

Name.....Index No.....Class.....AdmNo.....

443/1

**AGRICULTURE**

Paper 1

January 2021

2 hours

**KASSU EXAMINATION**  
**Kenya Certificate of Secondary Education**

**AGRICULTURE**

**Paper 1**

2 hours

**Instructions to candidates**

Write your name and index number in the spaces provided above.

This paper consists of **three** sections **A,B** and **C**.

Answer **ALL** questions in Sections **A** and **B** and any **TWO** questions from section. **ALL** answers must be written in the spaces provided after every question.

The paper consists of 10 printed pages. Check to ascertain that all pages are printed.

Do not remove any pages from this booklet.

**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(30 Marks)**

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

1. (a) Give two characteristics of intensive farming system. (1mk)

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(b) State two advantages of mixed farming. (1mk)

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2 State two forms in which water is available in the soil. (1mk)

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3 Give three agents of physical weathering. (1 ½ mks)

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4 Give two ways in which mulch control the soil erosion. (1mk)

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5 State four advantages of drip irrigation. (2mks)

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6 Give two benefits of adding organic manure to sandy soil. (1mk)

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7 Give four advantages of using grafting as a method of improving avocado fruits. (2mks)

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8 Give four reasons for using certified seeds for planting. (2mks)

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9 List three methods used to control weeds in pastures. (1 ½ mks)

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10 State two reasons for conserving forage crops. (1mk)

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11 Name two types of labour records kept in the farm. (1mk)

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12 State four causes of land fragmentation. (2mks)

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13 Outline four roles of trees in soil and water. (2mks)

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14 Give two reasons for earthing up tobacco crop. (1mk)

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15 List three examples of working capital employed by a farmer in the production of maize.(1 ½ mks)

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16 State three ways in which labour productivity can be improved. (1 ½ mks)

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17 (a) Give two reasons why nitrogenous fertilizers are suitable for top- dressing. (1mk)

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(b) Outline four deficiency symptoms of sulphur in crops. (2mks)

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18 State four symptoms of maize stalk borer infestation in maize. (2mks)

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**SECTION B (20 Marks)**

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

19 Study the illustration below and answer questions that follow.



(i) Identify the weed. (1mk)

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(ii) Give two harmful effects of the weed illustrated above. (2mks)

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(iii) State two reasons why tillage is sometimes preferred as a method of weed control.

(2mks)

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20 (a) Given that a maize crop is planted at a spacing of 75cm x 25cm, calculate the plant population in one hectare of land if two seeds are planted per hole.( Show your working). (3mks)

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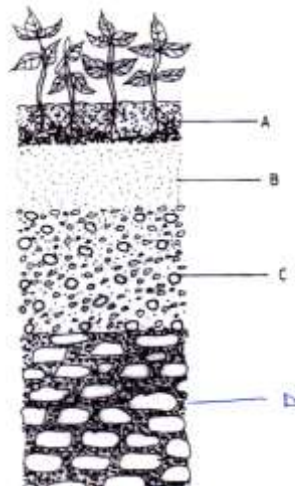
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(b) Give two reasons for having the correct plant population in the production of annual crops. (2mks)

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21 Study the illustration below and answer questions that follow.



(i) Identify the structure above. (1mk)

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(ii) Name the parts labelled A,B,C and D above. (2mks)

- A.....
- B.....
- C.....
- D.....

(iii) Give four ways in which the above illustration influences crop distribution. (2mks)

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22 (a) Below is a diagram showing a crop infected by a disease. Study it and answer questions that follow.



(i) Identify the disease. (1mk)

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(ii) Name the category in which the disease is classified. (1mk)

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(iii) Give three control measures of the disease illustrated above. (3mks)

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**SECTION C (40 Marks)**

*Answer any two questions from this section in the spaces provided after every question.*

23(a) Describe the field production of maize under the following sub-headings.

(i) Seedbed preparation. (3mks)

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(ii) Planting (5mks)

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(b) State and explain six marketing functions. (12mks)

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24 (a)(i) Explain the precautions taken during the harvesting of pyrethrum. (3mks)

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(ii) Outline five factors that affect the rooting of cuttings. (5mks)

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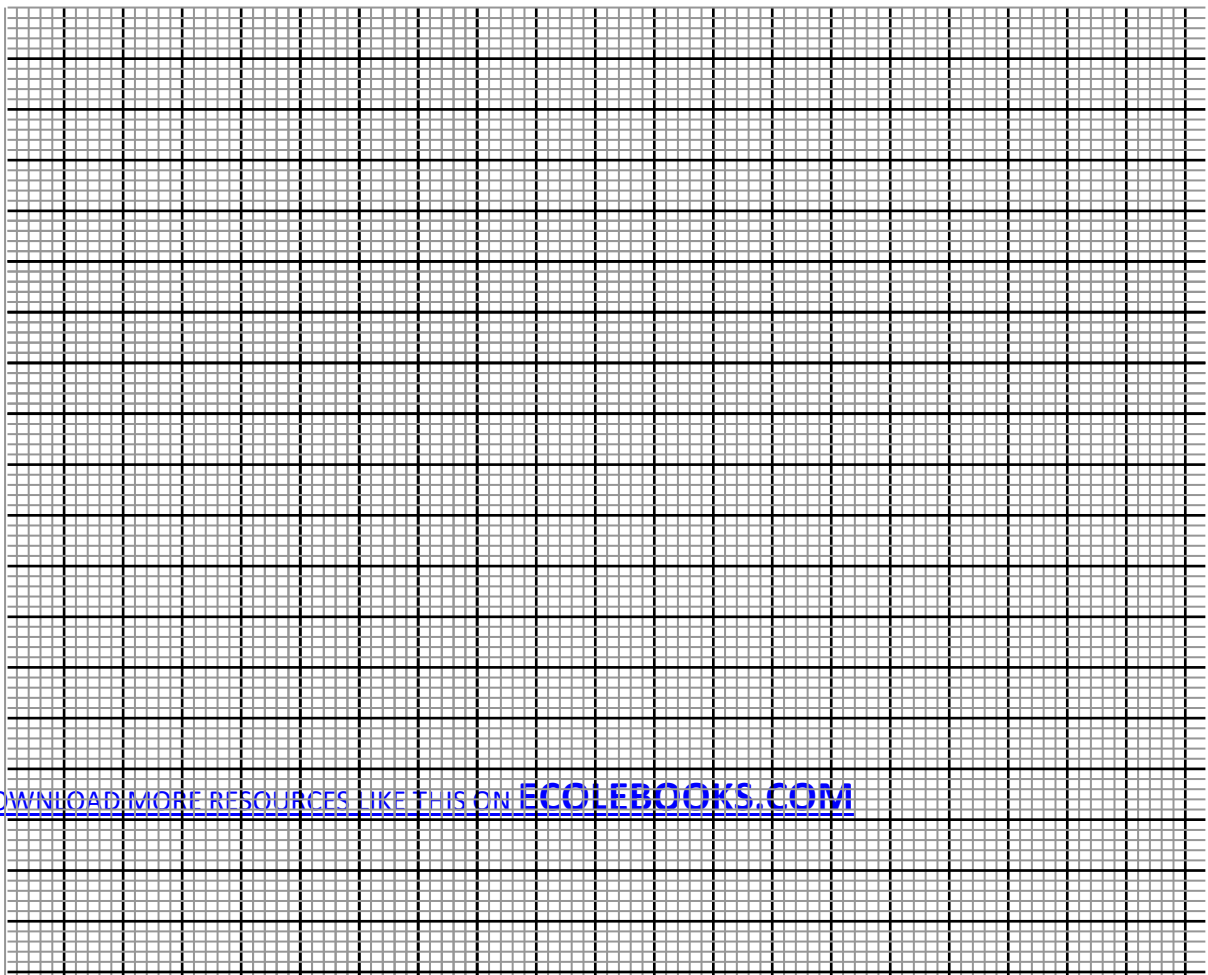
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(b) The following is a Demand and Supply schedule of eggs to teachers in a school.

Price per 30 kg crate (Ksh)	Demand per day (No of crates)	Supply per day (No. of crates)
330.00	5	47
310.00	11	46
290.00	15	44
270.00	19	42
255.00	24	39.5
240.00	29	36.5
225.00	33	33
210.00	37	29
200.00	43	27
190.00	49	20

- (i) Using the same axis with price on the vertical axis, illustrate the demand and supply schedule curves for eggs. (6mks)



(ii) Determine the equilibrium price. (1mk)

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(iii) What would be the price if 45 trays were supplied? (1mk)

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(iv) Apart from price, outline four other factors that influence the demand of eggs in a market? (4mks)

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25 (a) State and explain six ways in which soil lose fertility. (12mks)

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(b) Outline eight factors considered in farm planning. (8mks)

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