

NAME _____ INDEX _____

DATE _____ SIGNATURE _____

**AGRICULTURE 443/1
FORM FOUR
1ST TERM 2016
2 HRS.**

**Kenya Certificate of Secondary Education
AGRICULTURE 443/1
FORM FOUR 1ST TERM EXAMINATION 2016**

Instructions

- 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

For Examiner's Use Only

Section	Questions	Maximum marks	Candidate score
A	1 - 15	30	
B	16- 18	20	
C	19- 21	40	
	Grand total	90	

This paper consists of 9 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.

SECTION A (30 MARKS)

Answer all the questions in this section

1. State four roles of trees in soil conservation. (2 marks)

2. List four human factors which hinder agricultural development. (2 marks)

3. Give four functions of phosphorous in tomato growing. (2 marks)

4. State four sites to avoid when sampling soil. (2 marks)

5. State four reasons for water treatment. (2 marks)

6. Outline four measures used to control river bank erosion. (2 marks)

7. State four reasons for staking tall varieties of tomatoes . (2 marks)

8.a) Give two reasons as to why sorghum is drought resistant. (1 marks)

b) State two ways in which pasture is utilized. (1 mark)

9. State four reasons for paddocking . (2 marks)

10. What are four causes of seed dormancy . (2 marks)

11. State four product-product relationship in agricultural economics . (2 marks)

12. Give four benefits of tissue culture in crop propagation. (2 marks)

13. State four morphological factors which affect herbicide effectiveness. (2 marks)

14.a) Name three viral diseases transmitted by aphids. (1 ½ marks)

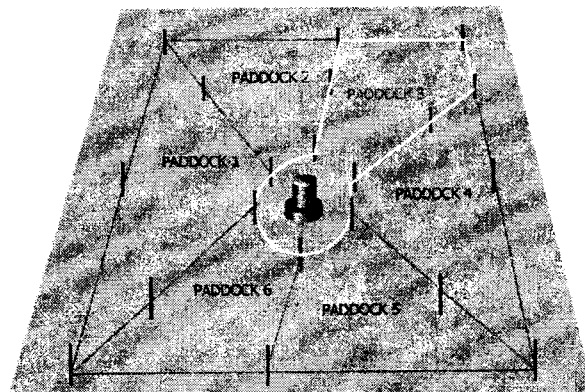
b) How can aphids be controlled biologically in crops? (½ mark)

15. List four methods of land acquisition. (2 marks)

SECTION B (20 Marks)

Answer all the questions in this section in the spaces provided

16. Study the diagram below of a grazing system and then answer the questions that follow

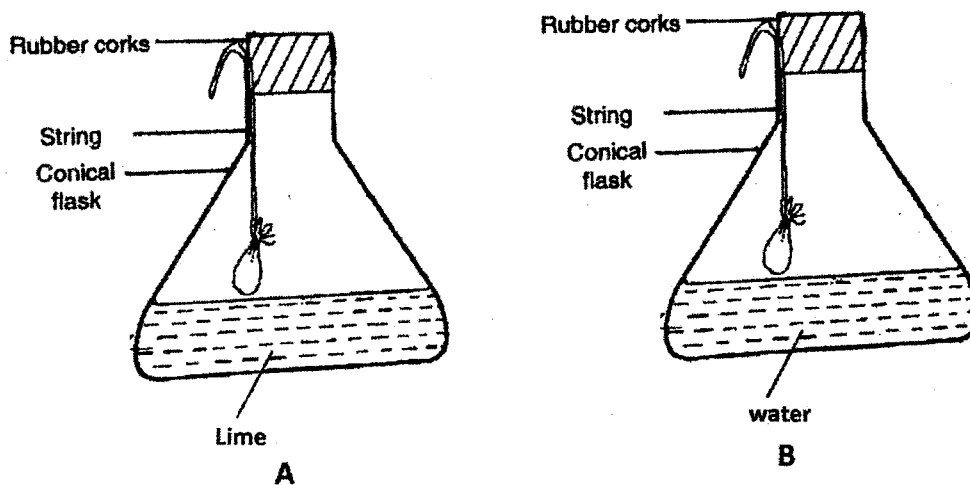


a) Identify the grazing system shown in the diagram. (1 mark)

b) What is the importance of placing the water troughs as shown in the diagram? (1 mark)

c) State five advantages of the illustrated system of grazing (5 marks)

17. Study the illustration below of a set up of an experiment to study an aspect of soil .The set up was left undisturbed for five hours .



a) What was the aim of the experiment? (1 mark)

b) Give one observation that was made in each flask labelled A and B . (2 marks)

A

B

c) Give a reason for each of your answers in (b) above (2 marks)
A

B

c) State two benefits of soil micro-organisms. (2 marks)

18. Describe the procedure of silage making (6 marks)

SECTION C (40 marks)

ANSWER ANY TWO QUESTIONS IN THIS SECTION

- 19.a) Explain five reasons why green manure is not commonly used in carrot growing (10 marks)

- b) State five contributions of agriculture to national development (10 marks)

21.a) State and explain six factors which should be considered when designing a crop rotation program (12 marks)

b) State four objectives of land settlement and resettlement (8 marks)
