

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

SCHOOL CAND. SIGN.....

443/1
AGRICULTURE
PAPER 1
Time: 2 HOURS

Kenya Certificate of Secondary Education – Mock Paper2

INSTRUCTION TO CANDIDATES

- This paper consists of **THREE** sections: **A, B** and **C**.
- Answer **ALL** questions in section **A**.and**B**
- **ANY** Two questions from section **C**.

SECTION	MARKS	CAND. SCORE
A	30	
B	20	
C	40	
TOTAL SCORE	90	

SECTION A (30MKS)

1. Give **two** characteristics of plantation farming. (1mk)

2. Name **two** chemical processes of weathering. (1mk)

3. State **two** advantages of organic farming . (1mk)

4. Outline **three** effects of soil organisms which benefit plant growth. (1½mks)

5. Give **two** ways in which organic mulch help to conserve water in the soil. (1mk)

6. Give **two** types of labour records. (1mk)

7. Outline **four** ways in which land consolidation helps to improve farm management.(2mk)

8. List **six** factors that should be considered when grading a crop produce. (3mks)

9. State **four** importance of raising tomato seedlings in a nursery bed. (2mks)

10. Give **four** ways of controlling weeds in a field of maize. (2mks)

11. State **three** reasons for top dressing pasture. (1½mks)

12. Give **four** reasons for training crops as a field practice . (2mks)

13. State **three** activities the farmer carries out on a store before storing grains. (1½mks)

14. Give **four** desirable characteristics of certified seeds. (2mks)

15. (a) Outline **two** characteristics of nitrogenous fertilizers. (1mk)

(b) Give the forms in which the following elements are available to plants: (1mk)

(i) Phosphorous _____

(ii) Potassium _____

16. List **three** general symptoms of viral diseases in crops. (1½mks)

17. Give **four** factors that influence the choice of tools and equipment used in Primary cultivation. (2mks)

18. State **four** factors that contribute to competitive ability of weeds. (2mks)

SECTION B. (20MKS)

19. (a) Diagram below shows an adult crop pest which in its larval stage causes the middle shoots of sorghum to wither as shown in the diagram.

(i) Identify the pest. (1/2mks)

(ii) Give **two** ways of controlling the pest. (2mks)

(b) Diagrams E, F and G below shows the panicles of three sorghum varieties growing side by side.

- (i) Which one of the **three** varieties of sorghum is least likely to be damaged by the birds. (1/2mks)

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- (ii) Give a reason for your answer in (i) above. (1mk)

- (iii) State **two** methods that are used in controlling birds in a field of sorghum. (2mks)

20. The diagram below shows a method of bringing tea into bearing. Use it to answer the questions that follow

- (i) Identify the specific method shown in the diagram. (1/2mk)

- (ii) Describe the procedure of carrying out the above in a tea bush. (4mks)

21. Use the diagrams below to answer the questions that follow

(a) Identify each of the soil structures labeled K and L (1/2mks)

K _____

L _____

(b) Give **one** place where the soil structure labeled L can be found. (1mk)

(c) State **three** ways in which a farmer can improve the structure of water logged clay soil. (3mks)

22. The diagram below illustrates a vegetative propagation method. Study it and answer the questions that follow.

(a) Name the method used in preparing the above planting material. (1/2 mk)

(b) Name the crop propagated using the above method (1mk)

(c) Name the parts labeled X and Y (2mks)

X_____

Y_____

(d) State one environmental condition necessary for the success of the method named in (a) above. (1mk)

SECTION C. (40MKS)

23. (a) Describe the production of Kales under the following sub headings:-

(i) Seedbed preparation (3mks)

(ii) Transplanting (5mks)

(iii) Field practices (4mks)

(b) Explain eight cultural control measures of diseases in crop production. (8mks)

24(a) Below is a graphical representation of the law of diminishing returns. Explain what happens in each of the zones marked I, II and III in relation to output. (3mks)

Zone marked I _____

Zone marked II _____

Zone marked III _____

(b) Which of the **three** is a rational zone of production? (1mk)

(c) State any **six** precautions a potato farmer would take to minimize risks in the production of potatoes. (6mks)

(d) Explain **ten** factors to consider when selecting a farm enterprise (10mks)

25. (a) Give **six** precautions observed in pruning mature tea. (6mks)

(b) Describe the procedure followed when collecting a soil sample from the field for testing in the laboratory. (6mks)

(c) Give **four** desirable characteristics of materials used in the preparation of compost manure. (4mks)

(e) Outline **four** advantages of intercropping crops. (4mks)
