

NAME ..... CLASS .....A DM NO.....

443/1

AGRICULTURE

PAPER I

TIME 2 HOURS

## SCHOOL BASED FORM 4 EXAMINATION

JULY /AUGUST 2017

### INSTRUCTION TO CANDIDATES

1. Write your name and adm. No. in the spaces provided above
2. This paper consists of three sections A, B and C
3. Answer all the questions in section A and B and two questions in section C in the spaces provided

### For Examiners use only

SECTION	Questions	Maximum Score	Candidate's Score
A	1-18	30	
B	19-22	20	
C		20	
		20	
	Total Score	90	

**SECTION A ( 30MARKS )**

**Answer ALL the question in this section in the spaces provided**

1. Give **one** reasons why agriculture is regarded as a science (1mk)  
(i) .....
2. List **four** methods of farming (2mks)  
(i) .....  
(ii) .....  
(iii) .....  
(iv) .....
3. Differentiate between soil structure and soil texture (1mk)  
.....  
.....
4. State **four** reasons for draining a water logged land (2mks)  
(i) .....  
(ii) .....  
(iii) .....  
(iv) .....
5. State **two** effects of siltation in dams and reservoirs (1mk)  
(i) .....  
(ii) .....
6. Give **three** benefits of undersowing in pasture production (1mk)  
(i) .....  
(ii) .....  
(iii) .....

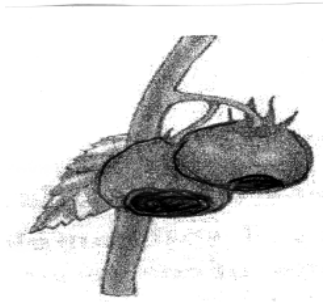
7. Give **four** reasons for growing crops under optimum temperature condition (2mks)
- (i) .....
- (ii) .....
- (ii) .....
- (iii) .....
8. Name **one** vegetative material used to propagate each of the following crops (2mks)
- (a) Bananas .....
- (b) Pineapples .....
- (c) Irish Potatoes .....
- (d) Pyrethrum .....
9. List four advantages of the title deed to a farmer (2mks)
- (i) .....
- (ii) .....
- (iii) .....
- (iv) .....
10. What is meant by the following terms in crop as production?
- (a) Crop rotation..... (1mk)
- (b) Mulching..... (1mk)
11. Give **two** factors that can increase seed rate in crop production (2mks)
- (i) .....
- (ii) .....
- (iii) .....
- (iv) .....
12. State **three** functions of Nitrogen in crops (1 ½ mks)
- (i) .....
- (ii) .....
- (iii) .....

13. State **four** ways of improving labour productivity on the farm (2mks)
- (i) .....
  - (ii) .....
  - (iii) .....
  - (iv) .....
14. State **four** advantages of applying lime as a measure of improving soil condition (2mks)
- (i) .....
  - (ii) .....
  - (iii) .....
  - (iv) .....
15. List **three** sources of organic matter in the soil (1 ½ mks)
- (i) .....
  - (ii) .....
  - (iii) .....
16. List **four** post harvest practices that are carried out in maize production (2mks)
- (i) .....
  - (ii) .....
  - (iii) .....
  - (iv) .....
17. Give **three** factors affecting selectivity and effectiveness of herbicides (1 ½ mk)
- (i) .....
  - (ii) .....
  - (iii) .....
18. What is meant by the term preference and choice as used in agriculture economics (1mk)
- .....
- .....

**SECTION B ( 20 MKS)**

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

19. The diagram below shows a physiological condition of tomatoes . Use it to answer the following questions.



(a) Identify the condition

(1mk)

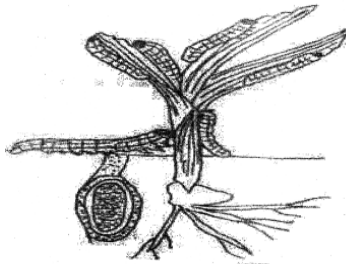
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.....

(b) Give **three** causes of the condition identified in (a) above

(3mks)

- (i) .....
- (ii) .....
- (iii) .....

20. The diagram drawn below shows pests that attack crops in the field. Use it to answer the questions that follows.



(a) Identify the pest (1mk)

.....

(b) Classify the above pest depending on the feeding habit (1mk)

.....

(c) List **three** effects of the pest above in crop production (3mk)

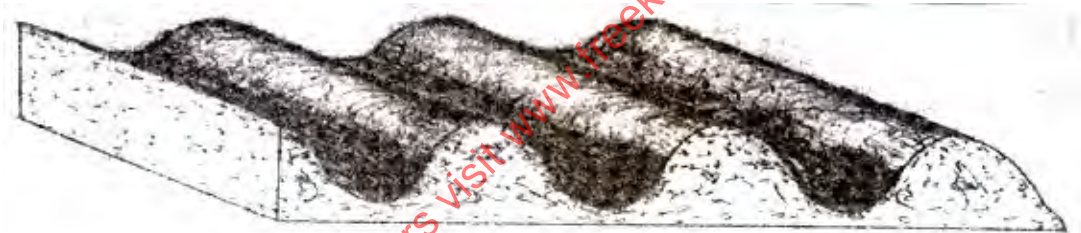
(i) .....

(ii) .....

(iii) .....

21. The diagram below illustrates a final seedbed after a tertiary operation done during land preparation.

*Study it carefully and answer the questions that follow*



(a) Name the tertiary operation carried out on the seedbed (1mk)

.....

(b) Describe how the tertiary operation named in (a) above is carried out (2mks)

.....

.....

(c) Give **two** advantages of planting crops on the final seedbed illustrated above (2mks)

(i) .....

(ii) .....

22. The table below shows the population and gross domestic products of countries A and B

Country	Gross Domestic Produce (Million Kshs)	Population (Million)
A	1800	36
B	1200	15

(a) Calculate the per capita income for each country. Show your working (3mks)

.....  
 .....  
 .....

(b) Which of the **two** countries is more developed economically (1mk)

(i) .....

(c) Give a reason for your answer in (b) above (1mk)

(d) How can agriculture increase the gross domestic product of a country (1mk)

(i) .....

**SECTION C ( 40 MARKS)**

**Answer any TWO questions from this section in the spaces provided after question 25**

23. (a) Discuss production of beans (*Phaseolus Vulgaris*) under the following sub-headings

(i) Selection and preparation of planting materials (3mks)

(ii) Planting (3mks)

( iii ) Disease control (2mks)

(b) Outline four factors that determine the depth of planting maize seeds (4mks)

(c) Outline the advantages of a mixed grass legume pasture over pure grass (8mks)

