

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

GRADE 10

APPLIED AGRICULTURE (Theory)

TERM 1

JANUARY 2026

Time: 2 Hours

COMPETENCE BASED EDUCATION CKEAB 001

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.

Performance Levels Grid

SCORE GRID

Section A	Q1a	Q1b	Q1c	Q1d	Q2	Q3a	Q3b	Q3c	Q4	Q5	Q6a	Q6b	Q7a	Q7b	Section Total
Max Marks	2	2	2	1	6	3	6	4	6	6	4	8	3	4	60
Learner Score															

Section B	Q8a	Q8b	Q8c	Q9	Q10	Q11a	Q11b	Q11c	Q11d	Q11e	Section Total
Max Marks	4	8	4	8	6	1	3	2	2	2	40
Learner Score											

Section	Max Marks	Learner Score
A	60	
B	40	
TOTAL	100	

Level	Level	% Range	Points	Learner's score
Exceeding (EE)	EE1	90-100%	8	
	EE2	75-89%	7	
Meeting (ME)	ME1	58-74%	6	
	ME2	41-57%	5	
Approaching (AE)	AE1	31-40%	4	
	AE2	21-30%	3	
Below (BE)	BE1	11-20%	2	
	BE2	1-10%	1	

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-AGRICULTURE-

-001

-Senior School-

SECTION A: (60 Marks)

Answer all questions in this section.

1. A farmer wants to start a maize farm but does not own land. Answer the following questions:

(a) Identify **one legal way** a farmer can access land for agricultural use. (2 marks)

(b) State **one advantage** of using this method. (2 marks)

(c) State **one disadvantage** of using this method. (2 marks)

(d) Give a **relevant example** where this method can be applied. (1 mark)

2. Susan has bought a land for a certain agricultural activity. Identify three uses of land for agricultural production and explain why each is important. (6 marks)



	Use	Importance
i		
ii		
iii		

3. Timothy is a farmer in Nyandarua, he plans to plant some trees in his farm

(a) Name three natural factors that can affect his land productivity. (3 marks)

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

(b) Explain three benefits of planting trees in the farm. (6 marks)

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



(c) Suggest suitable crops for high altitude and low altitude regions. (4 marks)

High altitude crops	Low altitude crops

4. A group of students visited a farm and observed the farmer preparing the land. Explain three reasons why land is important in agricultural production. (6 marks)

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

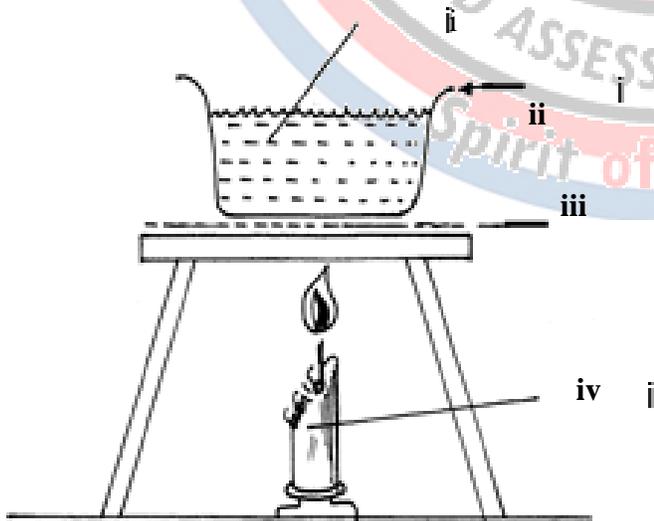
5. A farmer wants to grow vegetables. Explain the following properties of soil and their importance to crop production: (6 marks)

(a) Physical properties

(b) Chemical properties

(c) Biological properties

6. Mwangi set up of apparatus for finding the percentage of humus contents in a soil by ignition.



a. Label the apparatus. (4 marks)

i) _____

ii) _____

iii) _____

iv) _____

b. Outline the steps followed in carrying out the illustrated experiment. (8 marks)

i) _____

ii) _____

iii) _____

iv) _____

7. (a) Tamara was asked by her teacher to name the three types of soils. Which one are they? (3 marks)

i) _____

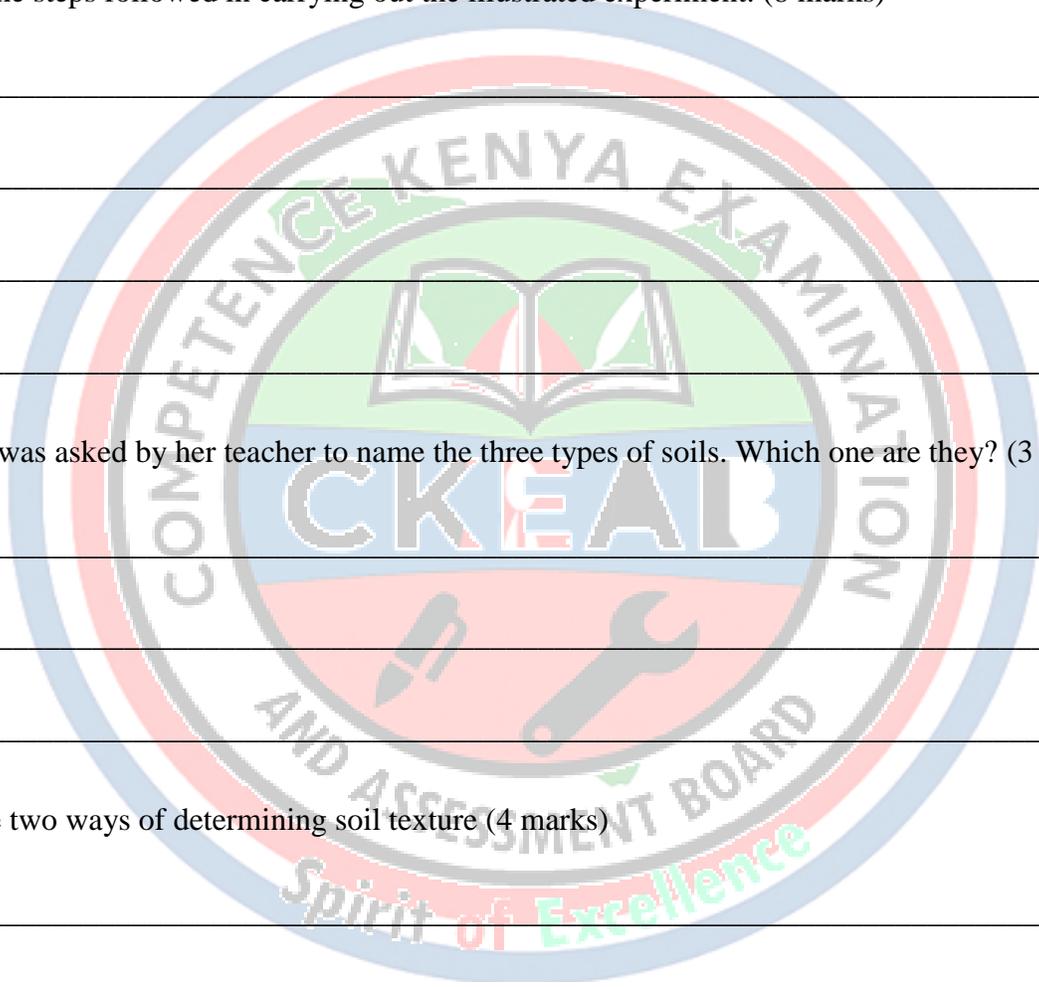
ii) _____

iii) _____

(b) Name two ways of determining soil texture (4 marks)

i) _____

ii) _____

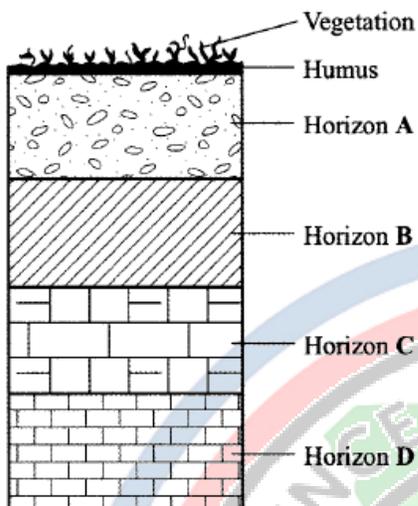


SECTION B: (40 Marks)

Answer all questions in this section.

8. **The** diagram below shows soil profile.

(a) Label the horizons. (4 marks)



A: _____ B: _____
 C: _____ D: _____

(b) Describe the characteristics of each horizon. (8 marks)

Horizon	Characteristic
A	
B	
C	
D	

(c) Explain how the soil profile affects crop production. (4 marks)

- i) _____
- ii) _____



9. Explain how the following soil properties affect crop growth: (8 marks)

(a) Soil texture

(b) Soil structure

(c) Soil fertility

(d) Soil porosity

10. A farmer inherited a 5-acre land in a semi-arid region. He wants to practice mixed farming. Using your knowledge of land and soil properties: (6 marks)

(a) Suggest suitable crops and livestock for the region.



(b) Explain how soil and climate factors will influence his choice.

(c) Suggest ways to improve soil fertility and water retention.

11. a) Grade 10 learners used the farm tool below for farm clearance activity



Name the farm tool. (1 mark)



b) Give **one** use of each of the following tools: (3 marks)

i. Wheelbarrow

ii. Rake

iii. Tape measure

c) State **two** maintenance practices for a wheelbarrow. (2 marks)

d) List **two** dangers of using farm tools incorrectly. (2 marks)

e) Explain **two** benefits of maintaining farm tools in good condition. (2 marks)

i. _____

ii. _____

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