

NAME:.....INDEX .....DATE.....  
SCHOOL:.....CANDIDATES SIGNATURE.....

443/1  
AGRICULTURE (THEORY)  
PAPER 1  
JULY / AUGUST, 2010  
2 HOURS

## KISUMU NORTH AND EAST DISTRICTS JOINT TEST Kenya Certificate of Secondary Education 2010

443/1  
AGRICULTURE (THEORY)  
PAPER 1  
JULY / AUGUST 2010

### **INSTRUCTIONS TO CANDIDATES**

- ❖ Write your name and index number in the spaces provided above. Sign and write the date of the examination in the spaces provided above
- ❖ This paper consists of three sections :A, B and C
- ❖ Answer **ALL** questions in section A and B
- ❖ Answer **TWO** questions in section C in the spaces provided

### **SECTION A (30 MARKS)**

***Answer ALL questions from this section in the spaces Provided***

1. Give two reasons why farmers are advised to use certified seeds for planting (1 mk)

.....  
.....

.....  
.....

2. List four methods of drainage used in Kenya (2mks)

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

3. Give three methods of practicing rotational grazing (1½mks)

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

4. State four ways of modifying soil pH (2mks)

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

5. State four measures a farmer may employ in order to adjust to uncertainty (2mks)

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

6. List four cultural methods of pest control in crop production (2mks)

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

7. Name four human factors that influence the efficiency of agricultural production (2mks)

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

.....  
8. State four ways through which one would acquire land (2mks)

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

9. Give four benefits of correct plant population in annual crops (2mks)

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

10. State 2 advantages of propagating tea using cuttings (1mk)

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

11. Give four reasons why we treat water for use in the farm (2mks)

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

12. Differentiate between over sowing and under sowing as used in pasture establishment. (1mk)

.....  
.....

13. Give three advantages of tissue culture (1½mks)

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

14. List any four financial documents as used in agricultural economics. (2mks)

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

15. State four disadvantages of overhead irrigation (2mks)

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

16. List four characteristics of clay soils (2mks)

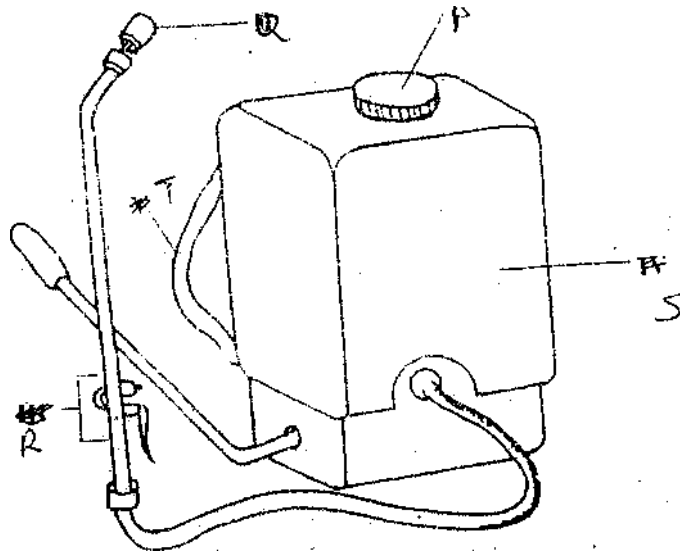
.....  
.....  
.....  
.....

17. Mention four factors that influence spacing in a pure sorghum stand (2mks)

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

**SECTION B (20 MARKS) Answer ALL the Questions in this section in the spaces provided**

18. The diagram below shows an equipment used in crop production. Study it and answer the questions that follow



(i) Identify the equipment (1mk)

.....

(ii) State the functions of the parts labelled P and Q (2mks)

Part	Functions
P	
Q	

(iii) State one use of the equipment illustrated above. (1mk)

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

(iv) Give one routine maintenance practice that should be carried out on the equipment above (1mk)

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

19. Calculate the elasticity of supply if the price of wheat changes from ksh.10.00 to ksh 12.00 per kg resulting in a change of supply from 400kg to 600kg. (show your working) (5mks)

20. Below are diagrams K and L showing coffee plants established using two different formative pruning systems. Study them and then answer the questions that follow



K

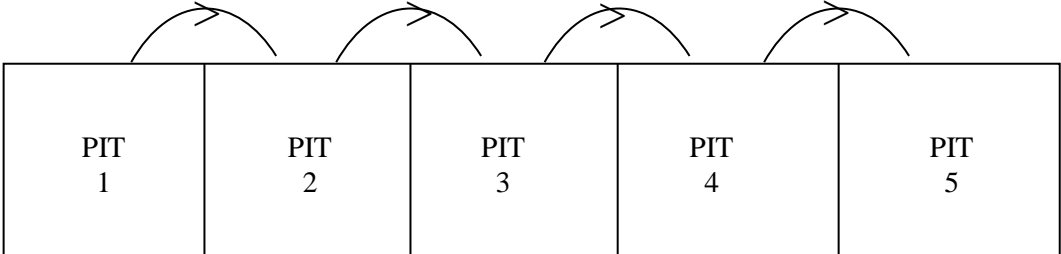


L

- a) Name the system of pruning illustrated in the diagram labeled
  - K..... (1mk)
  - L..... (1mk)
- b) Describe the procedure of carrying out the pruning system labeled K (3mks)

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

21. The illustration below depicts a method of making compost.



(i) Identify the method of making the compost illustrated above (1mk)

.....

(ii) Describe the process of filling the first pit (4mks)

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

**SECTION C (40 MARKS) Answer any two questions from this section in the spaces provided after question 24**

22. a) Identify the two main categories of land tenure systems (2mks)

.....

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

b) Describe the effects of fragmentation and subdivision of land (14mks)

c) What advantages does a farmer holding a title deed have over one who doesn't have (4mks)

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

23. Discuss the factors that influence soil erosion (20mks)

24. Describe the cultural methods a farmer would employ to control crop pests (20mks)

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



A series of approximately 35 horizontal dotted lines spanning the width of the page, providing a grid for writing or drawing.

A series of horizontal dotted lines spanning the width of the page, providing a guide for handwriting practice.



