

AGRICULTURE PAPER 1

KAGONDO SECONDARY SCHOOL

FORM FOUR PRE MID YEAR EXAM 2017

443/1

**SECTION A (30 mks)**

Answer all questions in this section in the spaces provided

1. Agriculture is viewed as an art and a science. State four practices in the farm that make Agriculture an art (2mks)
2. State four ways in which a farmer can improve the structure of a water logged clay soil (2mks)
3. Despite efficient water supply to his tomatoes, Mr. Gikandi still noted wilting of some plants. Suggest two possible causes of wilting (1mk)
4. Outline the stages undergone in the development of a gully (2mks)
5. a) Explain why zone 2 in the zones of production is called a Rational Zone (1mk)  
b) Differentiate between a complete budget and a partial budget (1mk)
6. a) State four deficiency symptoms that would be seen in a crop lacking potassium (2mks)  
b) A farmer was advised to apply 150 kg of CAN of maize. Calculate the amount of Nitrogen applied per Hectare if CAN contains 21%N (1mk)
7. List down three types of Nurseries (1 ½ mks)
8. State four achievements that can be made with high level of education and technology in agriculture (2mks)
9. Name four examples of liabilities in a balance sheet (2mks)
10. State four ways in which a farmer can increase labor productivity in the farm (2mks)
11. Give four farming practices that may help in achieving minimum tillage (4mks)
12. State four reasons why timely weed control is advisable in crop production (2mks)
13. Give two forms of collective land tenure system in Kenya (1mks)
14. Define the term "Economic Injury level" of a crop (1mk)
15. State three characteristics of shifting cultivation (1 ½ mks)

16. Name the disease that is characterized by mass of dark spores on the flowering part of maize (1mk)

**SECTION B (20 MKS)**

Answer all questions in this section in the spaces provided

17. Three maize pests are shown in the diagram below. Study them and answer the questions that follow

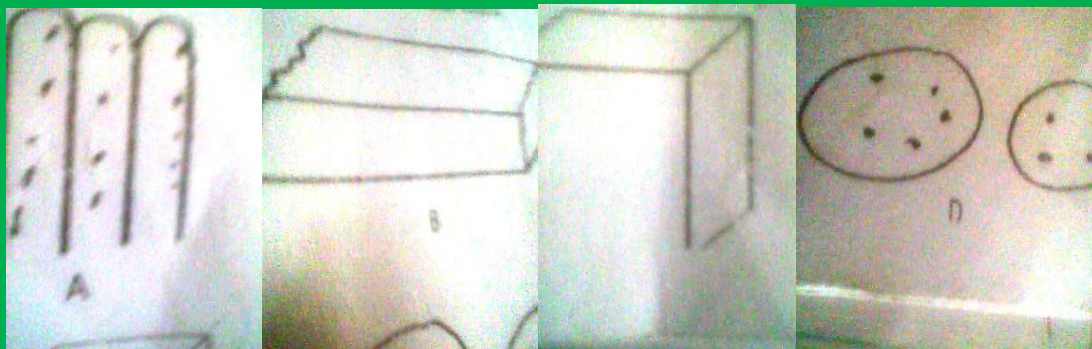


a) Identify the pests in the diagrams labeled A, B, and C (2mks)

b) At what stage of maize production does pest A and B damage the crop (2mks)

c) Give two ways in which C causes losses in field crops (2mks)

18. Study the following types of soil structure and answer the questions that follow



a) Identify the type of soil structure labeled A, B, C, and D (2mks)

A.....

B.....

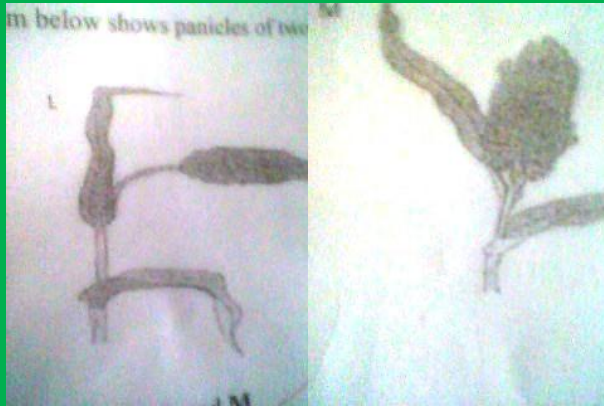
C.....

D.....

b) Which type of soil structure is best suited for farming (1mk)

c) Identify four characteristics which make the soil structure named in (b) above suitable for farming (2mks)

19. The diagram below shows panicles of two sorghum varieties. Study and answer the following questions



a) Identify varieties L and M (2mks)

b) Which of the two varieties of sorghum is less likely to be damaged by birds (1mk)

c) Give a reason for your answer in (b) above

20. Differentiate between a Hybrid and a composite as applied in maize production (1mk)

21. Why are the following weeds difficult to control

a) Couch grass (1mk)

b) Oxalis latifolia (1mk)

c) Double thorn (1mk)

### **SECTION C (40 MKS)**

Answer any two questions in this section in the spaces provided.

22 i) Explain five structures used to control soil erosion (10mks)

ii) State and explain five factors which may influence the spacing of crops (10mks)

23 a) Describe ten cultural methods used in controlling crop pests (10mks)

b) Describe production of paddy rice under the following sub headings

i) Land preparation (3mks)

ii) Water control (3mks)

iii) Role of irrigation water (3mks)

iv) Signs of maturity (1mk)

24.a) Explain challenges faced by Kenyan vegetable farmers in the production of crop (10mks)

b) Discuss various safety precautions observed when using herbicides (5mks)

c) State 5 factors that influence soil erosion (5mks)