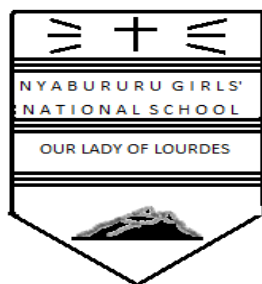


Name .....class.....adm. number.....sign.....



DATE DONE.....

INVIGILATOR.....

DATE RETURNED.....

DATE REVISED.....

***Kenya Certificate of Secondary Education***

**443/1**

**AGRICULTURE**

**PAPER 1 (THEORY)**

**TIME: 2 HOURS**

**INSTRUCTIONS TO CANDIDATES**

- Write your name and admission number in the spaces provided above each page
- This paper consists of **three** sections: A , B and C
- Answer **all** the questions in sections A and B and any **two** questions in section C in the spaces provided.
- This paper consists of 7 printed pages.
- Check to ensure that all pages are printed as indicated and no quest is missing

**FOR EXAMINER'S USE ONLY**

	Questions	Maximum score	Candidate's score
A	01-14	30 marks	
B	15- 18	20 marks	
C	19 – 21	40 marks	
		Total score	

**SECTION A (30MARKS)**

**Answer the questions in this section in the spaces provided**

- 1 State two biotic factors that positively influence agriculture. (1mark)
  
  
  
  
  
  
  
  
  
  
2. State any four factors of production in agriculture (2marks)
  
  
  
  
  
  
  
  
  
  
3. List any two leguminous forage crops. (1marks)
  
  
  
  
  
  
  
  
  
  
4. State any two ways in which farmers can adjust to risks and uncertainties (1mark)
  
  
  
  
  
  
  
  
  
  
5. State any two considered in choosing a system of farming. (1mark)
  
  
  
  
  
  
  
  
  
  
6. Give two examples of .variable inputs in agricultural production (1mark)
  
  
  
  
  
  
  
  
  
  
7. A farmer had a plot of land size 5 hectares in which she intended to plant maize. She was advised to apply 160kg  $P_2O_5$  per hectare at planting time and 200kg nitrogen per hectare during top dressing. The fertilizers available in the market were di-ammonium phosphate 18 -46 - 0 and calcium ammonium nitrate (20%N).
  - (i) The total nutrients percentage in di-ammonium phosphate fertilizer is 64%. Account for the remaining percentage (1mark)
  
  
  
  
  
  - (ii) Calculate the amount of DAP required in the total area for maize. (2marks)

Name .....class.....adm. number.....sign.....

(iii) Calculate the amount of CAN required in the total area for maize. (2marks)

8. Explain the meaning of the following terms as used in crop pests

i). Economic injury level. (1mark)

ii). Integrated pest control (1mark)

9. Give four effects of crop diseases (2marks)

10. Outline four ways of improving labour productivity (4marks)

11. Differentiate between standing forage and hay methods of forage conservation (2marks)

12. State two precautions that should be observed while harvesting pyrethrum. (1mark)

13. Give three types of soil erosion (3marks)

14. Differentiate between a nursery bed and a seedling bed. (2marks)

**SECTION B (20MKS)**

**Answer all the questions in this section in the spaces provided.**

15. The diagram below is of a method of crop propagation.



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

(b) Name the parts labeled A, B, C (1 ½ marks)

A

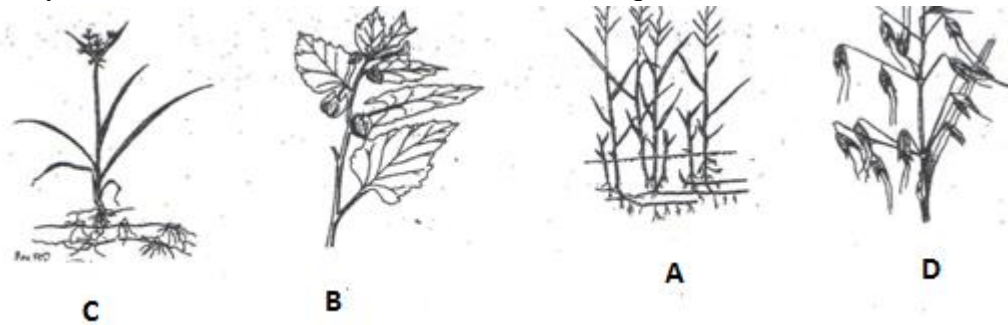
B

C

(c) State three crucial stages of the above illustrated method of crop propagation (1½marks)

(d) State two advantages of the method of propagation illustrated above (2marks)

16. Study the weeds illustrated below and answer the questions that follow



(a) Identify the weeds labeled A, B, C, D (2marks)

A

B

C

D

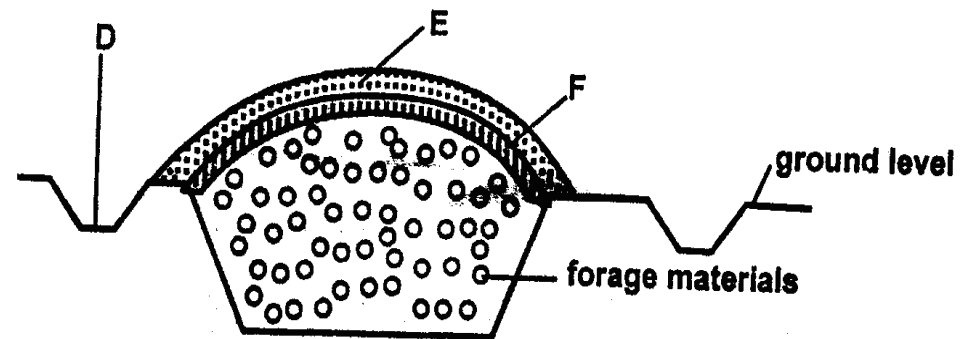
(b) Why is difficult to control the weeds labeled B and A (1 mark)

A

B

(c) State four harmful effects of weeds in crop production. (4marks)

17. Study the diagram illustrated below and answer the questions that follow.



a) Identify the method of silage preparation illustrated above (1mark)

b) Name and state the use of the parts labeled **D**, **E** and **F** (3marks)

**D**

**E**

**F**

c) State **three** factors that affect the quality of silage. (3marks)

**SECTION C (40 Marks)**

Name .....class.....adm. number.....sign.....

**Answer any two questions from this section.**

18. Describe rice production under the following sub-heading.
- (i) Seedbed preparation (3 marks)
  - (ii) Transplanting of maize. (3 marks)
  - (iii) Field management practices. (6 marks)
  - (iv) Give two reasons for flooding a rice field. (2 marks)
- b) Describe five ways of improving farm management. (5 marks)
19. a) Describe four disadvantages of communal land ownership . (4 marks)
- b) Describe five marketing functions. (10marks)
- c) State and explain three that influence change of demand of farm produce at a constant price. (6 marks)
20. a) Describe various ways of reclaiming a water logged land. (10marks)
- b) Describe the objectives of settlement and resettlement (10marks)