five** ways in which temperature influence agriculutre   (5mks)
25.   (a) Describe production of dry beans under the following subheadings
        (i) Preparation of planting materials   (3mks)
        (ii) Planting   (4mks)
        (iii) Weed control   (3mks)
        (b) State **five** advantages of minimum tillage in crop production   (5mks)
        (c) Give **five** marketing functions of Kenya Tea Development Authority (KTDA)   (5mks)
26   (a) Describe **five** cultural methods of controlling crop diseases   (5mks)
        (b) Describe **seven** field management practices carried out in the production of annual crops   (7mks)
        (c) Describe **four** structural methods of controlling soil erosion   (4mks)
        (d) State **four** conditions that may encouragae diseases in a vegetable nursery   (4mks)