

Name Adm. No.

443/1
AGRICULTURE
Paper 1
October 2016
Time: 2 Hours

Candidate's Signature

Date

KANDARA SUB-COUNTY FORM 3 JOINT EVALUATION
Kenya Certificate of Secondary Education

AGRICULTURE
Paper 1
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INSTRUCTIONS TO CANDIDATES

- * Write your name and admission number in the spaces provided above.
- * This paper consists of three sections **A**, **B** and **C**
- * Answer **ALL** the questions in section **A** and **B** in the spaces provided.
- * Answer any **TWO** questions in section **C** in the spaces provided at the end of the section.

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Section	Question	Maximum score	Score
A	1 - 17	30	
B	18 - 21	20	
C		20	
		20	
Total score		90	

SECTION A : (30 MARKS)

Answer all the questions in this paper in the spaces provided.

1. State four biotic factors that are harmful to crops. (2 marks)

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2. Differentiate between arable farming and pastoral-nomadism. (2 marks)

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3. State three factors that determine the method of surface irrigation to use. (1½ marks)

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4. Give two importance of each of the following practices carried out in crop production. (1 mark)

a) Ridging

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- b) Rolling (1 mark)

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5. Give four disadvantages of using organic manures. (2 marks)

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6. State three conditions under which opportunity cost is zero. (1½ marks)

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7. Outline four factors a farmer need to consider when developing a crop rotation programme. (2 marks)

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8. State three advantages of individual owner operator in land tenure system. (1½ marks)

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9. a) List two examples of pasture legumes. (1 mark)

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b) Name two types of additives used in silage making. (1 mark)

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10. State four characteristics of a good vegetable seedling. (2 marks)

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11. State three characteristics of annual weeds. (1½ marks)

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12. State four ways by which grass cover help to conserve soil. (2 marks)

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13. a) State two feeding habits of field insect pests. (1 mark)

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b) Give two factors that affect efficiency of pesticides. (1 mark)

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14. State two advantages of using polythene sleeves in raising seedlings. (1 mark)

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15. Give one ionic form in which the following elements are used in plants.
a) Nitrogen (½ mark)

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b) Phosphorus (½ mark)

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16. Distinguish between seed inoculation and seed dressing. (2 marks)

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17. a) Name two fungal diseases of maize in the field. (1 mark)

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b) Give the disease which causes a mass of dark spores on the floral parts of maize. (½ mark)

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SECTION B : (20 MARKS)

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

18. a) Calculate the amount of P_2O_5 contained in 600kg compound fertilizer 20 : 10 : 5. (3 marks)

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b) Name the deficient nutrient element in plants showing the following symptoms:

i) Stunted growth, die back of plant tips, leaves roll up and chlorosis along margins of younger leaves. (½ mark)

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ii) Yellowing of leaves appear first on lower leaves, leaves turn brown and fall prematurely stunted growth. (½ mark)

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iii) Leaf curling, yellowing of leaves, tips and edges of leaves are scorched and have small mottles. (½ mark)

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iv) Purpling of leaves, stunted growth, slender stalks and lateral buds remain dormant. (½ mark)

19. a) Name the vegetative propagative material for the following crops. (2½ marks)

i) Sisal

ii) Bananas

iii) Pyrethrum

iv) Tea

v) Pineapples

b) The diagram below illustrates a field management practice in tomatoes. Study it carefully and answer the questions that follow.



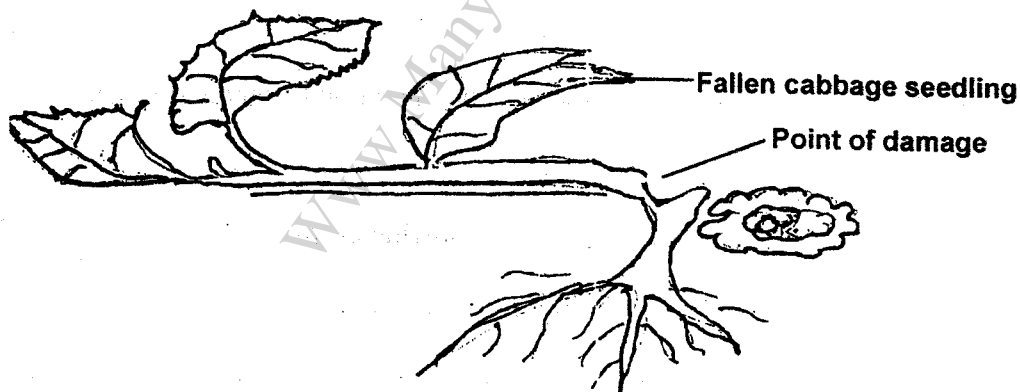
i) Identify the field practice.

(1 mark)

ii) State three reasons for carrying out the practice.

(1½ marks)

20. The diagram below shows damage caused to a young plant after transplanting.



a) Name the pest that causes the damage.

(1 mark)

b) State one method of controlling the pest named above.

(1 mark)

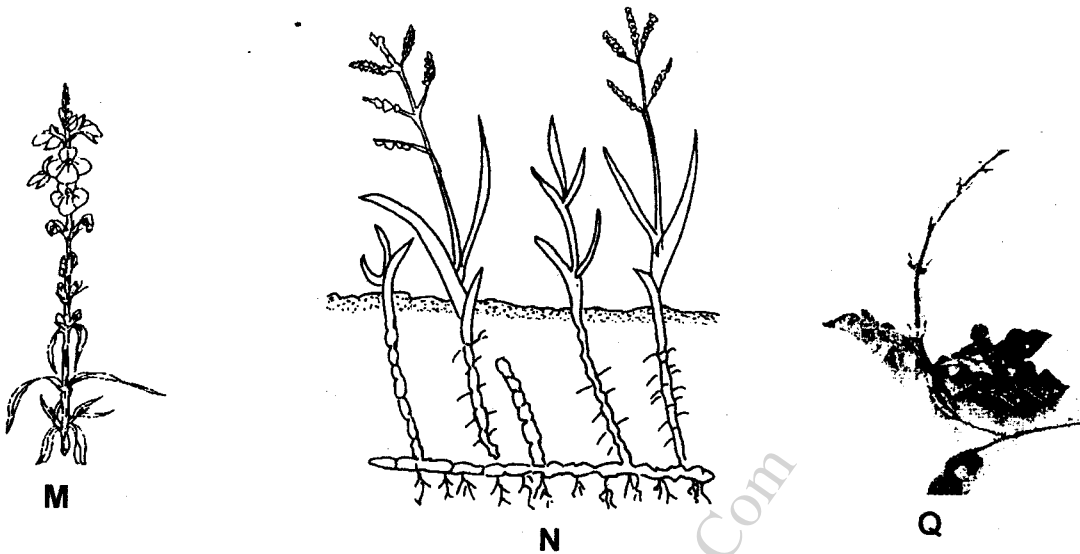
c) Name any other two pests that attack cabbage in the field.

(2 marks)

d) State the type of damage caused by the pests named in (c) above.

(1 mark)

21. The diagrams below show common weeds in crops fields. Use them to answer the questions that follows.



a) Identify the weeds M, N and Q

(3 marks)

M

N

Q

b) With a reason, identify the weed which is the most difficult to control.

Weed (½ mark)

Reason (½ mark)

c) Identify the weed that is :

i) Parasitic to maize in the field. (½ mark)

ii) Irritating to farm workers. (½ mark)

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