

NAME:.....INDEXNO:.....

SCHOOL.....SIGNATURE:..... DATE.....

443/1

AGRICULTURE

PAPER 1

JULY/AUGUST 2012

TIME: 2 Hours

KISUMU NORTH AND EAST DISTRICT JOINT TEST.

Kenya Certificate of Secondary Education

AGRICULTURE

PAPER 1

2HOURS

INSTRUCTIONS TO CANDIDATES

- Write your **Name** and **Index** number in the spaces provided.
- Sign and write the date of examination in the spaces provided.
- This paper consists of three sections **A,B** and **C**.
- Answer all the questions in sections **A** and **B**.
- Answer any two questions in section **C** in the spaces provided.

For Examiner's Use Only

Section	Question	Maximum	Candidate's score
A	1 - 19	30	
B	20- 24	20	
C	25 -26	20	
	27	20	
TOTAL		90	

SECTION A (30 MARKS)

Answer all the questions in this section in the spaces provided

1. Give **two** aspects of light that influence crop growth

(1mk)

.....
.....
.....
.....

2. List **four** sources of organic matter in soil. (2mks)

.....
.....
.....
.....
.....

3. State **three** objectives of land settlement which have been under taken in Kenya (1½ mks)

.....
.....
.....
.....
.....

4. **State three** effects of excessive application of nitrogenous fertilizer on crop growth. (1½ mks)

.....
.....
.....
.....
.....

5. **Give four** examples of variable inputs in vegetable production. (2mks)

.....
.....
.....
.....
.....

6. Outline **two** routine maintenance practices carried out on water storage tanks. (1mk)

.....
.....
.....
.....

7. State **four** characteristics of a fertile soil. (2mks)

.....
.....

.....
.....
.....
8. **Give two** ways by which losses are incurred in silage. (1mk)

.....
.....
.....
9. Define the following terms

a) "Economic injury Level" of a crop pest. (1mk)

.....
.....
.....
b) Opportunity cost. (1mk)

.....
.....
.....
c) Marginal product. (1mk)

.....
.....
.....
10. Give a reason for each of the following practices

a) Top dressing established crops. (1mk)

.....
.....
.....
b) Topping in pasture management. (1mk)

.....
.....
.....
c) Stooking in maize production. (1mk)

.....
.....
.....
11. Give **three** reasons why seedlings may fail to establish in the field. (1½ mks)

.....
.....
.....
.....

12. **List three** types of surface irrigation in crop production. (1½ mks)

.....
.....
.....
.....
.....

13 **State two** roles of house hold – firm relationship. (1mk)

.....
.....
.....
.....
.....

14. Define the following terms

a) Per capital income. (1mk)

.....
.....
.....
.....

b) Land reform. (1mk)

.....
.....
.....
.....

15. **List two** types of terraces. (1mk)

.....
.....
.....
.....

16. **List two** methods used to drain farm land. (1mk)

.....
.....

.....
.....
.....

17. **Give two** varieties of carrots. (1mk)

.....
.....
.....

18. Differentiate the following terms

a) Hybrid and composite in maize. (1mk)

.....
.....
.....

b) Undersowing and oversowing. (1mk)

.....
.....
.....

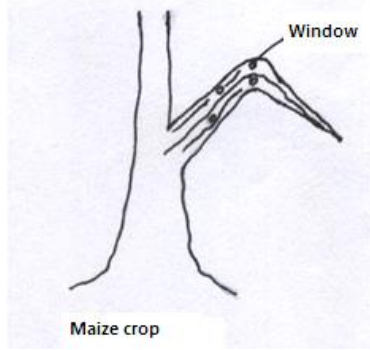
19. What is a farm budget? (1mk)

.....
.....
.....
.....

SECTION B (20 MARKS)

Answer ALL the questions in this section in the spaces provided

20. Study the diagram below and answer the question that follows



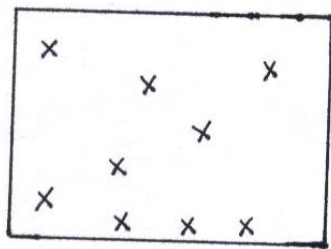
i) Identify the pest that has attacked the crop as illustrated above. (1mk)

.....

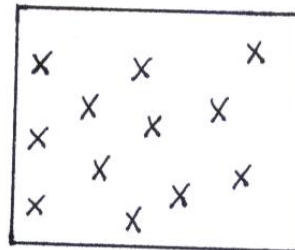
ii) Give **two** control measures against the pest. (2mks)

.....

21 Study the diagrams below showing soil sampling methods



A



B

a) Identify the method illustrated (1mk)

A.....
 B

b) Describe in brief the procedure of sampling. (3mks)

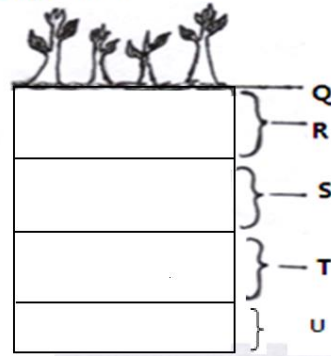
.....

c) Give **three** information that should be indicated on the sample bag (1 ½ mks)

.....

22. Observe the diagram below carefully and answer question below

Diagram Y



a) What does diagram Y illustrate? (1 ½ mk)

.....
.....
.....

b) Name the part labeled. (2mks)

Q.....
R.....
S.....
T.....

c) Give **three** importances of illustration Y to a farmer. (1½ mks)

.....
.....
.....

23 a) What is seed dormancy? (1mk)

.....
.....

b) State **two** ways of breaking seed dormancy. (2mks)

.....
.....

24 a) What is production function? (1mk)

.....
.....

b) Name and describe **three** production zones in agriculture (3mks)

.....
.....
.....
.....

SECTION C (40 MARKS)

Answer any TWO questions in this section

25 Describe field production of napier grass under the following sub headings

- a) Seedbed preparation (5mks)
- b) Planting (5mks)
- c) Fertilizer application (2mks)
- d) Weed control (5mks)
- e) Utilization (3mks)

26 a) Describe the functions of agricultural marketing boards (10mks)

b) Describe the role of agricultural co- operatives (10mks)

27 The following is a supply and demand schedule of eggs by teachers in chuth ber High school

Cost per 30 egg Tray (kshs)	Demand per day (No of trays)	Supply per day (No of trays)
33	0.5	4.7
31	1.1	4.6
30	1.6	4.4
28.50	2.0	4.2
25.50	2.4	3.9
24.00	2.9	3.6
22.50	3.3	3.3
21.00	3.7	2.9
19.50	4.2	2.5
18.00	4.8	2.0

- a) i) Using the same axis with price on the vertical axis, draw the two graphs to indicate the relationship between price demand and supply. (6mks)
- ii) Name the point of intersection of the two graphs. (1mk)
- iii) What is the price of eggs per tray at the point of intersection? (1mk)
- iv) What is the supply and demand of eggs at the point of intersection. (1mk)
- v) What is the price at supply of three trays. (1mk)
- b) Describe factors which determine demand of a commodity. (5mks)
- c) Outline the agricultural services available to farmers. (5mks)

