

KENYA CERTIFICATE OF BASIC EDUCATION (K.C.B.E)**GRADE 10****APPLIED AGRICULTURE (*Theory*)****END TERM 1****PATHWAY: S.T.E.M****Time: 2 Hours****COMPETENCE BASED EDUCATION****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		

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	

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)

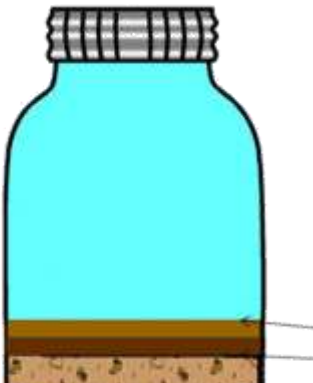
- i. _____.
- ii. _____.
- iii. _____.

- 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: _____.

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.



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. _____.

..

- 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. _____.

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THE 47 COUNTIES C1 SCHOOLS' JOINT NATIONAL SBA ASSESSEMENT

SENIOR SCHOOL ASSESSMENT

TERM 2 MIDTERM ASSESSMENTS 2026

GRADE 10 – APPLIED AGRICULTURE

006 JUNE

Time: 2 Hours

LEARNER'S DETAILS

Name: _____ **School:** _____

Assessment Number: _____ **Date:** _____

School Code: _____ **Signature:** _____

INSTRUCTIONS TO CANDIDATES

1. Write your name in the spaces provided above.
2. Write the name of your school and your stream in the spaces provided.
3. Write your admission number and the date of the assessment in the spaces provided.
4. This paper consists of two sections: A and B.
5. Answer all questions in section A and section B.
6. Answer the questions in English.
7. All answers **MUST** be written in the spaces provided in the paper.
8. Do NOT remove any page from this question paper.

FOR OFFICIAL USE ONLY (EXAMINER'S USE)

SECTION	SECTION A	SECTION B	% SCORE	EE1	EE2	ME1	ME2	AE1	AE2	BE1	BE2
SCORE RANGE	30 MARKS	50 MARKS		90-100	75-89	58-74	41-57	31-40	21-30	11-20	1-10
POINTS				8 POINTS	7 POINTS	6 POINTS	5 POINTS	4 POINTS	3 POINTS	2 POINTS	1 POINT
LEARNER'S TOTAL SCORE											

SECTION A (30 MARKS)

Answer ALL questions in this section.

1. A youth group in Bomet County wants to start a vegetable farming project but does not own land.

a) Identify **two legal ways** the group can access land. (2 marks)

- i. _____.
- ii. _____.

b) State **two advantages** of having a secure land ownership for farming. (2 marks)

- i. _____.
- ii. _____.

2. During a practical lesson, learners collected soil from a farm and separated its components.

a) Name **two components of soil** observed. (2 marks)

- i. _____.
- ii. _____.

b) State **one role of each component** named in (a) in crop production. (2 marks)

Component of soil	Role of the component in crop production

3. A farmer noticed that water drains very quickly in his sandy soil.

a) Identify the soil property responsible for this observation. (1 mark)

b) State **two disadvantages** of this soil property to crop production. (2 marks)

- i. _____.
- ii. _____.

c) Suggest **one way of improving the soil condition**. (1 mark)

4. A school agriculture club is preparing a plot that has been left fallow for two years.

a) State **two activities carried out during land clearing**. (2 marks)

b) Identify **two operations done during secondary cultivation**. (2 marks)

- i. _____.
- ii. _____.

5. A farmer in Kirinyaga County is growing tomatoes.

a) Name **two management practices** carried out on tomatoes. (2 marks)

- i. _____.
- ii. _____.

b) State **one benefit of each practice**. (2 marks)

_____.

6. A maize farmer observed that weeds were competing with crops for nutrients.

a) Identify **two types of weeds** that may be present in the farm. (2 marks)

- i. _____.
- ii. _____.

b) State **two methods of controlling weeds**. (2 marks)

- i. _____.
- ii. _____.

7. A farmer harvested maize too early and experienced low yields.

a) State **one factor that determines the correct harvesting time**. (1 mark)

_____.

b) Give **two signs that maize is ready for harvesting**. (2 marks)

- i. _____.
- ii. _____.

8. A student plans to start a poultry farming business.

a) Name **one factor of production required**. (1 mark)

_____.

b) State **two sources of capital** for the enterprise. (2 marks)

- i. _____.
- ii. _____.

SECTION B (50 MARKS)

Answer all questions provided in this section.

9. A farmer in Uasin Gishu County owns a 5-acre piece of land. He wants to grow wheat but is unsure about the suitability of his land.

a) Explain **four natural factors** he should consider before planting wheat. (8 marks)

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

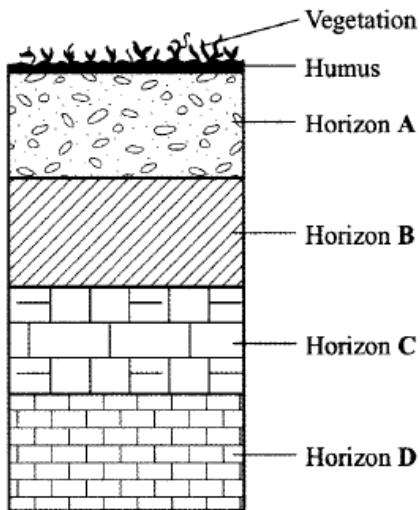
b) Explain **two ways the farmer can improve land productivity**. (2 marks)

- i. _____
- ii. _____

10. During a field trip, learners observed the following soil profile:

a) What is soil profile? (2mks)

b) Below is a diagram of soil profile, label the parts A to D. (4 marks)



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

c) Describe **three characteristics of the topsoil layer**. (3 marks)

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

d) Explain **two importance of soil profile in crop production**. (2 marks)

- i. _____.
- ii. _____.

11. A farmer in Machakos County practices **minimum tillage** due to frequent droughts.

a) Describe **three activities involved in primary cultivation**. (3 marks)

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

b) Explain **three advantages of conservation tillage**. (6 marks)

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

c) State **one tertiary operation** carried out before planting. (1 mark)

_____.

_____.

12. The diagram below shows a tomato plant undergoing pruning.

Before pruning



After pruning



a) Explain **three reasons for pruning tomato plants**. (6 marks)

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

b) Describe **two methods of top-dressing fertilizer application**. (4 marks)

- i. _____.
- ii. _____.

13. A group of learners established a cabbage nursery and later sold the produce in a local market in Nakuru.

a) Describe **four steps followed in preparing a nursery bed**. (4 marks)

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

b) Explain **two advantages of raising crops in a nursery**. (4 marks)

- i. _____.
- ii. _____.

c) Outline **two ways of preparing agricultural produce for marketing**. (2 marks)

- i. _____.
- ii. _____.

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GRADE 10 INTER C1 SENIOR SCHOOLS END OF YEAR EXAMINATIONS

KENYA CERTIFICATE OF BASIC EDUCATION

SENIOR SCHOOL ASSESSMENT

TERM 3 ENDTERM ASSESSMENTS 2026

GRADE 10 – AGRICULTURE

Time: 2 Hours

LEARNER'S DETAILS

Name: _____ . School: _____ .

Assessment Number: _____ . Date: _____ .

School Code: _____ . Signature: _____ .

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LEARNER'S TOTAL SCORE											

SECTION A (30 MARKS)

Answer **ALL** questions in this section.

1.A farmer in Bomet County wants to establish a vegetable farm. Before acquiring land, she considers factors such as soil characteristics, slope, rainfall and accessibility.

a) State **two factors** that determine the suitability of land for agricultural production. (2 marks)

i. _____

ii. _____

2. During a practical lesson, learners collected three soil samples.

- i. *Sample X felt gritty when rubbed between the fingers, while*
- ii. *Sample Y felt smooth and sticky when wet.*

a) Identify the soil represented by Sample X. _____ (1 mark)

b) Identify the soil represented by Sample Y. _____ (1 mark)

c) State **one advantage** of loamy soil for crop production. (1 mark)

3. A farmer intends to prepare a field for planting maize.

a) Name **two primary land preparation operations** that may be carried out before planting. (2 marks)

- i. _____
- ii. _____

b) Explain **one importance** of proper land preparation. (1 mark)

4. A maize farmer notices that some young plants have been attacked by weeds shortly after germination.

a) State **two harmful effects of weeds** on crops. (2 marks)

- i. _____
- ii. _____

b) Name **one method** of controlling weeds in a maize field. (1 mark)

5. A farmer wants to maintain good crop growth throughout the growing period.

State **three field management practices** that the farmer can carry out after crop establishment. (3 marks)

;

iii.

6. A farmer harvested tomatoes when some fruits were still green while others were fully ripe.

a) State **one indicator** that can be used to determine the maturity of a crop. (1 mark)

b) Give **one reason** why crops should be harvested at the correct stage of maturity. (1 mark)

7. A dairy farmer is selecting cattle for milk production.

State **two characteristics** that the farmer should consider when selecting a good dairy breed. (2 marks)

i.

ii.

8. During an Agriculture practical lesson, learners were shown a cow that was restless and attempting to kick.

a) State **one safety precaution** that should be taken when handling the animal. (1 mark)

b) Give **one reason** why animals should be handled calmly. (1 mark)

9. A farmer observes that one of her goats has lost appetite, has a dull coat and appears weak.

a) State **one possible indication** that the animal is unhealthy. (1 mark)

b) Give **one general measure** that can be taken to prevent diseases in livestock. (1 mark)

10. A group of learners establishes a small beekeeping project at school.

State **two products** that can be obtained from honey bees. (2 marks)

i. _____

ii. _____

11. A farmer has the following tools:



a) State the use of a **secateurs** in crop production. (1 mark)

b) State **one maintenance practice** that should be carried out on farm tools after use. (1 mark)

12. A youth group processes fresh mangoes into mango juice and packaged dried mango slices.

a) Identify the agricultural activity illustrated above. (1 mark)

b) State **one benefit** of adding value to agricultural produce. (1 mark)

13. A farmer produces 500 kg of tomatoes. After sorting, grading and packaging, she sells the produce directly to consumers at a higher price.

a) Name the process of grouping agricultural produce according to quality and size. (1 mark)

14. A school Agriculture club plans to establish a small vegetable enterprise.

State **two factors** that should be considered before establishing the enterprise. (2 marks)

i. _____

ii. _____

15. A farmer has crop residues, animal manure and dry leaves available on the farm.

a) Name the process of converting these materials into a useful organic manure. (1 mark)

b) State **one benefit** of using compost manure in crop production. (1 mark)

SECTION B: 50 MARKS

Answer ALL questions in this section.

16. A farmer in Narok County plans to establish a 5-hectare maize farm. The farm has gently sloping land, receives adequate rainfall and has a mixture of sandy and clay soils. The farmer intends to conduct a soil assessment before beginning land preparation.

a) Explain **four factors** that the farmer should consider when evaluating the suitability of the land for maize production. (4 marks)

i. _____

ii. _____

iii. _____

iv. _____

b) Describe **three physical properties of soil** that influence crop production. (3 marks)

i. _____

ii. _____

iii. _____

c) Explain **three ways** in which a farmer can conserve soil on sloping agricultural land. (3 marks)

iii. _____

17. A farmer planted beans on a one-acre field. Two weeks after germination, the farmer noticed that weeds were competing with the beans. Some plants were also showing signs of poor growth. The farmer decides to improve field management practices.

a) Explain **four harmful effects of weeds** on crop production. (4 marks)

i. _____

ii. _____

iii. _____

iv. _____

b) Describe **three appropriate field management practices** that the farmer can undertake to improve the growth of the beans. (3 marks)

i. _____

ii. _____

iii. _____

c) State **three factors** that should be considered when determining the correct time to harvest a crop. (3 marks)

i. _____

ii. _____

iii. _____

18. A farmer wants to start a small dairy enterprise. He plans to purchase two dairy cattle and intends to establish good animal health and handling practices.

a) Explain **three characteristics** of a good dairy animal. (3 marks)

i. _____

ii. _____

iii. _____

b) Describe **three safe practices** that should be followed when handling livestock. (3 marks)

i. _____

ii. _____

iii. _____

c) Explain **two measures** that can be used to prevent the spread of diseases in livestock. (2 marks)

d) State **two signs** that may indicate that an animal is unhealthy. (2 marks)

- i. _____
- ii. _____

19. A Grade 10 Agriculture class establishes a beekeeping project as part of an enterprise activity. The learners plan to harvest honey and sell it after proper processing and packaging.

a) Explain **three factors** that should be considered when selecting a suitable site for a beehive. (3 marks)

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

b) State **two precautions** that should be taken when harvesting honey. (2 marks)

- i. _____
- ii. _____

c) Explain **three ways** through which an animal-rearing or beekeeping project can benefit learners. (3 marks)

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

d) State **two records** that should be maintained in an agricultural enterprise. (2 marks)

- i. _____
- ii. _____

20. A youth group in Kisumu County produces tomatoes. Instead of selling all the tomatoes fresh, the group decides to process some into tomato sauce. The members package and label the product before selling it to consumers.

a) Explain **three reasons** why agricultural produce is processed and value-added. (3 marks)

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

b) Describe **three factors** that the group should consider when choosing a market for its tomato products. (3 marks)

- i. _____

c) The group harvested **800 kg** of tomatoes. It sold **600 kg** at **KSh 50 per kilogram**.

Calculate the total amount of money received from the sale. (2 marks)

d) State **two qualities** of a successful agricultural entrepreneur. (2 marks)

i. _____

ii. _____

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