

KENYA CERTIFICATE OF BASIC EDUCATION (K.C.B.E)

GRADE 10

APPLIED AGRICULTURE (*Theory*)

TERM 1

MARCH 2026

PATHWAY: S.T.E.M

Time: 2 Hours

COMPETENCE BASED EDUCATION CKEAB 003

LEARNER'S DETAILS

Name: _____.

School: _____.

Assessment Number: _____ Date: _____.

School Code: _____ Signature: _____.

INSTRUCTIONS TO LEARNERS

1. Write your name, assessment number, class and date on all the answer sheets provided.
2. Answer all the questions in the spaces provided.
3. Use a blue or black pen for writing. Pencils should be used only for drawings and diagrams.

SCORE GRID

No.	Question / Item	Maximum Marks	Learner's Score	Performance Level
1	Question 1 (a-c)	8		
2	Question 2 (a-e)	15		
3	Question 3 (a-c)	12		
4	Question 4 (a-d)	12		
5	Question 5 (a-d)	13		
6	Question 6 (a-e)	14		
7	Question 7 (a-b)	6		
	TOTAL	80		

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Turn over

SECTION A: THEORY (80 Marks)

Answer all questions in this section.

1. A school agriculture club plans to start a **vegetable farming project** within the local community.



- a) Identify **THREE** ways through which the club can access land for agricultural use. (3 marks)

- i. _____.
- ii. _____.
- iii. _____.

- b) Explain **THREE** factors you would consider when evaluating the suitability of the land for crop production. (3 marks)

- i. _____.
- ii. _____.
- iii. _____.

- c) State **TWO** reasons why land is important in agricultural production. (2 marks)

- i. _____.
- ii. _____.

2. During a field excursion, learners observed different soil layers in a farm.

- a) Name the **types of soil** labelled QRS. (3 marks)

Q: _____.
R: _____.
S: _____.

b) Name any **two main categories of soil properties** important in crop production. (2 marks)

- i. _____.
- ii. _____.

c) Identify the soil activity below. (1 mark)

_____.

d) Describe **ONE test** used to determine each of the following soil properties:(3 marks)

- i) Soil texture: _____.
- ii) Soil pH: _____.
- iii) Soil porosity: _____.

e) Explain **THREE ways** in which the soil profile influences crop production. (3 marks)

- i. _____.
- ii. _____.
- iii. _____.

3. A farmer wants to prepare a fallow piece of land for planting maize as shown below.

a) Outline **FOUR activities** carried out during land preparation to obtain a good seedbed. (4 marks)

- i. _____.
- ii. _____.

- iii. _____.
- iv. _____.

b) Differences between **primary cultivation** and **secondary cultivation**. (4 marks)

	Primary cultivation	Secondary cultivation
i		
ii		

c) Explain **TWO conservation tillage practices** used in crop production. (4 marks)

- i. _____.
- ii. _____.

4. A learner is managing tomatoes and capsicum in the school farm as shown below.

X

Y

a) Identify the fruits X and Y. (2 marks)

X: _____ Y: _____.

b) Describe **THREE pruning practices** carried out on vegetable crops. (3 marks)

- i. _____.
- ii. _____.
- iii. _____.

c) Explain **THREE reasons** why top dressing is important in crop production. (3 marks)

- i. _____.
- ii. _____.
- iii. _____.

d) Identify four management practices carried out to tomato seedling in the farm. (4 marks)

- i. _____.
- ii. _____.
- iii. _____.

5. A Grade 10 class established tomatoes using a nursery bed.

X

a) Identify the activity shown above.(1 mark)

_____.

b) Identify **FOUR crops** that are established through a nursery. (4 marks)

- i. _____.
- ii. _____.
- iii. _____.
- iv. _____.

c) Describe **FOUR management practices** carried out in a nursery bed. (4 marks)

- i. _____.
- ii. _____.
- iii. _____.
- iv. _____.

d) Justify **TWO reasons** why nursery establishment is preferred in vegetable production. (4 marks)

- i. _____.
- ii. _____.

6. Learners noticed weeds growing among crops on the school farm.

a) Identify the activity shown below. (1 mark)

b) Classify weeds based on **life cycle**. (3 marks)

- i. _____.
- ii. _____.
- iii. _____.

c) Identify the name of the weed shown below. (2 marks)



U

V

U: _____.

V: _____.

d) Describe **FOUR methods** used to control weeds in a crop field. (4 marks)

- i. _____.

- ii. _____.
- iii. _____.
- iv. _____.

e) State **TWO economic effects** of weeds on farming household. (2 marks)

- i. _____.
- ii. _____.
- iii. _____.

7. A farmer is harvesting some farm produce.

a) Identify the crops being harvested below: (2 marks)



E

F

E: _____.

F: _____.

b) Explain **FOUR factors** that determine the harvesting time of a crop. (4 marks)

- i. _____.
- ii. _____.
- iii. _____.
- iv. _____.

b) State **FOUR post-harvest practices** carried out to reduce losses. (4 marks)

- i. _____.
- ii. _____.
- iii. _____.
- iv. _____.