

NAME _____

ADM NO _____

SCHOOL _____ SIGNATURE _____

AGRICULTURE

FORM FOUR

443/1

PAPER 1

MARCH/APRIL - 2013

TIME: 2HRS

ELDORET EAST INTER - SCHOOLS TEST - 2013

(Kenya Certificate of Secondary Education) K.C.S.E

Instructions :

- Write your Name and Index Number in spaces provided above
- This paper consists of three sections A, B and C
- Answer all questions in section A, and B and any other two questions in section C in the spaces provided in this booklet

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAX SCORE	CAN. SCORE
A	1-22	30	
B	23-28	20	
C	29-31	20	
		20	
TOTAL SCORE		90	

Section A (30 marks)

Answer ALL the questions in the spaces provided.

1. State **three** ways by which trees help in land reclamation. (1 ½ marks)

2. Give **two** advantages of monoculture. (1 mark)

3. State **three** ways in which high environmental temperatures can be modified in crop production. (1 ½ marks)

4. Name **two** methods which can be used to detect nutrient deficiency in crops. (1 mark)

5. State **three** factors which contribute to the success of settlement scheme. (1 ½ marks)

6. a) What is marginal revenue? (½ mark)

- b) Explain any **three** characteristics of variable costs. (1 ½ marks)

7. Give **three** symptoms of black rot disease in cabbage. (1 ½ marks)

8. State **three** effects of riverbank erosion. (1 ½ marks)

9. Differentiate between obligate parasites and facultative parasites. (½ marks)

10. Name **four** examples of leguminous fodder crops. (2 marks)

11. Give **three** functions of sulphur in crops. (1 ½ marks)

12. State **three** benefits of large scale farming. (1 ½ marks)

13. State **three** practices that could be carried out to maximize the use of nitrogen fertilizer in a maize crop.

(1 ½ marks)

14. List **four** environmental factors that affect crop distribution in Kenya. (2 marks)

15. Give **two** advantages of biological method of weed control. (1 mark)

16. Define integrated pest management . (IPM) (½ mark)

17. State **four** disadvantages of tenancy system in farming. (2 marks)

18. State three roles of water in a rice field. (1 ½ marks)

19. Give **three** reasons for sub soiling in land preparation. (1 ½ marks)

20. In what ionic form in phosphorus absorbed by plants? (1 mark)

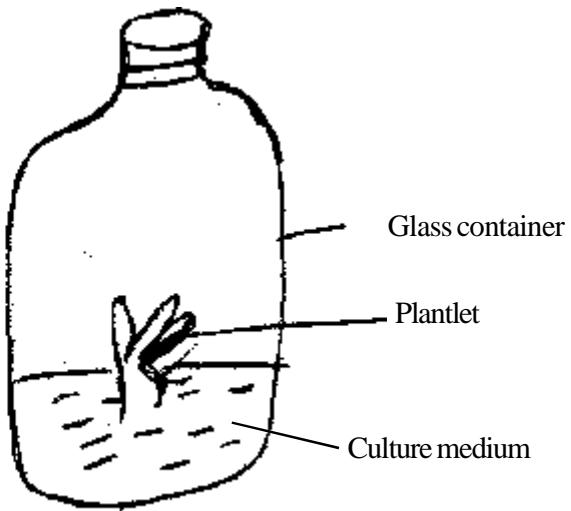
21. What is “changing the cycle” in coffee growing? (½ mark)

22. State **three** importance of a house hold in agricultural production economics. (1 ½ marks)

SECTION B. (20 MARKS)

Answer ALL questions in this section in the spaces provided.

23. The diagram below illustrates a method of crop propagation. Study it and answer the questions that follow.

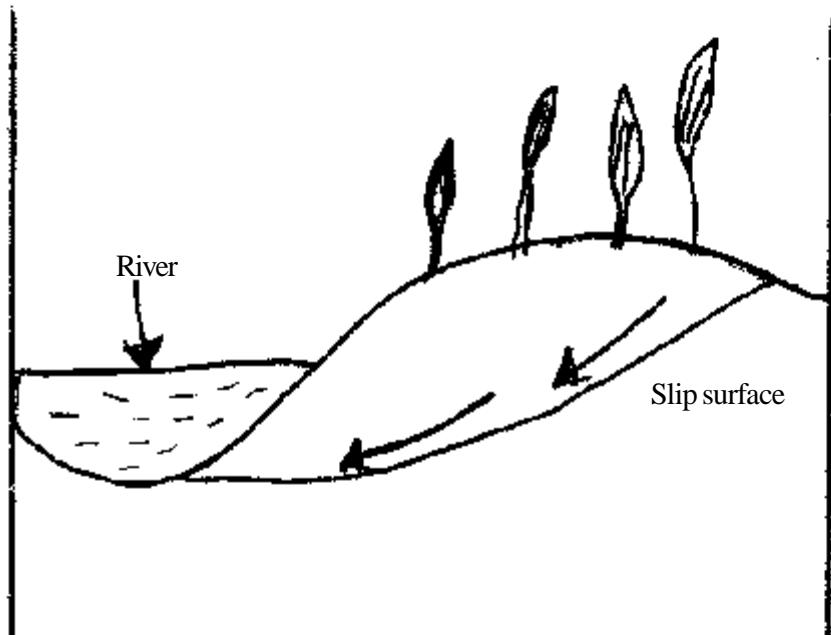


- a) Identify the method of propagation illustrated. (1 mark)

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- b) State **two** disadvantages of using this method of propagation (2 marks)

24. Describe the procedure of determining soil texture through the sieve method. (2 ½ marks)

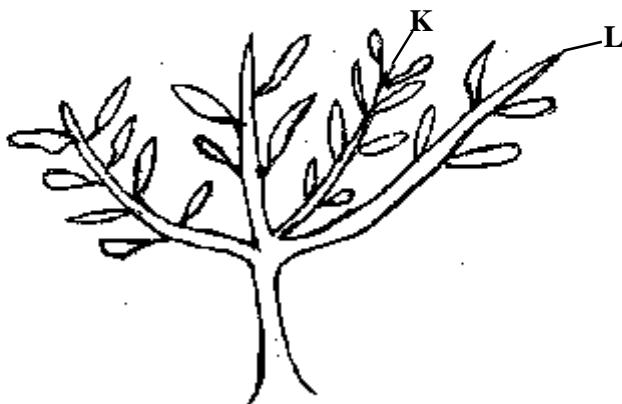
25. The diagram below shows a type of soil erosion. Study it carefully and answer the questions that follow.



- a) Name the type of soil erosion shown above? (1 mark)

- b) State **three** factors that influence the type of soil erosion shown above. (3 marks)

26. Below is an illustration of a young citrus tree.



a) Which one of the branches marked K and L should be pruned. (1 mark)

b) Give a reason for your answer in (a) above. (1 mark)

c) Which is the correct tool for pruning the branches. (1 mark)

27. a) State ~~three~~ ^{three} disadvantages of tillage in weed control. (3 marks)

28. State **three** uses of a microcatchment. (1 ½ marks)

SECTION C (40 MARKS)

Answer any TWO questions from this section in the spaces provide after question 31

29. a) Describe the establishment of grass pasture from the time the land is ploughed to the time the pastures is ready for grazing. (10 marks)

b) Describe the procedure of harvesting coffee. (5 marks)

c) State and explain any **five** ways through which soil loses fertility. (5 marks)

30. a) Explain the importance of land preparation. (7 marks)

b) Describe the procedure which should be followed in spraying a fungicide in powder form using a knapsack sprayer. (8 marks)

c) Describe the ecological requirements of onions (*Allium cepa*) (5 marks)

31. a) State **five** observable indicators of economic development of a nation. (5 marks)

b) Explain **five** characteristics of land as a factor of production (5marks)

c) Outline **seven** types of information contained in a title deed. (7marks)

d) State **three** factors that determine the method of harvesting crops. (3 marks)

