

NAME ..... INDEX NUMBER .....

SIGNATURE .....

DATE .....

443/1  
**AGRICULTURE**  
PAPER 1  
**TIME: 2 HRS**  
JULY/AUGUST 2016

**KERICHO WEST SCHOOLS JOINT EXAM - 2016**  
*Kenya Certificate of Secondary Education (K.C.S.E)*

**AGRICULTURE**

Paper 1 (Theory)  
July/August 2016  
Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

- Write your Name & Index number in the spaces provided above
- Sign and write the date of examination in the spaces provided above
- This paper consists of three sections: A, B and C.
- Answer all the questions in Section A and B and any two questions from Section C.
- All answers must be written in the spaces provided.

**FOR EXAMINER'S USE ONLY**

Section	Question	Maximum Score	Candidate's Score
A		30	
B		20	
C		40	
<b>TOTAL SCORE</b>		<b>90</b>	

**SECTION A 30 MARKS (ANSWER ALL QUESTIONS)**

1. Give two limitations of mixed farming (1 mk)

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

2. State two reasons for carrying out soil conservation measures in a farm (1 mk)

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

3. Name four factors influencing choice of tools and equipment for primary tillage (2 mks)

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

4. Give four pieces of information contained in a title deed (2 mks)

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

5. Name two chemical processes of weathering (1 mk)

.....  
.....

6. State four ways of improving labour productivity in the farm (2 mks)

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

for more free past papers visit: [www.freekcsapastpapers.com](http://www.freekcsapastpapers.com) Call: 0720502479

7. Give four farming practices that may help in achieving minimum tillage (2 mks)

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

8. State four ways in which herbicides work to kill weeds (2 mks)

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

9. State three factors that affect the rooting of cuttings used to propagate crops (1 ½ mks)

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

10. List two examples of potassic fertilisers (1 mk)

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

11. Give four advantages of practising crop rotation (2 mks)

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

12. Name four farm records that should be kept by a poultry farmer (2 mks)

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

13. Give two ways in which pastures are classified

(1 mk)

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

14. Define the following terms as used in coffee production

(1 ½ mks)

a) Capping.....

.....

b) Desuckering .....

.....

c) Changing the cycle.....

.....

15. Name three diseases common in cabbages

(1 ½ mks)

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

16. State four ways in which land reforms can be implemented in Kenya

(2 mks)

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

17. State four factors that determine the stage at which a crop is harvested

(2 mks)

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

b) State a stage of transplanting a vegetable seedling

(½ mk)

.....

**SECTION B (20 MKS)**

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

18. Form one students of Kilimo Secondary school set out to investigate the constituents of the sample from the school farm. They carried out a series of tests on various portions of the sample. Their results were tabled as follows;

Description of item weighed	Quantity
Mass of empty evaporating dish	10 gm
Fresh soil on an evaporating dish	35 gm
Mass of dried soil at 105° c on evaporating dish	28 gm
Volume of water in the tin	250 cm <sup>3</sup>
Volume of water and soil before stirring	450 cm <sup>3</sup>
	500 cm <sup>3</sup>

*Use the information in the table to answer the following questions.*

a) What is the percentage of soil water in the sample?(show your working) (2 mks)

.....

.....

.....

.....

b) Calculate the percentage of soil air in the sample (2 mks)

.....

.....

.....

c) Why was soil heated at 105° c? (1 mk)

.....

.....

.....

d) State two roles of organic matter in the soil (2 mks)

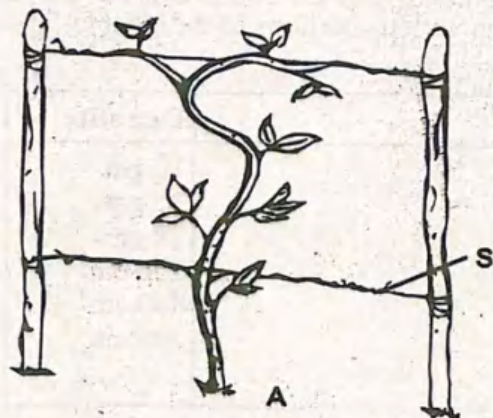
i) .....

.....

ii) .....

.....

19. The illustration below shows certain field practices carried out in crop production. Study them and answer the question that follow.



a) Identify the practices illustrated in A and B

A - ..... (1 mk)

B - ..... (1 mk)

b) Give one importance of the practices illustrated in A & B above (2 mks)

A - .....

B - .....

c) Give two examples of crops where field practice A is carried out (1 mk)

.....

d) State the appropriate material labelled S on illustration A (1 mk)

.....

20. a) On the same axes, draw and label demand and supply axes. On the same diagram, mark equilibrium market price. (5 mks)

b) Explain the meaning of equilibrium market price

(1 mk)

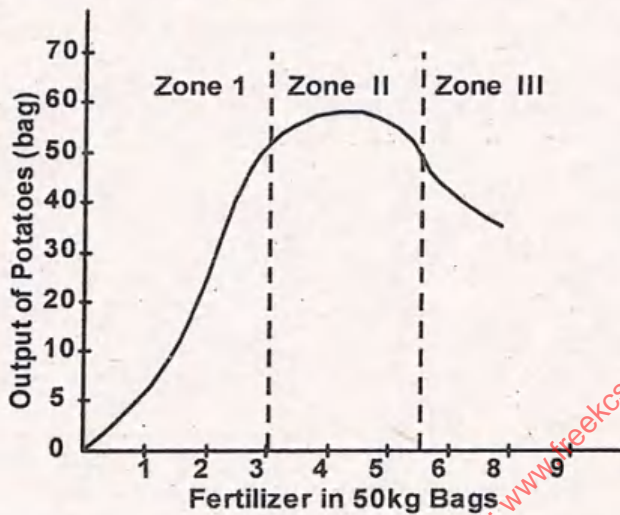
c) Define the term elasticity of demand as used in agriculture

(1 mk)

**SECTION C (40 MKS)**

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

21. a) Describe how various farming practices help to conserve soil (10 mks)  
b) Below is a graphical representation of the law of diminishing returns. Study it and use it to answer the question that follow



- i) Explain what happens in each of the three zones marked I, II and III (6 mks)  
ii) Which zone is rational zone of production (1 mk)  
iii) State any three precautions a potato farmer would take to minimise risk in potato (3 mks)
22. a) Explain five factors that should be considered when siting a vegetable nursery (5 mks)  
b) Explain six factors that should be considered when selecting seeds for planting (6 mks)  
c) Explain the different ways in which each of the following environmental factors influence crop production  
i) Temperature (4 mks)  
ii) Wind (5 mks)
23. a) Discuss production of finger millet under the following subheadings  
i) Ecological requirement (4 mks)  
ii) Planting (2 mks)  
iii) Harvesting (2 mks)  
b) Describe six advantages of mulching in crop production (6 mks)  
c) Describe six environmental benefit of agroforestry (6 mks)

for more free past papers visit: [www.freekcsespapers.com](http://www.freekcsespapers.com) or Call: 0720502479