

# AGRICULTURE

## TOPICAL REVISION BOOK



### Strands

#### 1.0 Crop Production

### Sub Strands

- 1.1 Agricultural Land
- 1.2 Properties of Soil
- 1.3 Land Preparation
- 1.4 Field Management Practices
- 1.5 Growing Selected Crops
- 1.6 Crop Protection
- 1.7 General Crop Harvesting

#### 2.0 Animal Production

- 2.1 Breeds of Livestock
- 2.2 Animal Handling and Safety
- 2.3 General Animal Health
- 2.4 Bee Keeping
- 2.5 Animal Rearing Project

#### 3.0 Agricultural Technologies and Entrepreneurship

- 3.1 Tools and Equipment
- 3.2 Product Processing and Value Addition
- 3.3 Establishing Agricultural Enterprise
- 3.4 Marketing Agricultural Produce
- 3.5 Composting Techniques

# GRADE 10 AGRICULTURE – TOPICAL REVISION QUESTIONS

## STRAND 1.0: CROP PRODUCTION

### SUBSTRAND 1.1: AGRICULTURAL LAND

**TOTAL: 100 MARKS**

**INSTRUCTIONS: Answer ALL questions.**

#### SECTION A: STRUCTURED & STAND-ALONE QUESTIONS (100 MARKS)

1. Define the term agricultural land. (2 marks)

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2. State four ways of accessing land for agricultural use. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

3. Differentiate between:

a) Leasing land and Buying land (2 marks)

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b) Inheriting land and Donation of land (2 marks)

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4. A farmer in your area wants to start a tomato project but has no land.

Suggest three possible land access options. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

Study the diagrams below



Land A



Land B



Land C

5. Using Diagram 1 above:

a) Identify the land type labelled B. (1 mark)

---

b) State two challenges of using land type B for farming. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

c) Suggest two solutions to improve land type B for crop production. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

6. Explain three reasons why land is important in agricultural production. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

7. List five land characteristics a farmer should consider before starting a crop project. (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

8. State three advantages of leasing land for farming. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

9. State three disadvantages of leasing land for farming. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

10. A student says:

*“Inherited land is always the best for farming.”*

Do you agree? Give two reasons. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

**Study the image below and use it to answer the following questions.**



11. Using Diagram 2 above:

a) Name the natural factor illustrated. (1 mark)

\_\_\_\_\_

b) Explain how it affects farming in the hilltop area. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

c) Explain how it affects farming in the valley area. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. State four natural factors that determine land productivity. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

13. Explain how altitude affects agricultural production. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

14. Explain how climate affects agricultural production. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

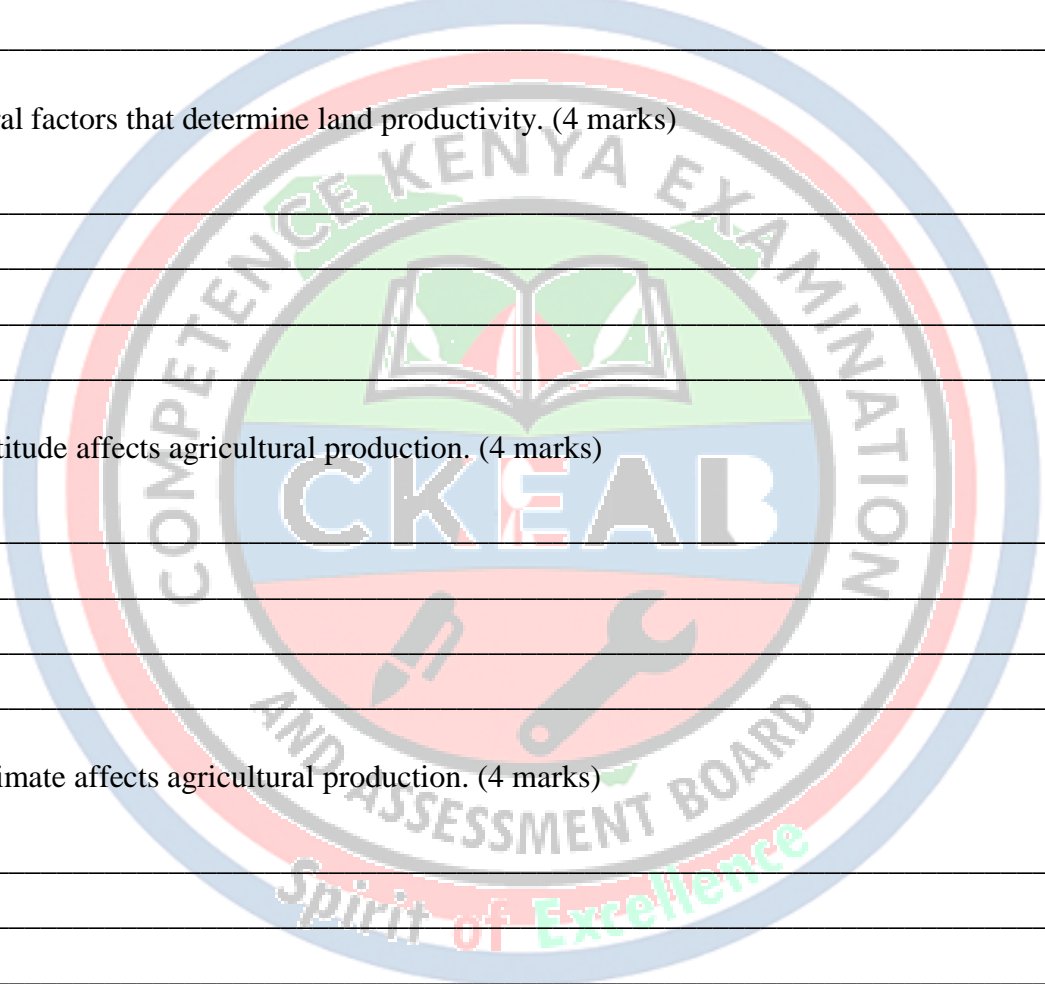
15. Explain how soil factors influence land productivity. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_



16. Explain how biotic factors influence agricultural land. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

17. List four examples of biotic factors affecting land productivity. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

18. Explain three ways a farmer can improve land productivity. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

19. State three reasons why farmers prefer flat land for mechanized farming. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

20. Name four soil properties that affect crop growth. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

21. A farmer owns land in a very dry region.

a) Identify the natural factor affecting productivity. (1 mark)

\_\_\_\_\_

b) Suggest three ways the farmer can still use the land productively. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

22. Explain four ways land can be misused in the community. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

23. State four ways of conserving agricultural land. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

24. Give three reasons why land disputes may occur. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

25. Suggest three ways of preventing land conflicts in the community. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

Mwangi developed the tool below to assess his farm productivity. Use it to answer the questions that follow

Factor	Good	Poor
Drainage	<input type="checkbox"/>	<input type="checkbox"/>
Soil depth	<input type="checkbox"/>	<input type="checkbox"/>
Water source	<input type="checkbox"/>	<input type="checkbox"/>
Road access	<input type="checkbox"/>	<input type="checkbox"/>

26. Using Diagram 3:

a) Name the tool shown. (1 mark)

\_\_\_\_\_

b) State two uses of such a checklist. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

27. Explain why road access is important when selecting agricultural land. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

28. Explain why water availability is important when selecting agricultural land. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

29. State three ways a farmer can determine if soil is fertile without a laboratory. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

30. Describe two ways farmers can obtain land through donation. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

31. A student wants to rear poultry but lives in a rented home.

a) Suggest two land access methods suitable for the student. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b) Give two challenges the student may face. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

32. Explain three reasons why land is considered a factor of production. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

33. Explain the meaning of utility of land. (2 marks)

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34. Give four examples showing how land has different utilities. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

35. A farmer has land near a river.

a) State two advantages of farming there. (2 marks)

- i. 

---
- ii. 

---

b) State two disadvantages of farming there. (2 marks)

- i. 

---
- ii. 

---

36.

a) Identify two climate factors that affects plant growth. (2 marks)

- i. 

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- ii. 

---

b) Explain how one factor affects crop productivity. (2 marks)

i. Wind

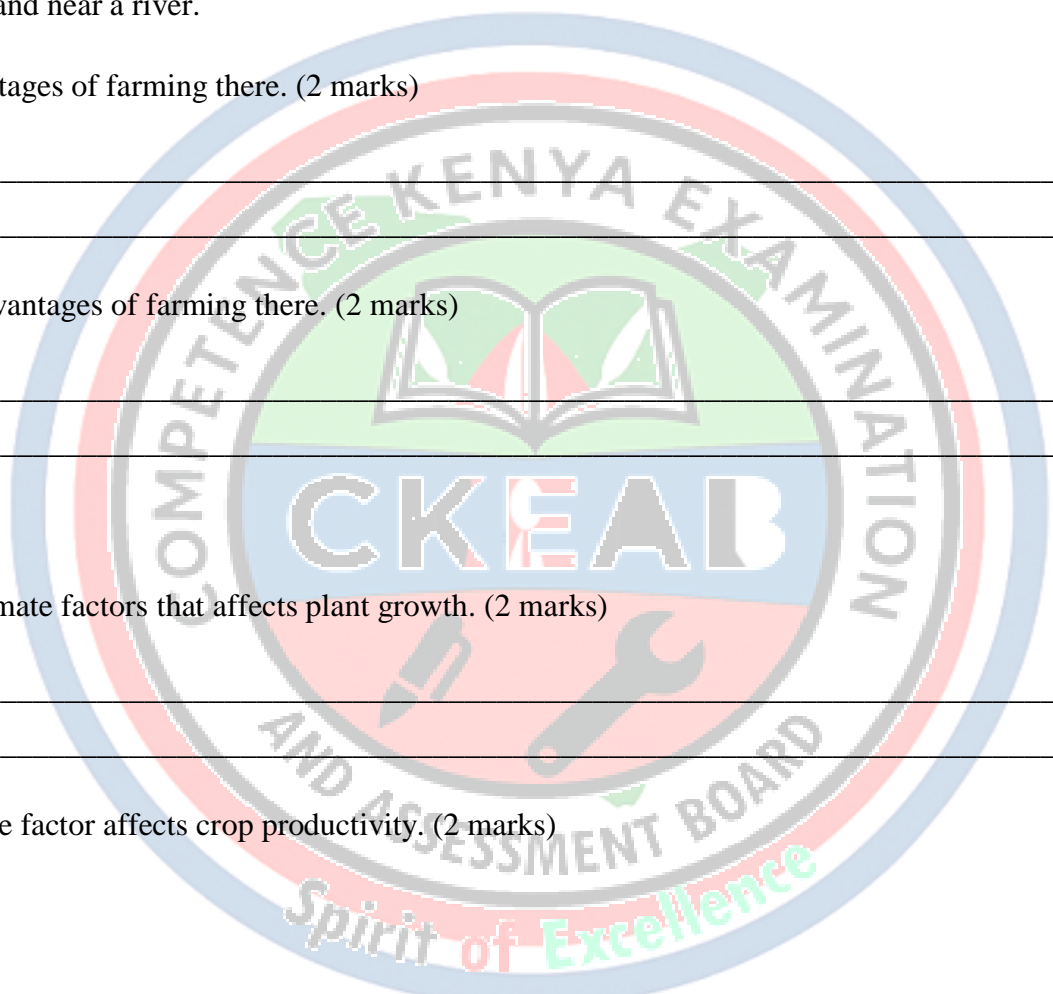
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ii. Sunlight

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37. State three ways of managing wind effects on farms. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

38. Explain how topography influences:

a) Soil erosion (2 marks)

\_\_\_\_\_

\_\_\_\_\_

b) Mechanization (2 marks)

\_\_\_\_\_

\_\_\_\_\_

39. Describe four indicators of waterlogged land. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

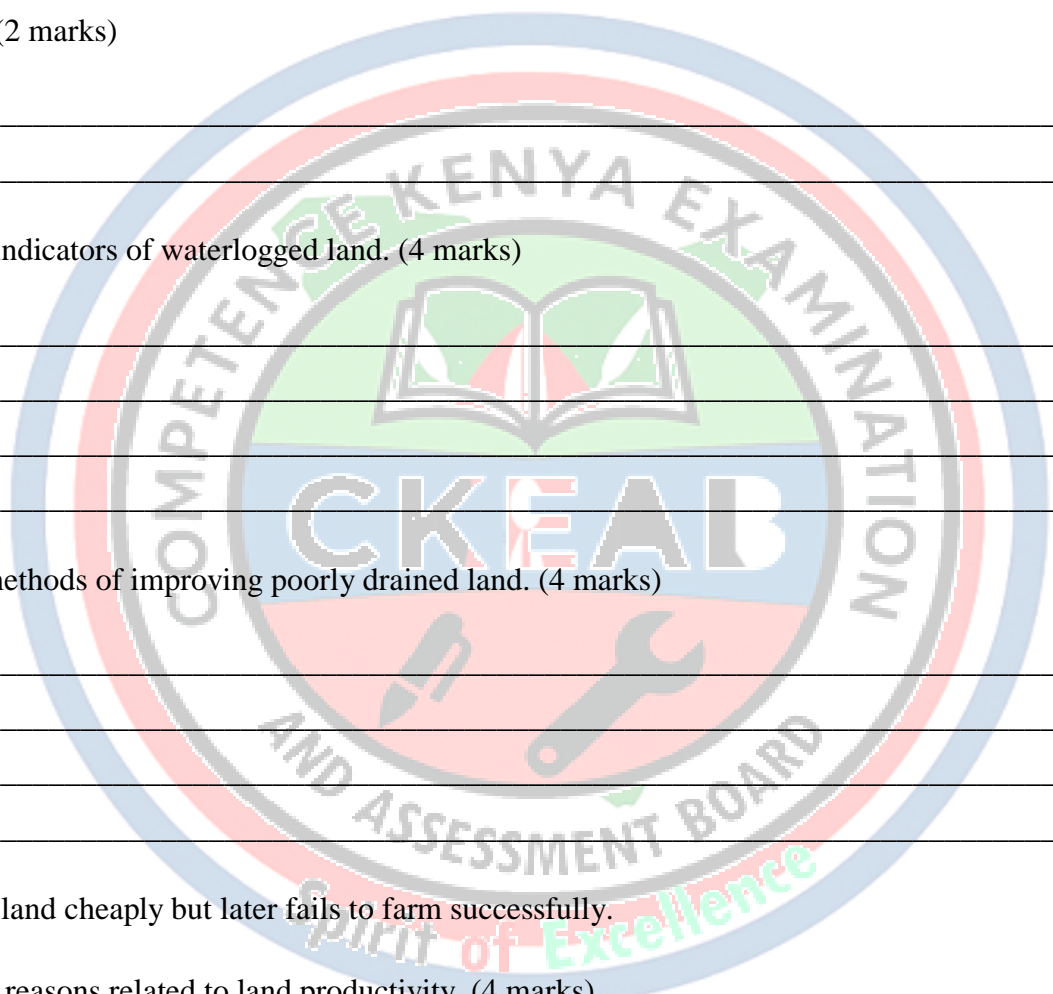
40. Suggest four methods of improving poorly drained land. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

41. A farmer buys land cheaply but later fails to farm successfully.

Give four possible reasons related to land productivity. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



42. Explain why land with high fertility may still produce low yields. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

43. State four ways technology can help in assessing land productivity. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

44. Explain the importance of land in ensuring food security in Kenya. (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

45. Give three reasons why agricultural land should be protected from subdivision. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

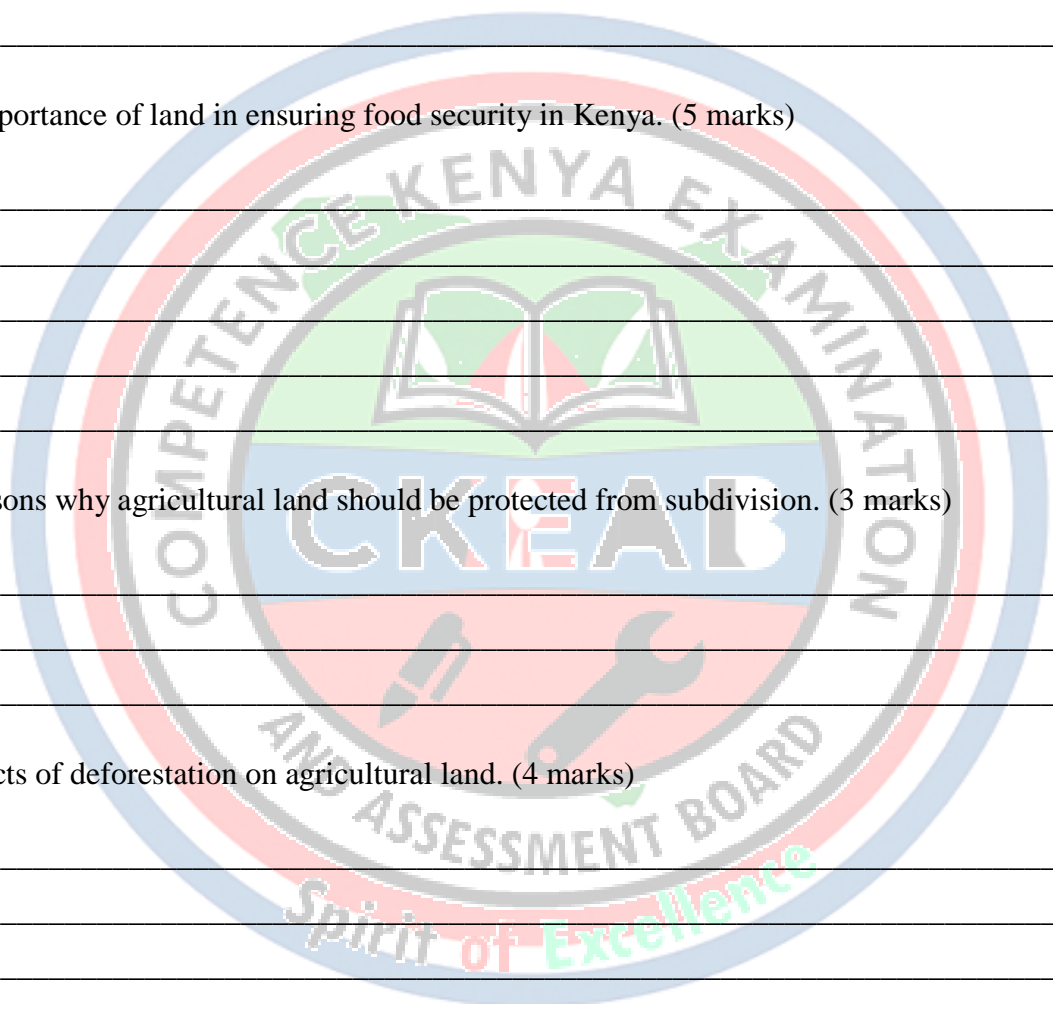
46. State four effects of deforestation on agricultural land. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

47. Your class visits three farms in the community.

a) State three observations you would make about land types. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_



b) State two questions you would ask a farmer about land access. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

48. A group of learners wants to lease land for a school farming project.

a) State three factors they should consider before leasing. (3 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

b) Suggest two ways they can ensure the agreement is safe. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

49. Explain four ways land contributes to income generation in a community. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

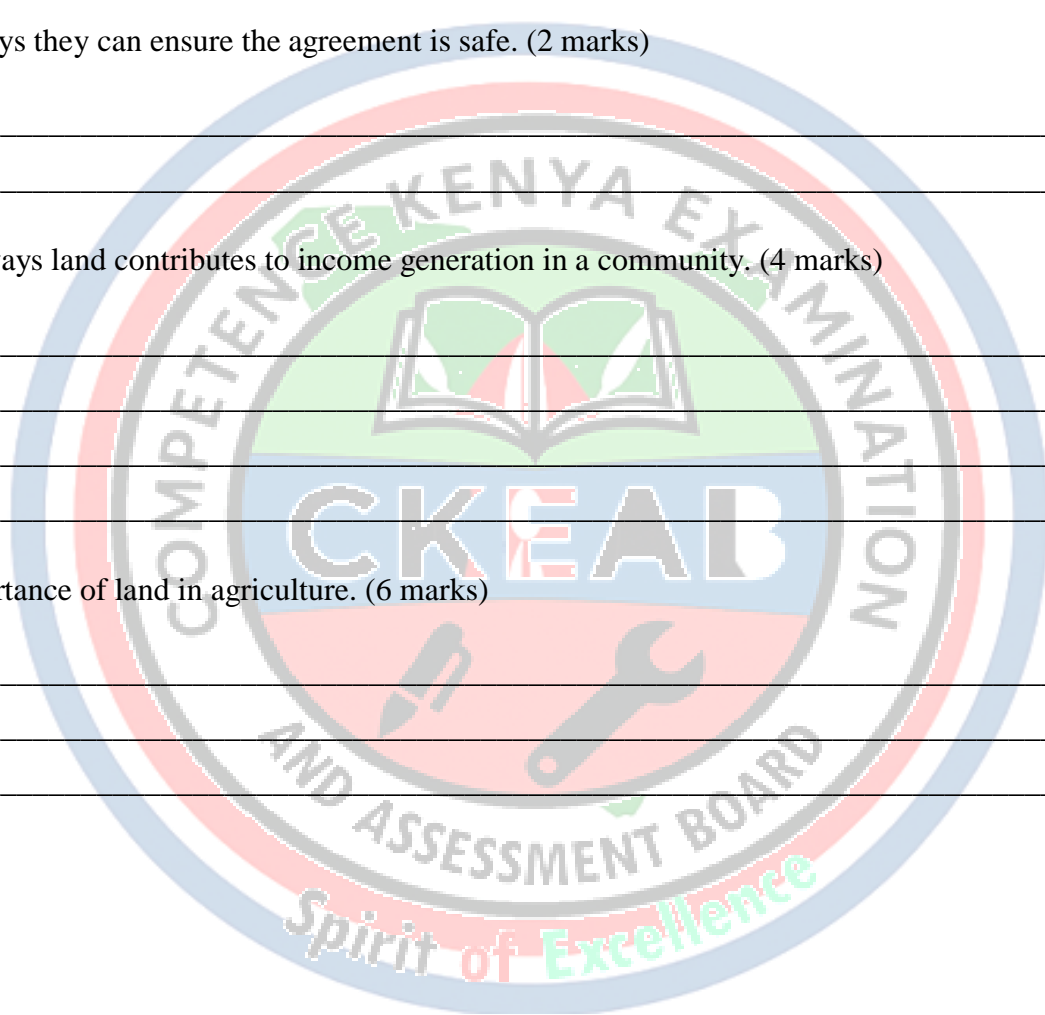
iv. \_\_\_\_\_

50. State the importance of land in agriculture. (6 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



## SUBSTRAND 1.2: PROPERTIES OF SOIL

**INSTRUCTIONS:** Answer ALL questions.

1. Define the term soil. (2 marks)

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2. State three main categories of soil properties. (3 marks)

- i. 

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- ii. 

---
- iii. 

---

3. List four physical properties of soil. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

4. List three chemical properties of soil. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

5. List three biological properties of soil. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

6. Explain the meaning of soil texture. (2 marks)

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7. Name the three soil separates that determine texture. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

8. State two ways soil texture affects crop production. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

9. Explain what is meant by soil structure. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

10. State three types of soil structure. (3 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

Grade 10 learners of Moi Girls Senior School conducted an experiment on formation of ribbons from different soil samples and shown below.

Soil sample + water → knead → form ribbon



Soil A

Soil B

Soil C

11. Using Diagram 2 above:

a) Name the test shown. (1 mark)

\_\_\_\_\_

b) State two uses of this test. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. A learner collects soil and it forms a long ribbon when pressed.

a) Identify the soil type. (1 mark)

\_\_\_\_\_

b) State two characteristics of this soil. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

13. Describe two characteristics of sandy soil. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

14. Describe two characteristics of clay soil. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

15. Describe two characteristics of loamy soil. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

16. State four advantages of loamy soil for crop production. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

17. State three disadvantages of sandy soil in farming. (3 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

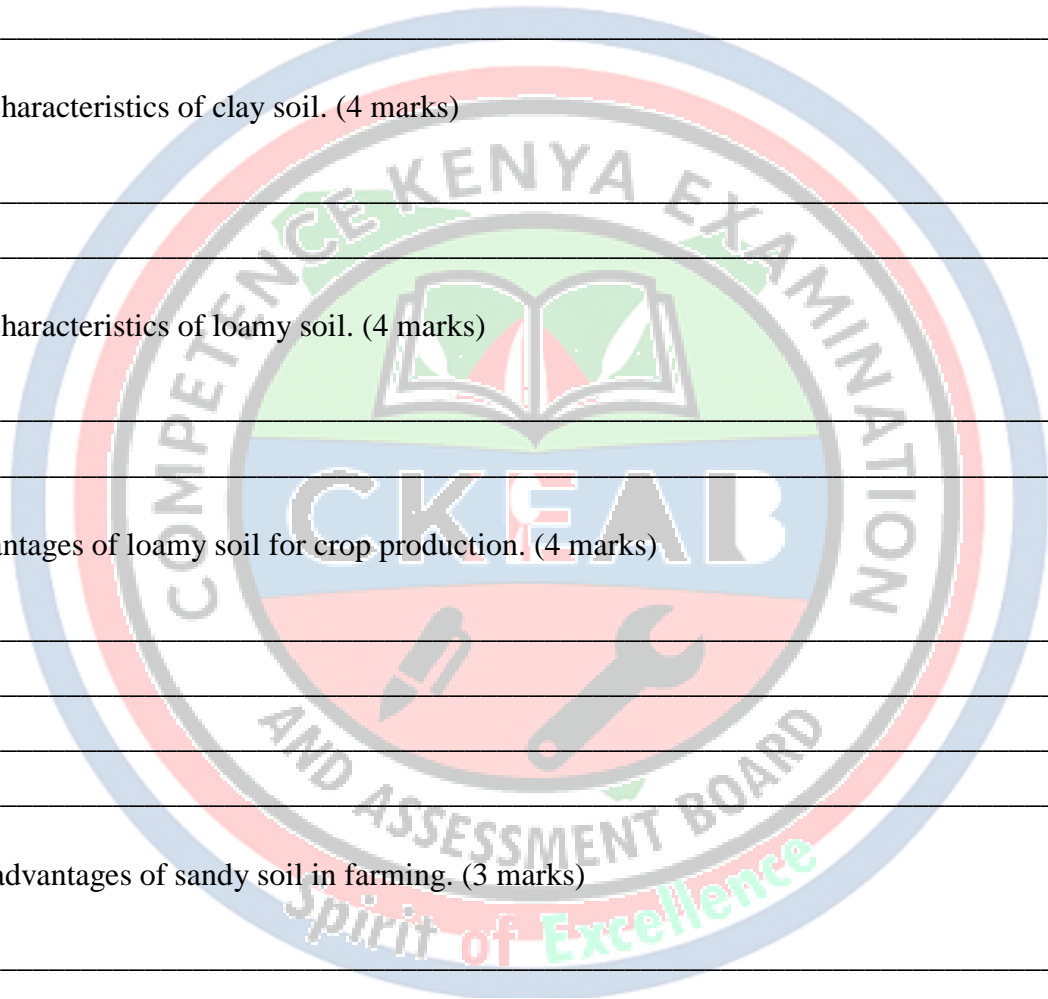
iii. \_\_\_\_\_

18. State three disadvantages of clay soil in farming. (3 marks)

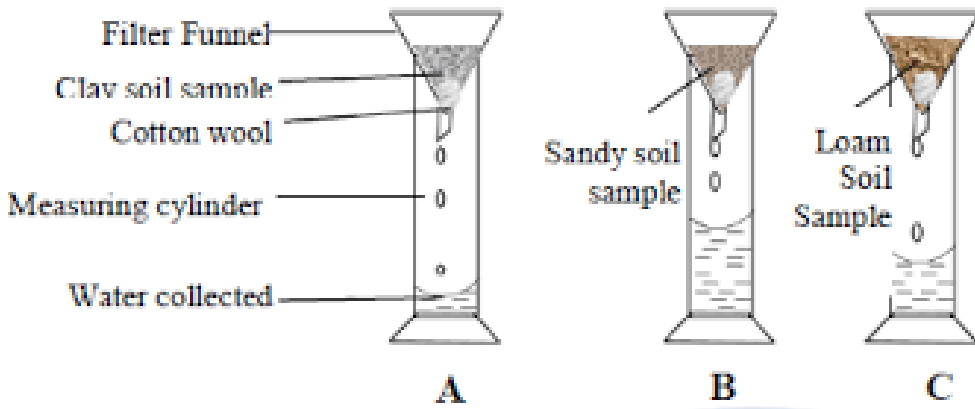
i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



During a soil experiment, grade 10 learners set up the experiment as shown below



19. Name the physical property tested using Diagram 3. (1 mark)

\_\_\_\_\_

20. State two reasons why this property is important in crop farming. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

21. Explain the meaning of soil porosity. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

22. Explain the meaning of soil permeability. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

23. Differentiate between porosity and permeability. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

24. State three factors that affect soil porosity. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

25. State three factors that affect soil permeability. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

26. Explain the meaning of soil pH. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

27. State the pH range for:

- a) Strongly acidic soil \_\_\_\_\_ (1 mark)
- b) Neutral soil \_\_\_\_\_ (1 mark)
- c) Strongly alkaline soil \_\_\_\_\_ (1 mark)

Mr Musalia displayed a soil  $p^H$ . scale as shown below



28. Using Diagram 4:

- a) Identify the pH of neutral soil. \_\_\_\_\_ (1 mark)
- b) State the pH of a soil that is strongly acidic. \_\_\_\_\_ (1 mark)

29. State three effects of acidic soil on crop growth. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

30. State three effects of alkaline soil on crop growth. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

31. Name three materials used to correct acidic soils. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

32. Name two materials used to correct alkaline soils. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

33. Describe two ways of testing soil pH in a school laboratory. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

34. Explain what is meant by soil humus. (2 marks)

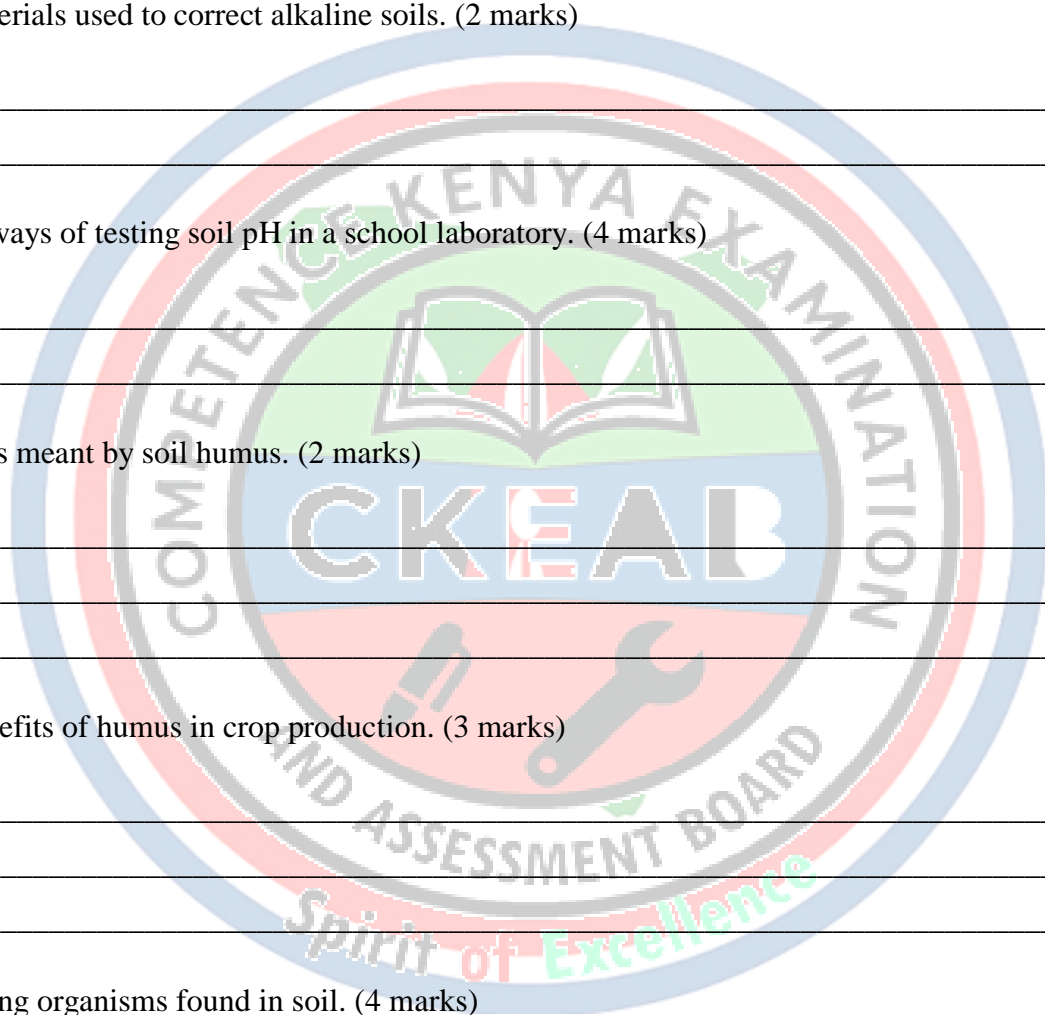
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

35. State three benefits of humus in crop production. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

36. Name four living organisms found in soil. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



37. Explain three roles of soil organisms in crop production. (6 marks)

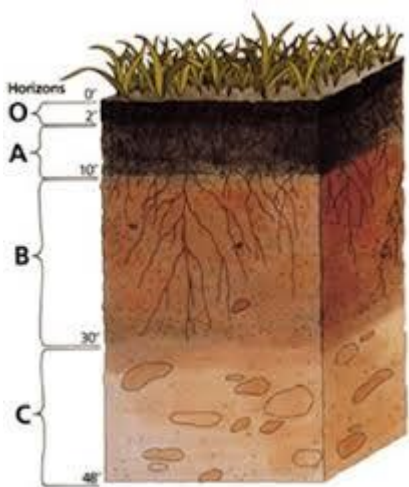
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

38. Define the term soil profile. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

39. Using the diagram below:



a) Name the horizon that contains the most humus. (1 mark)

\_\_\_\_\_

b) State two characteristics of this horizon. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

40. Explain three ways soil profile is important in crop production. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

41. State three differences between topsoil and subsoil. (3 marks)

	Top soil		Sub soil
i		i	
ii		ii	

42. A learner wants to investigate soil texture.

a) Name one method they can use. (1 mark)

\_\_\_\_\_

b) List two materials required. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

43. Describe an experiment to test soil porosity. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

v. \_\_\_\_\_

vi. \_\_\_\_\_

44. Describe an experiment to test soil permeability. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

45. A learner tested soil pH and obtained pH 4.5.

a) Classify the soil. \_\_\_\_\_ (1 mark)

b) Suggest two ways of improving it for maize production. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

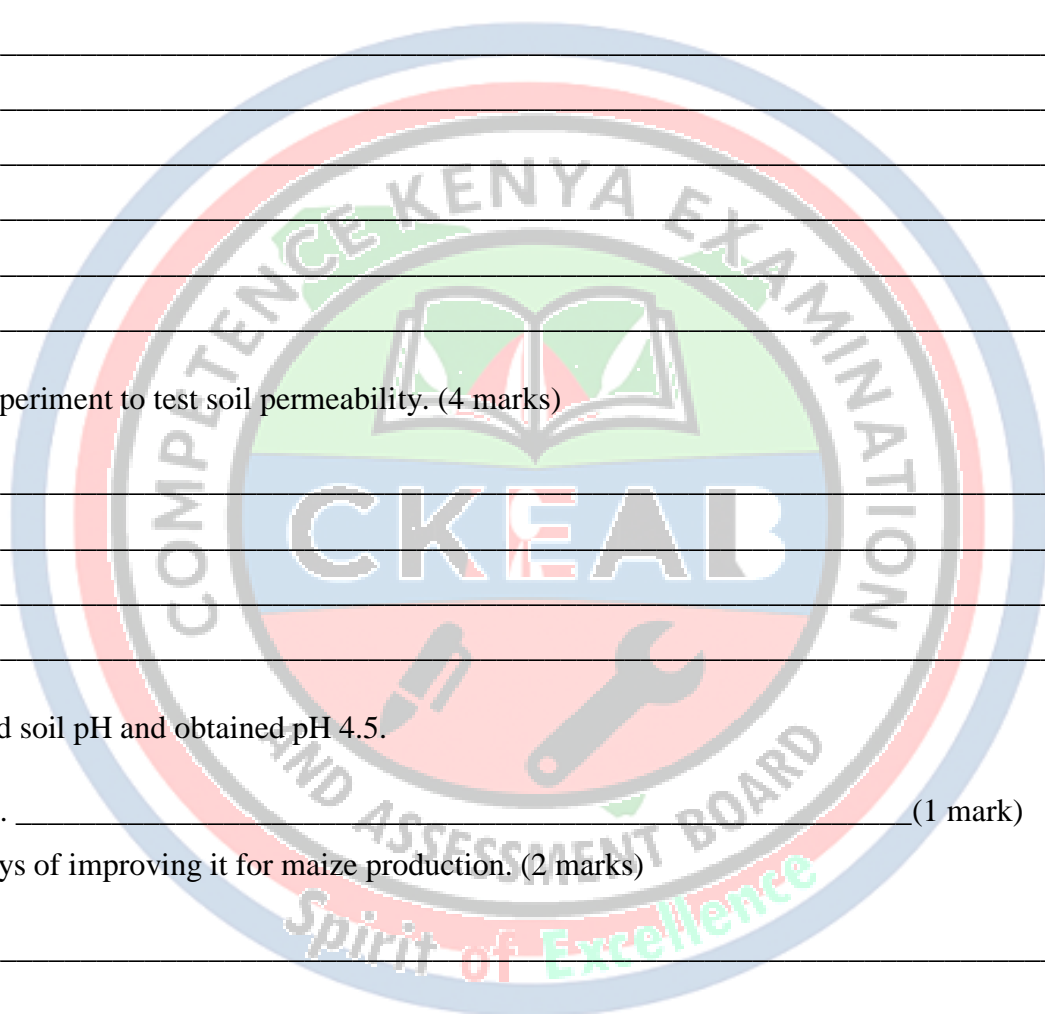
46. Explain why soil with good structure supports healthy crop growth. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_



47. A farmer complains that crops are yellow and stunted. The soil is strongly acidic.

a) Name one nutrient likely unavailable. \_\_\_\_\_ (1 mark)

b) Explain why the nutrient becomes unavailable. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

c) Suggest one corrective measure. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

48. Explain why sandy soil is not suitable for rice farming. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

49. A farmer wants to grow carrots.

a) Which soil type is best? \_\_\_\_\_ (1 mark)

b) Give two reasons for your answer. (2 marks)

i. \_\_\_\_\_

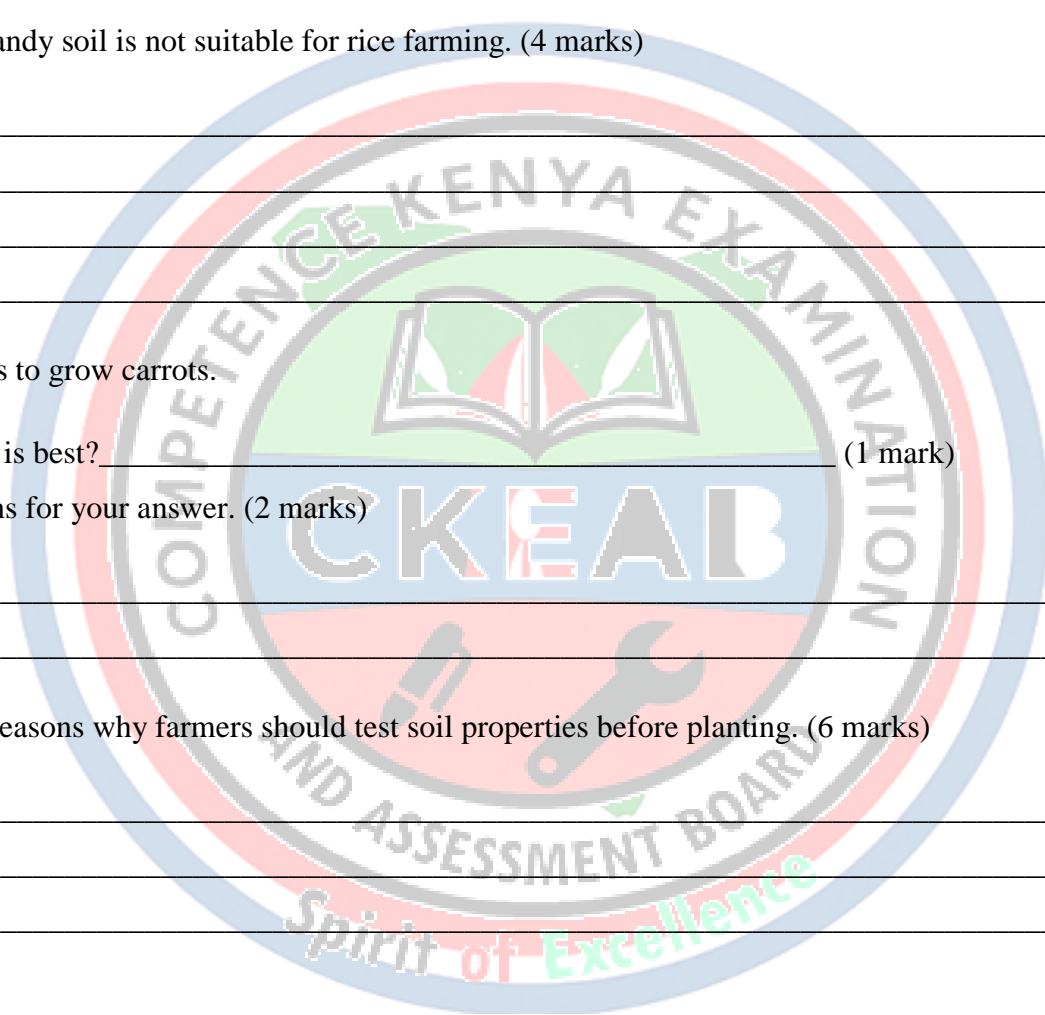
ii. \_\_\_\_\_

50. Explain three reasons why farmers should test soil properties before planting. (6 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



## SUBSTRAND 1.3: LAND PREPARATION

**INSTRUCTIONS:** Answer ALL questions.

*The diagram below shows land preparation stages*

Fallow Land



Land Clearing



Primary Cultivation



Secondary Cultivation



Tertiary Operations



Seedbed Ready

1. Define the term land preparation. (2 marks)

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2. State four activities carried out during land preparation. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

3. Give three reasons why land clearing is done before cultivation. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---



4. List four materials or obstacles removed during land clearing. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

5. Explain the meaning of fallow land. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

6. State three benefits of leaving land fallow. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

7. Name four hand tools used in land preparation. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

8. State two uses of a hoe in land preparation. (2 marks)

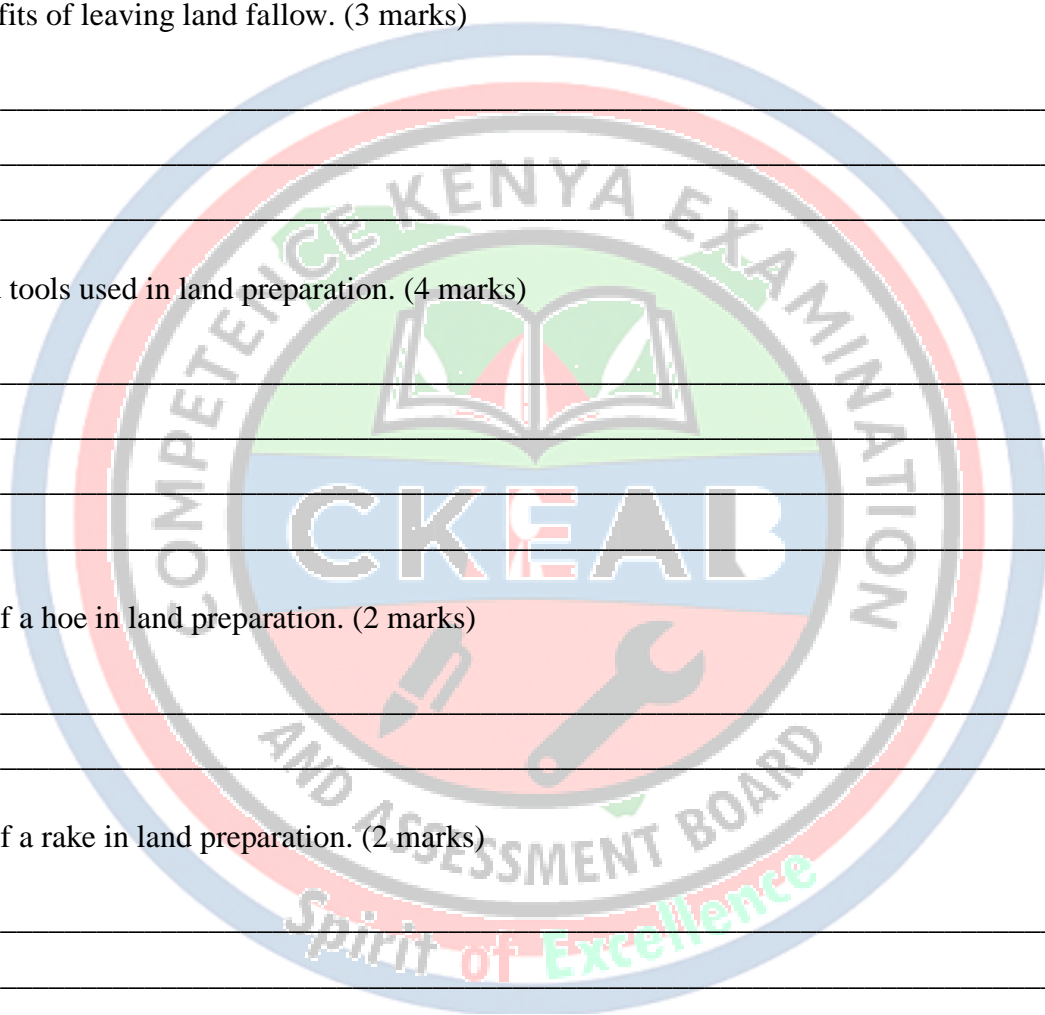
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

9. State two uses of a rake in land preparation. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

10. Explain the meaning of primary cultivation. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_



11. State three objectives of primary cultivation. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

12. Name three methods of primary cultivation. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

13. Explain the meaning of secondary cultivation. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

14. State three objectives of secondary cultivation. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

15. Name three methods of secondary cultivation. (3 marks)

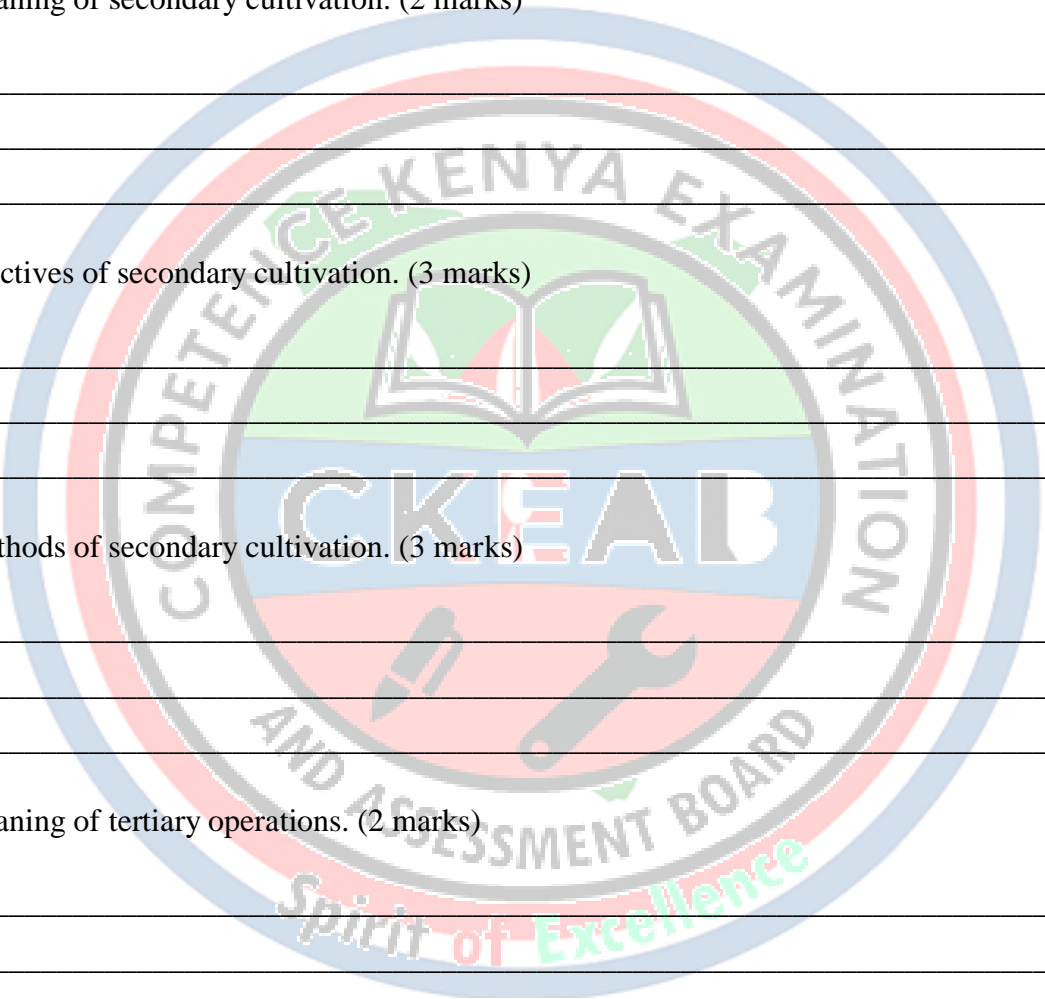
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

16. Explain the meaning of tertiary operations. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

17. State four tertiary operations carried out after secondary cultivation. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



Study the image below and use it to answer the following questions



18. Name the land preparation activity shown in the diagram above. (1 mark)

\_\_\_\_\_

19. State two advantages of using a tractor during land preparation. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

20. State three disadvantages of mechanized land preparation. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

21. Define the term seedbed. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

22. State four characteristics of a good seedbed. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

23. Explain three reasons why a fine tilth is required for small seeds. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

24. Define the term conservation tillage. (2 marks)

---

---

25. State three reasons why conservation tillage is practiced. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

26. Explain what is meant by minimum tillage. (2 marks)

---

---

27. Explain what is meant by zero tillage. (2 marks)

---

---

28. Differentiate between minimum tillage and zero tillage. (2 marks)

---

---

---

29. State three advantages of minimum tillage. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

30. State three advantages of zero tillage. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

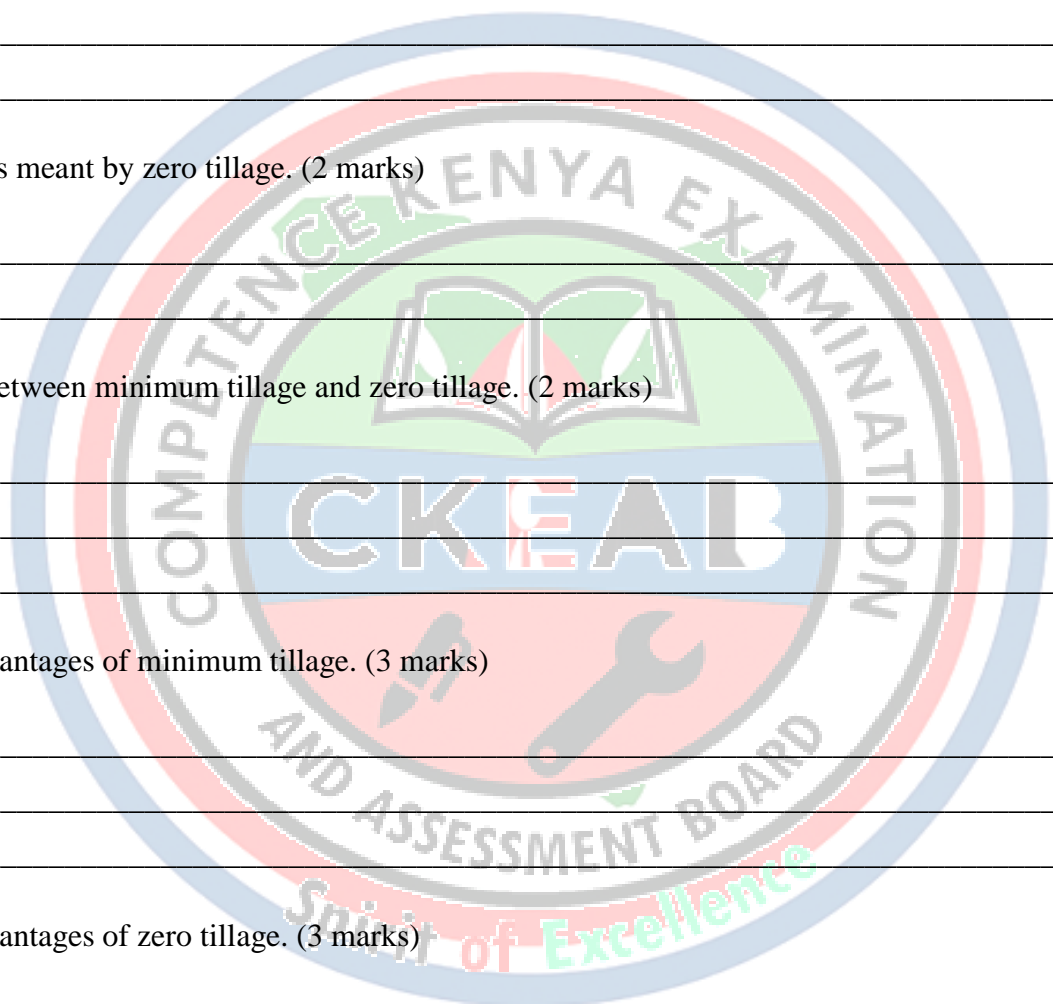
31. State three disadvantages of conservation tillage. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---



Some Crop residues were left on soil surface as shown below



32. Using the diagram above:

a) Identify the farming practice shown. (1 mark)

\_\_\_\_\_

b) State two benefits of leaving crop residues on the soil surface. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

33. A farmer wants to plant maize in a field full of shrubs and stones.

a) Name the first operation to be done. (1 mark)

\_\_\_\_\_

b) Give two tools used in this operation. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. Explain four ways land preparation helps in weed control. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

35. Explain three ways land preparation improves soil aeration. (3 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

36. A farmer ploughed land when it was too wet.

a) State two negative effects on soil. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b) Suggest one solution. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

37. State three factors that determine the method of land preparation used. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

38. Explain how the following influence land preparation:

a) Soil type (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) Slope/topography (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

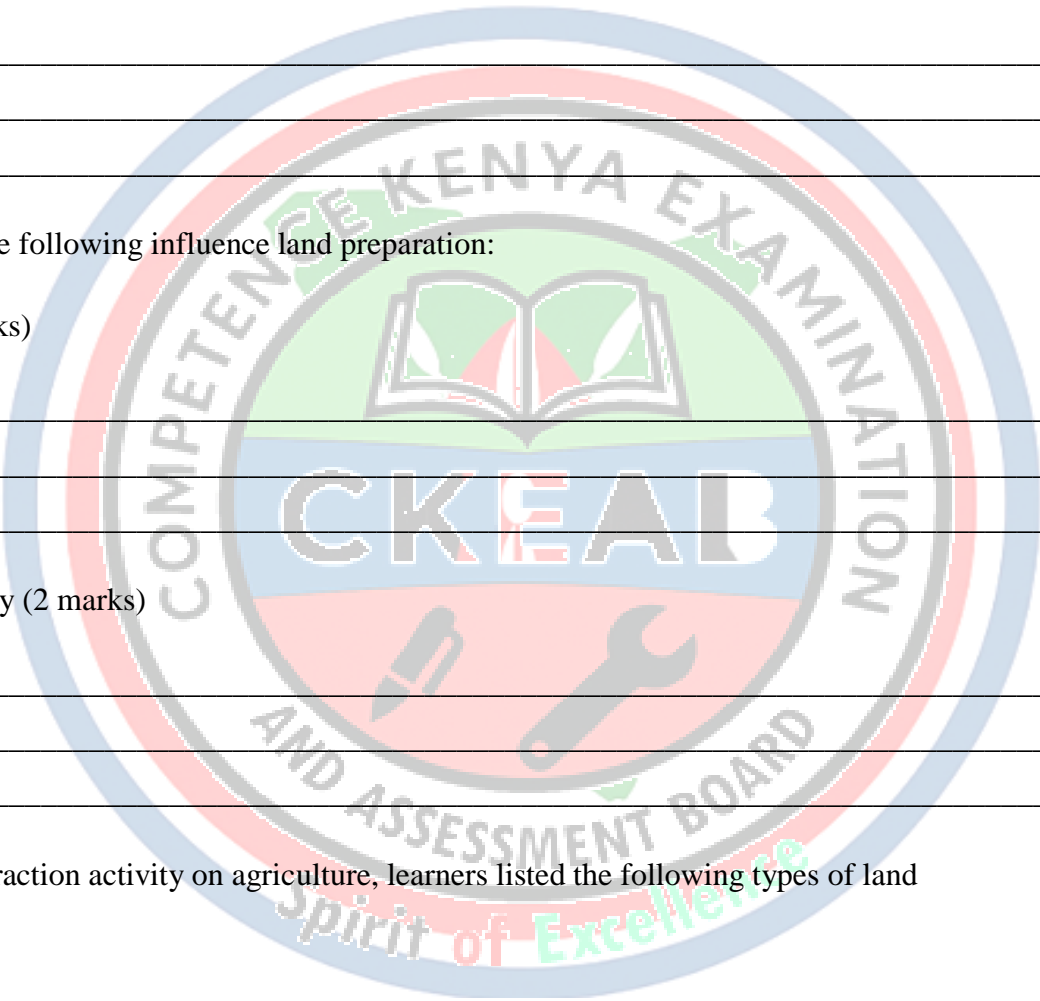
During a class interaction activity on agriculture, learners listed the following types of land

- A: Flat land
- B: Gentle slope
- C: Steep slope

39.

a) Identify the land most suitable for mechanized ploughing. (1 mark)

\_\_\_\_\_



b) Give one reason. (1 mark)

---

---

c) State one conservation tillage practice suitable for steep slopes. (1 mark)

---

---

40. List four safety rules followed during land clearing. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

41. State three safety precautions when using a hoe or jembe. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

42. Describe the steps followed when preparing land for planting vegetables. (6 marks)

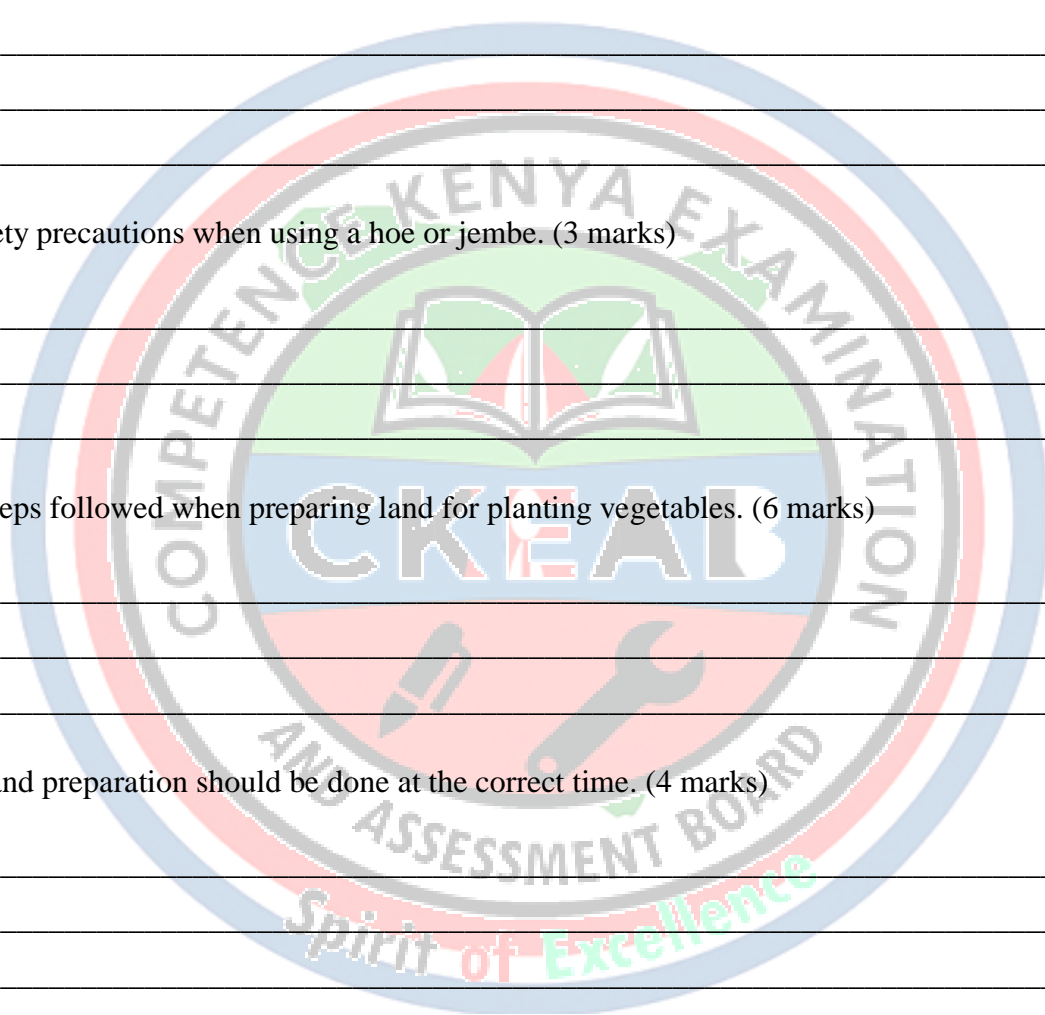
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

43. Explain why land preparation should be done at the correct time. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

44. State four reasons why proper land preparation is important in crop production. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



45. Explain how land preparation contributes to:

a) Good germination (2 marks)

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---

---

b) Strong root development (2 marks)

---

---

---

46. State three ways land preparation helps in conserving soil moisture. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

47. A farmer uses zero tillage but still gets poor yields.

Give four possible reasons. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

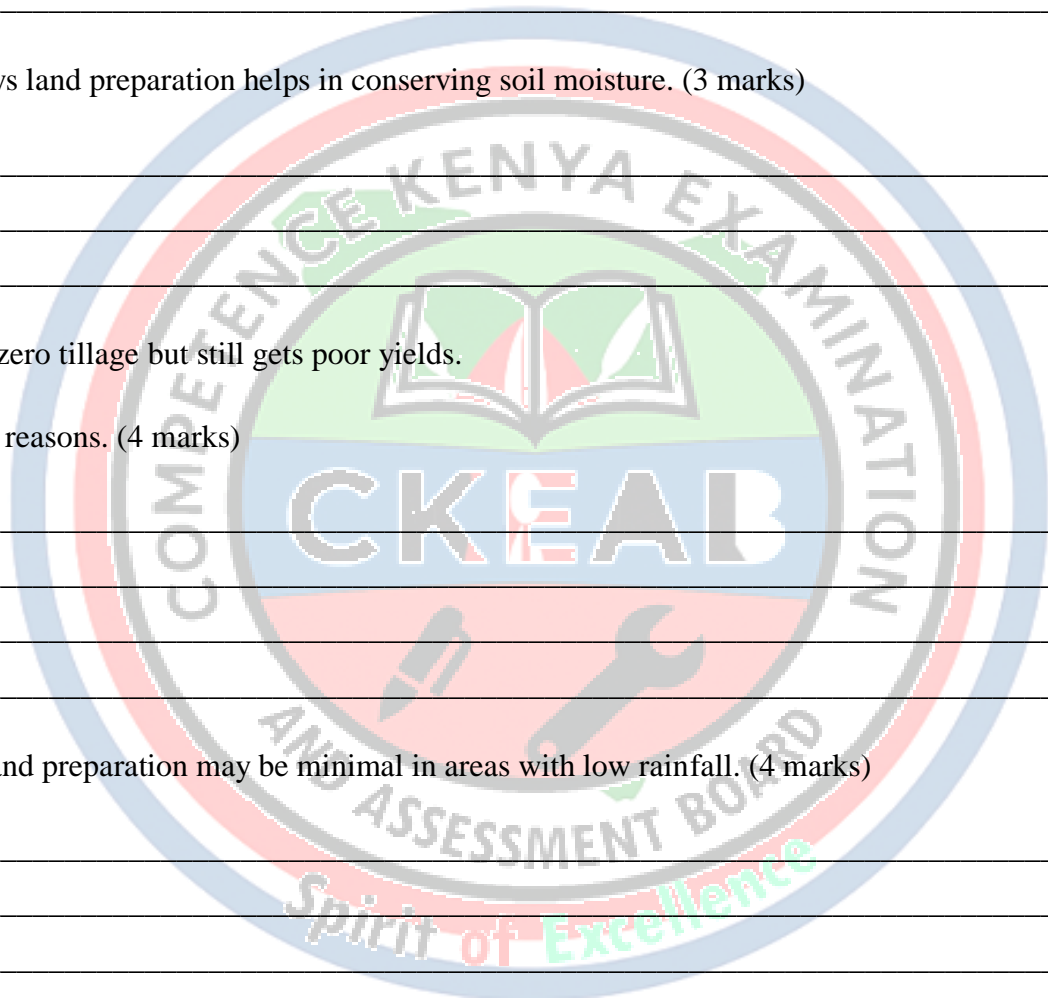
48. Explain why land preparation may be minimal in areas with low rainfall. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

49. A group of learners is preparing a school farm.

a) Suggest three activities they should carry out. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

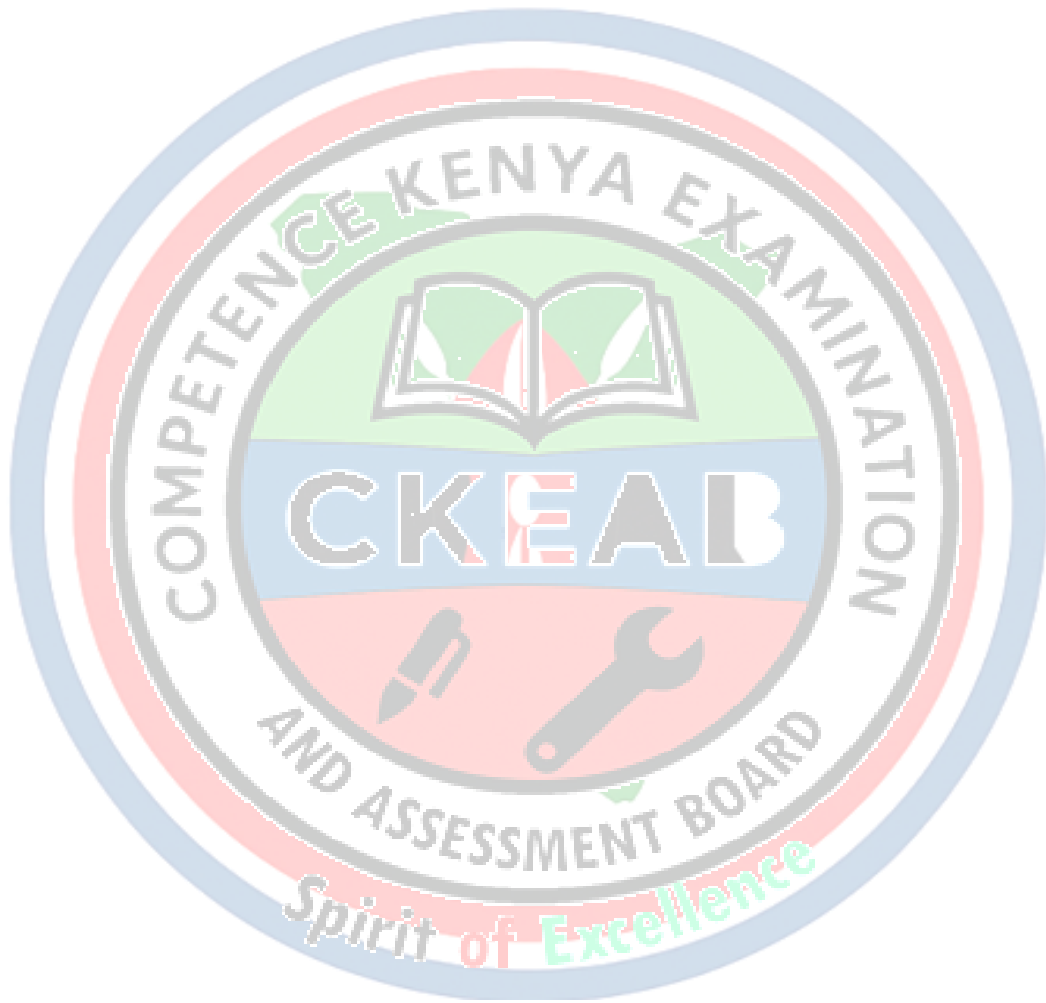


b) State two reasons why teamwork is important in land preparation. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

50. Explain the importance of land preparation in crop production. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_



## SUBSTRAND 1.4: FIELD MANAGEMENT PRACTICES

**INSTRUCTIONS:** Answer ALL questions.

1. Define the term field management practices. (2 marks)

---

---

2. State three examples of field management practices done after planting. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

3. Explain why field management practices are important in crop production. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

4. Define the term pruning. (2 marks)

---

---

5. Name four vegetable crops that require pruning. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

6. State three reasons why tomatoes are pruned. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

7. State three reasons why capsicum (sweet pepper) is pruned. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

8. Explain the meaning of single stem pruning. (2 marks)

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---

9. Explain the meaning of multiple stem pruning. (2 marks)

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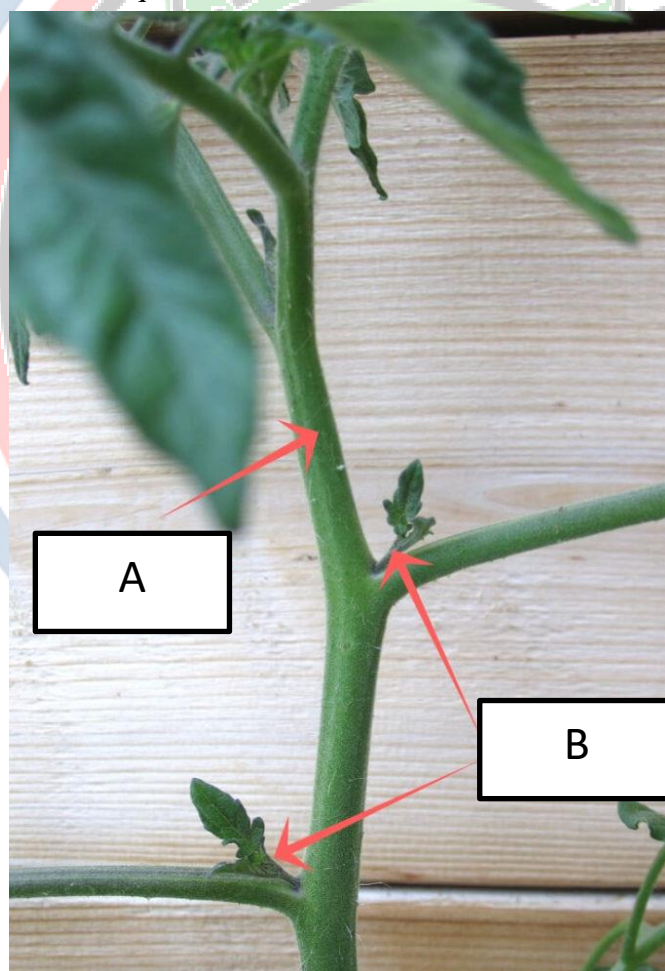
10. Differentiate between single stem pruning and multiple stem pruning. (2 marks)

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Use the diagram below to answer the questions that follow



11.

a) Identify the part labelled “B”. (1 mark)

b) State one reason why suckers are removed. (1 mark)

---

---

c) State one disadvantage of removing too many suckers. (1 mark)

---

---

12. Describe four steps followed when pruning tomatoes correctly. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

13. State three tools used for pruning vegetable crops. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

14. State four safety precautions observed during pruning. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

15. State three signs that show a tomato plant needs pruning. (3 marks)

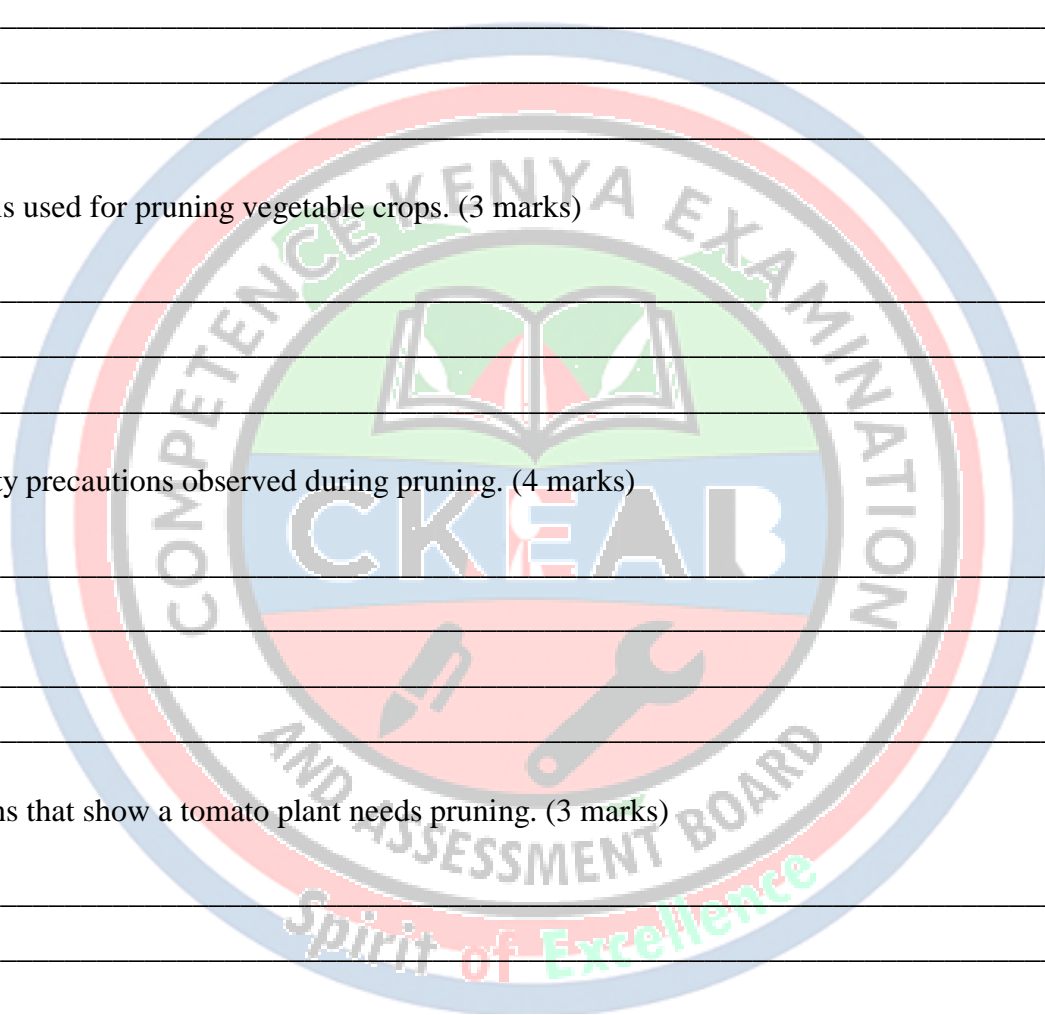
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

16. State two disadvantages of failing to prune tomato plants. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

17. State two disadvantages of over-pruning vegetable crops. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



18. Define the term perennial crop. (2 marks)

---

---

---

19. Give four examples of perennial crops that require pruning. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

20. State three reasons why perennial crops are pruned. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

21. Identify the pruning method shown below. (1 mark)



---

22. State two reasons for using this method. (2 marks)

- i. 

---
- ii. 

---

23. Explain the meaning of cutting back in perennial crops. (2 marks)

---

---

---

24. State three times when pruning of perennial crops is done. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

25. State four characteristics of a good pruning cut. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

26. Explain three ways pruning helps in pest and disease control. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

27. Define the term top dressing. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

28. State three reasons why top dressing is done in crop production. (3 marks)

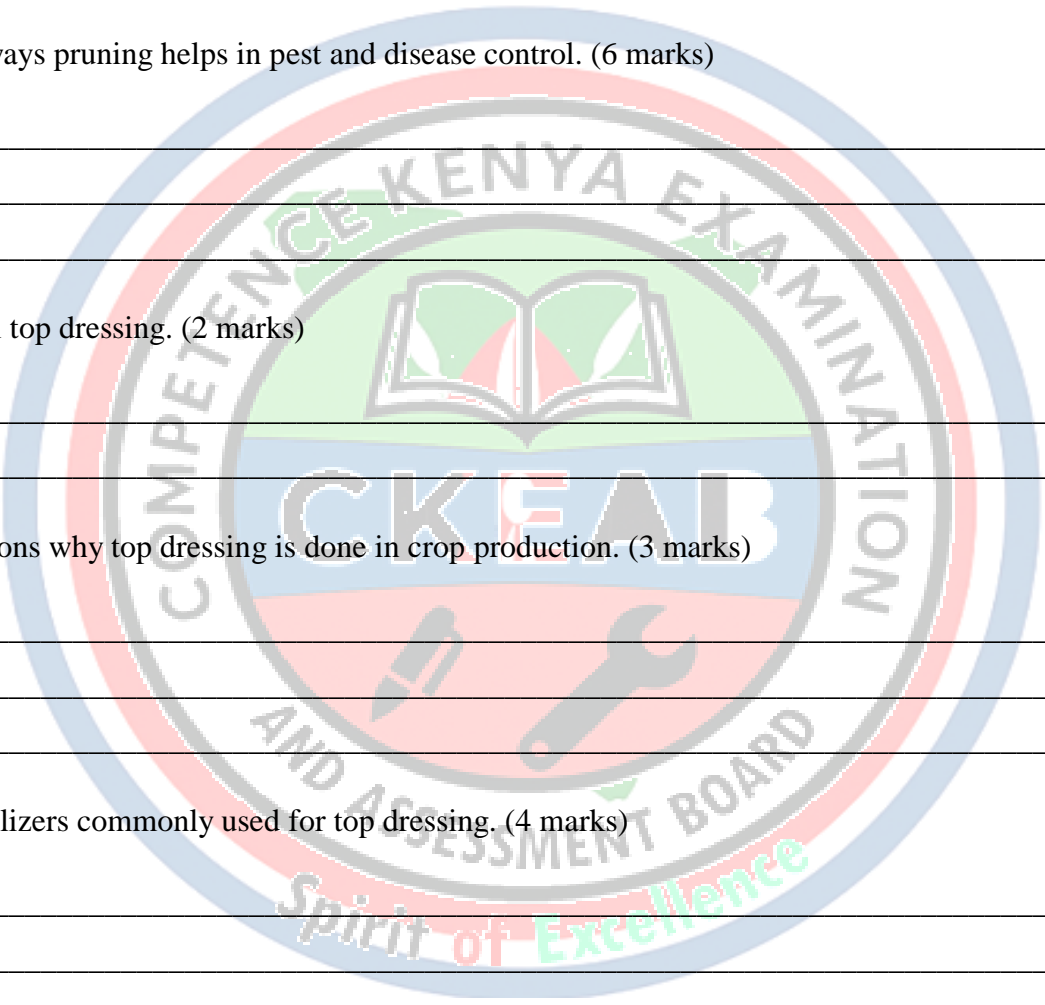
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

29. Name four fertilizers commonly used for top dressing. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

30. State three crops that require top dressing. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_



31. (a) State three signs that show a crop needs nitrogen top dressing. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

(b) State one use of the following farm tools ;

i. pruning hook ( $\frac{1}{2}$ marks)

\_\_\_\_\_

ii. bow saw ( $\frac{1}{2}$ marks)

\_\_\_\_\_

Different farmers were seen applying fertilizers using different application methods as shown below.



A



B



C



D

32.

a) Name the method labelled A. (1 mark)

\_\_\_\_\_

b) Name the method labelled B. (1 mark)

\_\_\_\_\_

c) Name the method labelled C and D. (2 marks)

C: \_\_\_\_\_

D: \_\_\_\_\_

33. State two advantages of the ring method of top dressing. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

34. State two disadvantages of broadcasting fertilizer. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

35. Explain why fertilizer should not touch the plant stem during top dressing. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

36. State four safety precautions observed when handling fertilizers. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

37. Describe a simple school-based activity to demonstrate pruning in tomatoes. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

38. Describe a procedure for top dressing maize using CAN fertilizer. (5 marks)

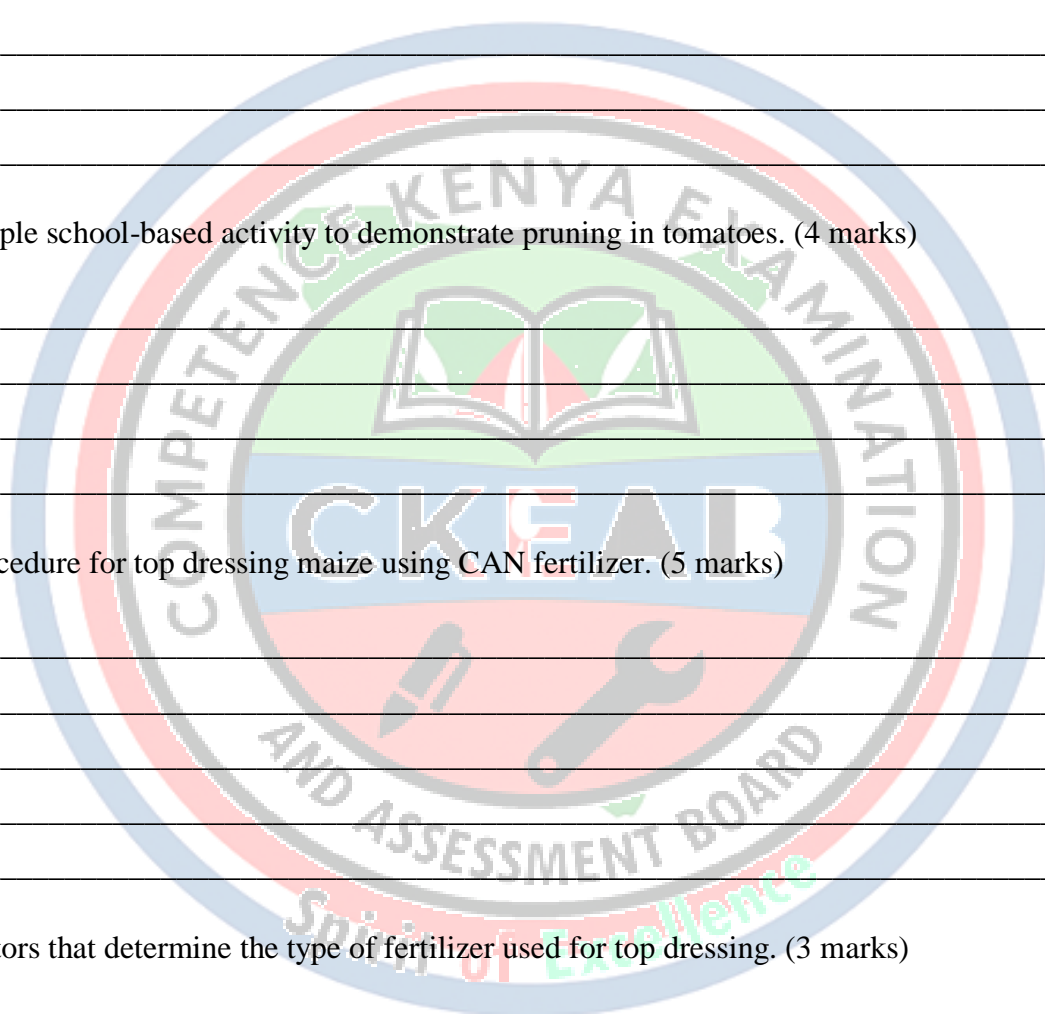
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

39. State three factors that determine the type of fertilizer used for top dressing. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

40. Explain three factors that determine the time of top dressing. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_



41. A farmer top dressed crops and later the plants dried up.

State three possible mistakes the farmer made. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

42. A farmer pruned tomatoes using a dirty blade.

a) State one possible effect. (1 mark)

\_\_\_\_\_

\_\_\_\_\_

b) Suggest two solutions. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

43. Explain why pruning is done early in the morning or late in the evening. (4 marks)

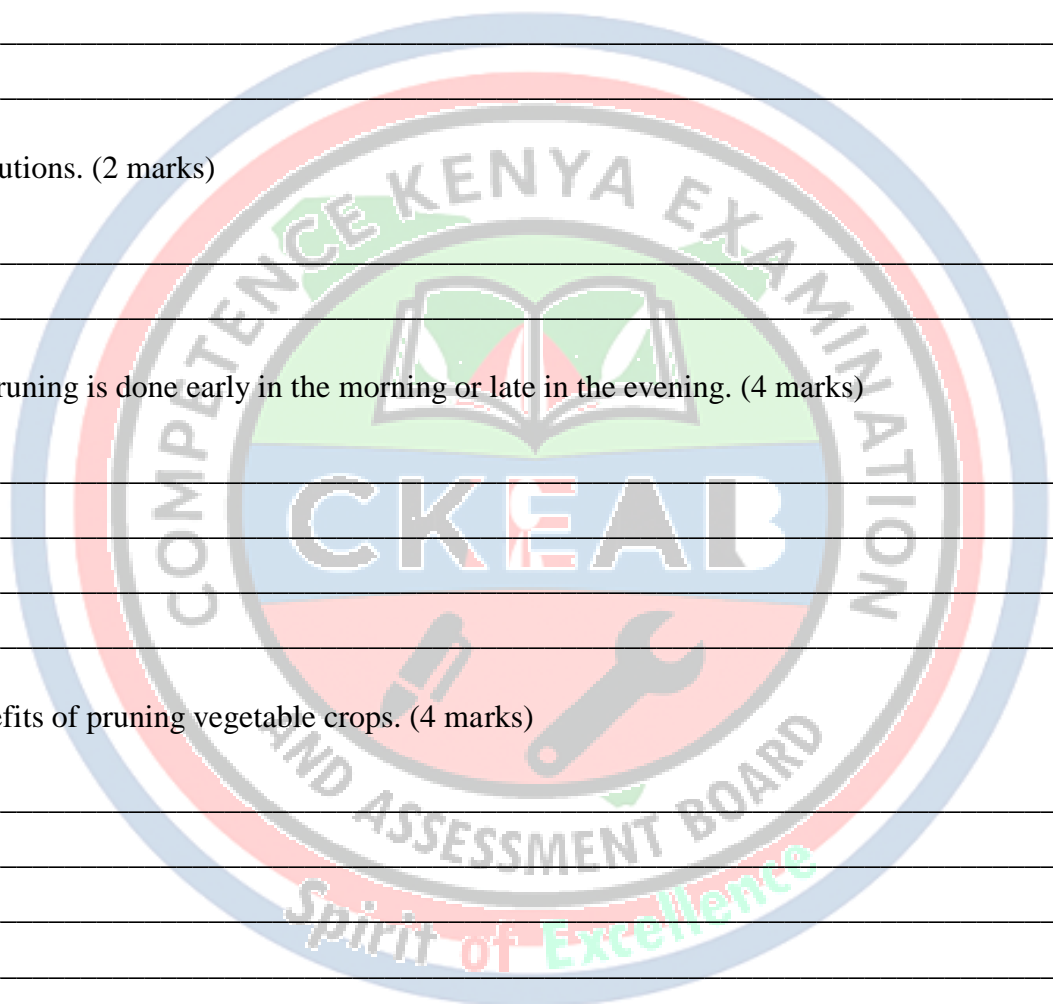
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

44. State four benefits of pruning vegetable crops. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

45. State four benefits of pruning perennial crops. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



46. A farmer grows tomatoes in a greenhouse but refuses to prune.

Predict four results on crop yield and health. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

47. Explain why top dressing should be done when the soil has enough moisture. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

48. A learner observes that crops are green but weak and fall over easily.

a) Which nutrient is likely too much? (1 mark)

\_\_\_\_\_

b) Explain the effect of excess nutrient. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

c) Suggest one corrective measure. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

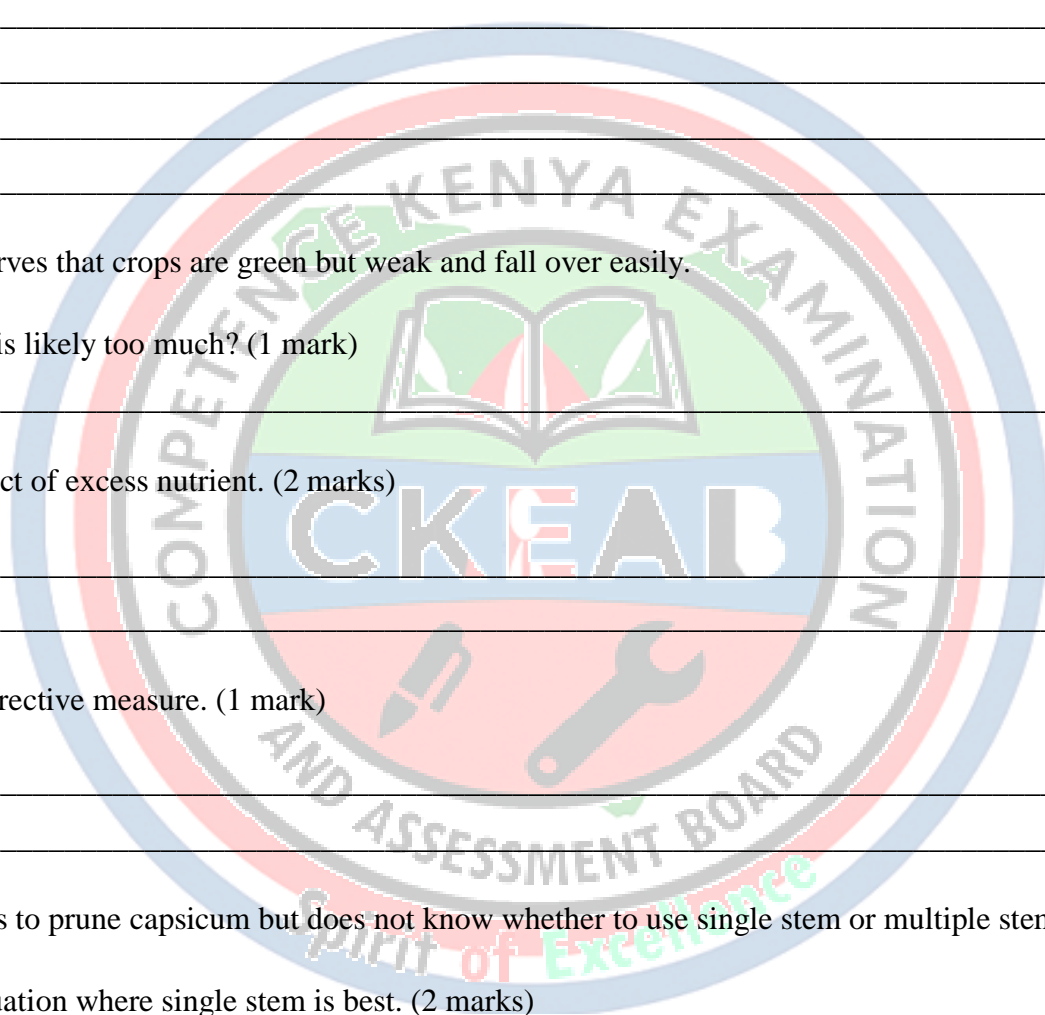
49. A farmer wants to prune capsicum but does not know whether to use single stem or multiple stem pruning.

a) Suggest one situation where single stem is best. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

b) Suggest one situation where multiple stem is best. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_



50. Explain how pruning and top dressing improve crop yield and quality. (6 marks)

---

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## SUBSTRAND 1.5: GROWING SELECTED CROPS

**INSTRUCTIONS:** Answer ALL questions.

1. Define the term nursery bed. (2 marks)

---

---

2. State four crops that are established through a nursery. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

3. State three reasons why some crops are first raised in a nursery. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

4. Give three advantages of raising crops in a nursery before transplanting. (3 marks)

- i. 

---
- ii. 

---
- iii. 

---

5. Differentiate between:

a) Nursery bed and seedbed (2 marks)

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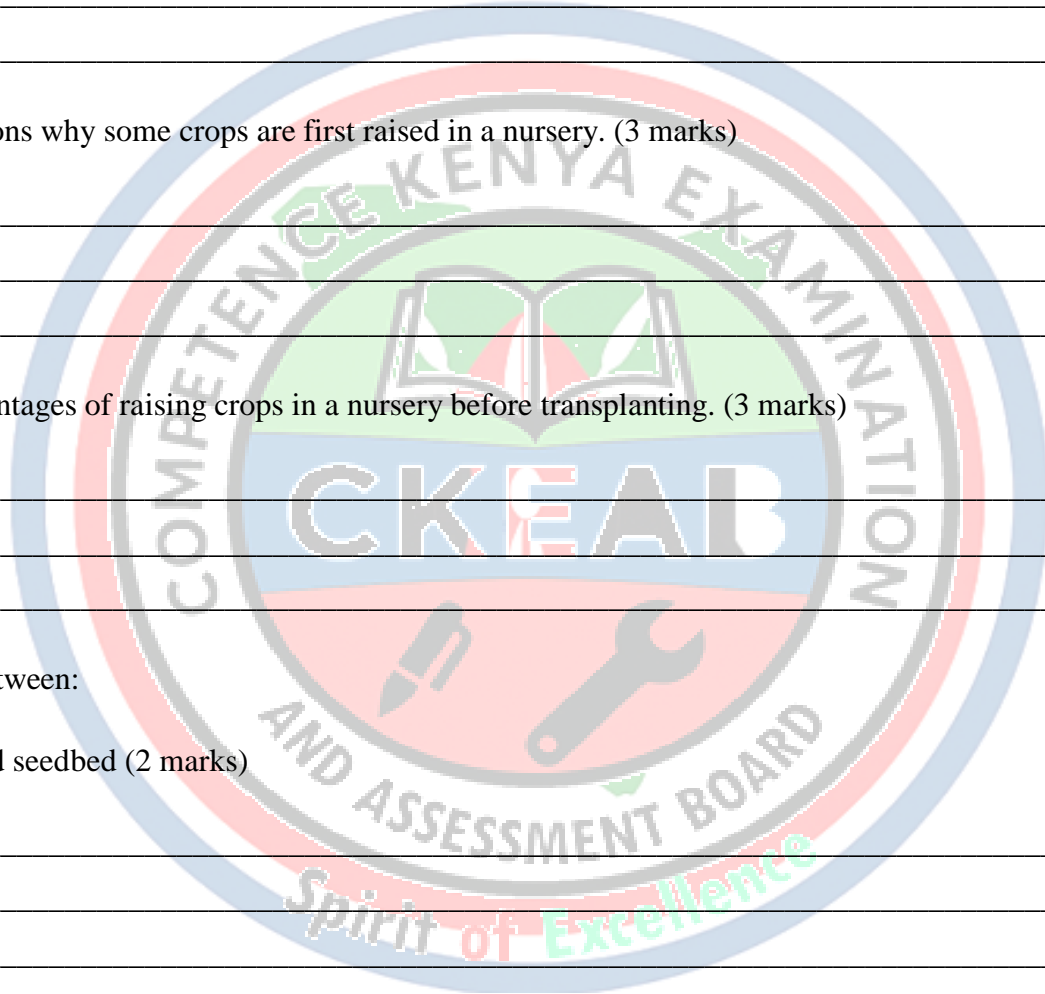
---

b) Direct sowing and transplanting (2 marks)

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---



6. State four factors considered when selecting a site for a nursery bed. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

7. State three materials required when establishing a nursery bed. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

8. List five steps followed when preparing a nursery bed. (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

9.

a) State one reason why nursery beds are made narrow (about 1m). (1 mark)

\_\_\_\_\_

\_\_\_\_\_

b) State two reasons for leaving paths between nursery beds. (2 marks)

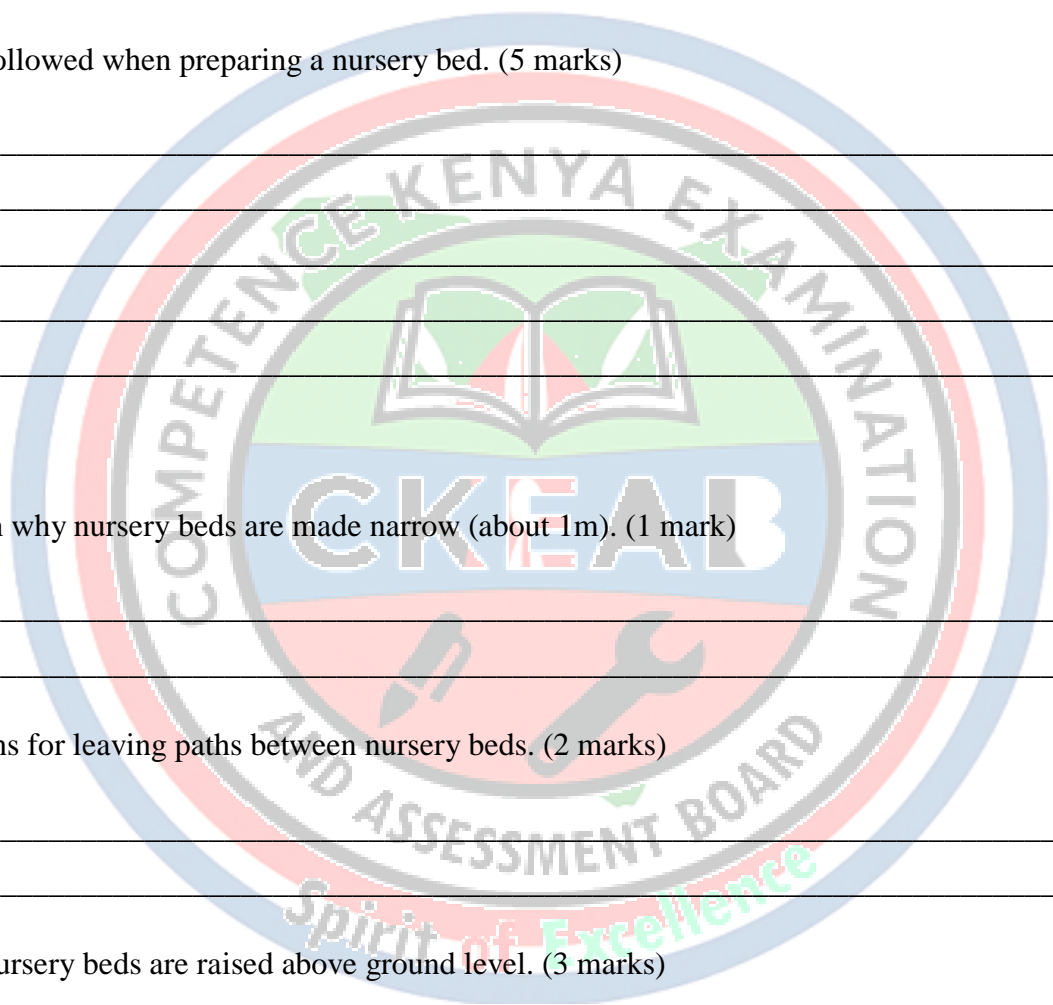
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

10. Explain why nursery beds are raised above ground level. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

11. State three methods used to treat nursery soil before sowing seeds. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_



12. Explain the importance of soil sterilization in a nursery. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

13. State three methods of sowing seeds in a nursery bed. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

14. Describe the steps of sowing tomato seeds in a nursery bed. (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

15. State three reasons why seeds are mixed with sand before sowing. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

16.

a) State the correct rule for sowing depth. (1 mark)

\_\_\_\_\_

b) Give two effects of sowing seeds too deep. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

17. State four nursery bed management practices. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

18. Explain why shading is important in a nursery. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

19. State three materials used for shading a nursery bed. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

20. Explain why watering in the nursery should be done gently. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

21. Define the term thinning. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

22. State two reasons why thinning is done in nursery beds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

23. Define the term pricking out. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

24. State three reasons for pricking out seedlings. (3 marks)

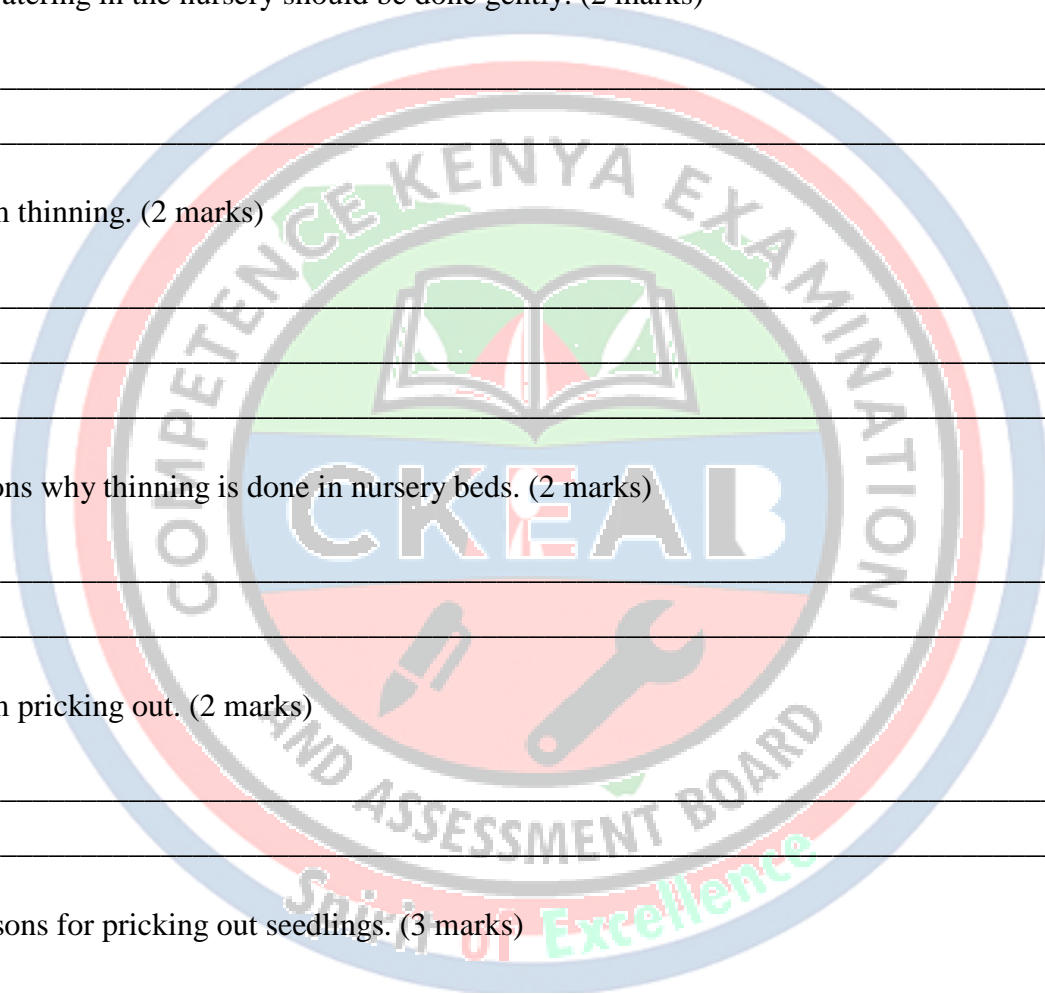
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

25. Explain the meaning of hardening off. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



26. State four ways of hardening off seedlings. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

**Study the agricultural process below**

Day 1–2: Reduce shade slightly

Day 3–4: Reduce watering slightly

Day 5–6: Expose more sunlight

Day 7: Ready for transplanting

27.

a) Name the process shown. (1 mark)

\_\_\_\_\_

b) State two reasons why this process is important. (2 marks)

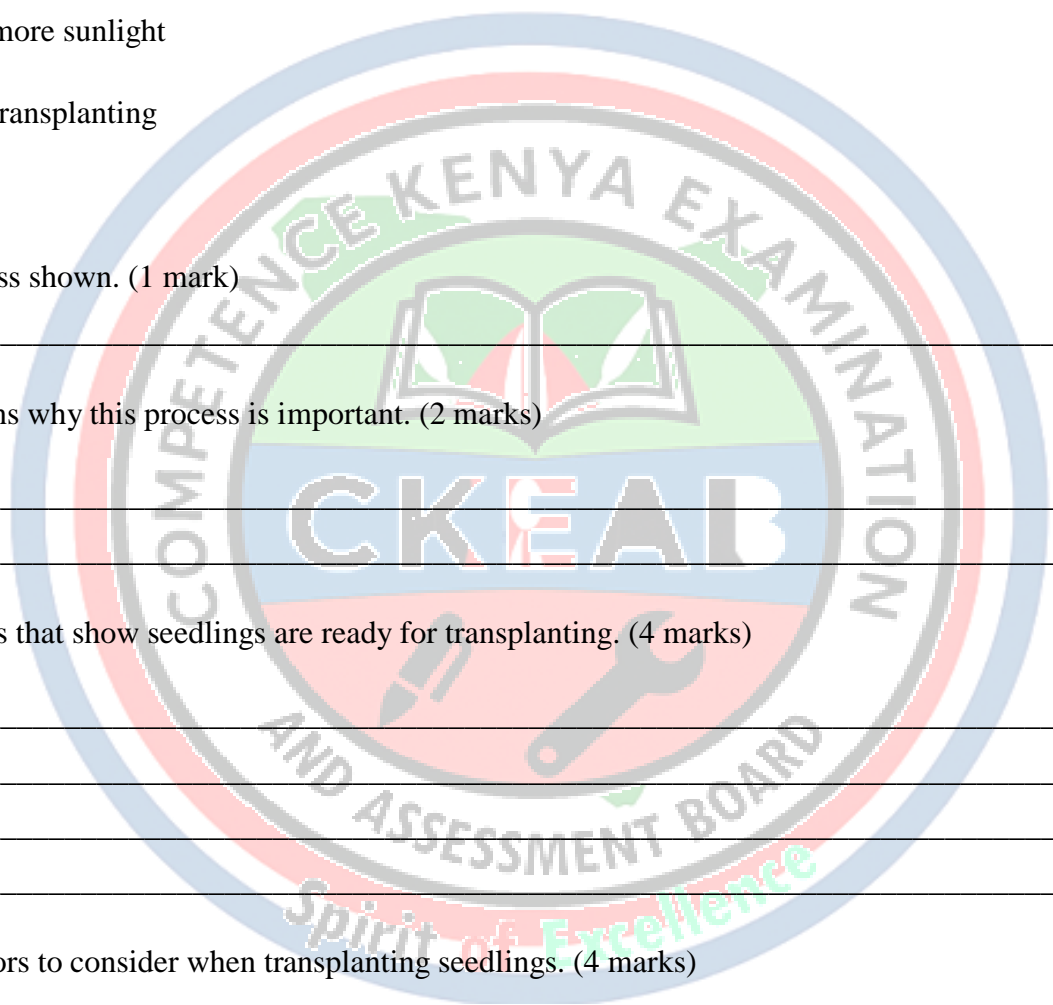
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

28. State four signs that show seedlings are ready for transplanting. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

29. State four factors to consider when transplanting seedlings. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



30. Describe the correct procedure for transplanting seedlings. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

31. State three mistakes farmers make during transplanting. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

32. Explain three ways to reduce transplanting shock. (6 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

Use the illustration below to answer the following questions.

Hole made → Seedling placed upright → Soil pressed → Watered

33.

a) State two correct actions done after placing the seedling in the hole. (2 marks)

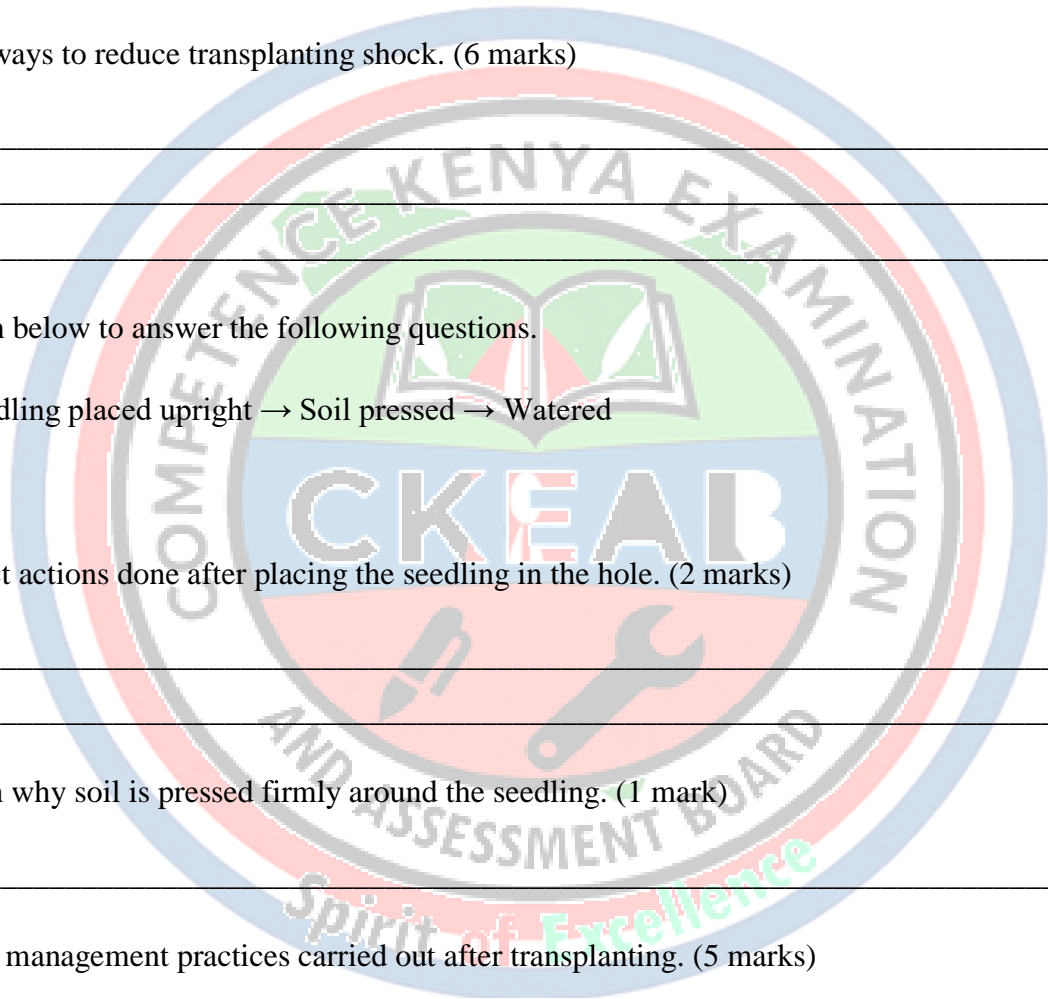
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b) Give one reason why soil is pressed firmly around the seedling. (1 mark)

\_\_\_\_\_

34. State five field management practices carried out after transplanting. (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_



35. Explain why weeding is important in growing a selected crop. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

36. State three methods of controlling weeds in vegetable crops. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

37. Explain the importance of mulching in vegetable farming. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

38. State four materials used for mulching. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

39. Explain why staking is important in tomato production. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

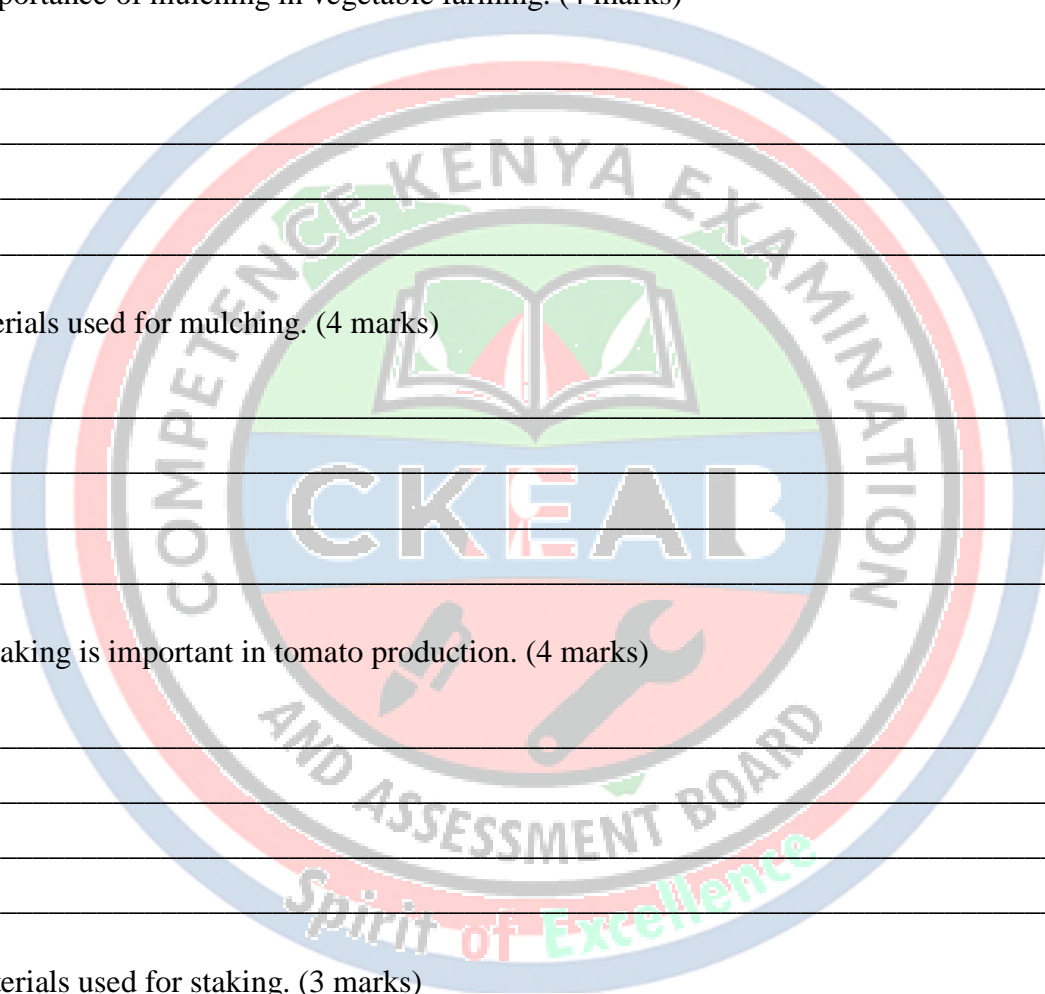
40. State three materials used for staking. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

41. Define the term harvesting. (2 marks)

\_\_\_\_\_

\_\_\_\_\_



42. State four signs that show vegetables are ready for harvesting. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

43. State three reasons why harvesting should be done at the correct time. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

44. State three effects of late harvesting in vegetables. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

**Below is a tomato maturity process**

Green → Breaker → Turning → Pink → Red ripe

45.

a) Name the stage best for long distance transport. (1 mark)

\_\_\_\_\_

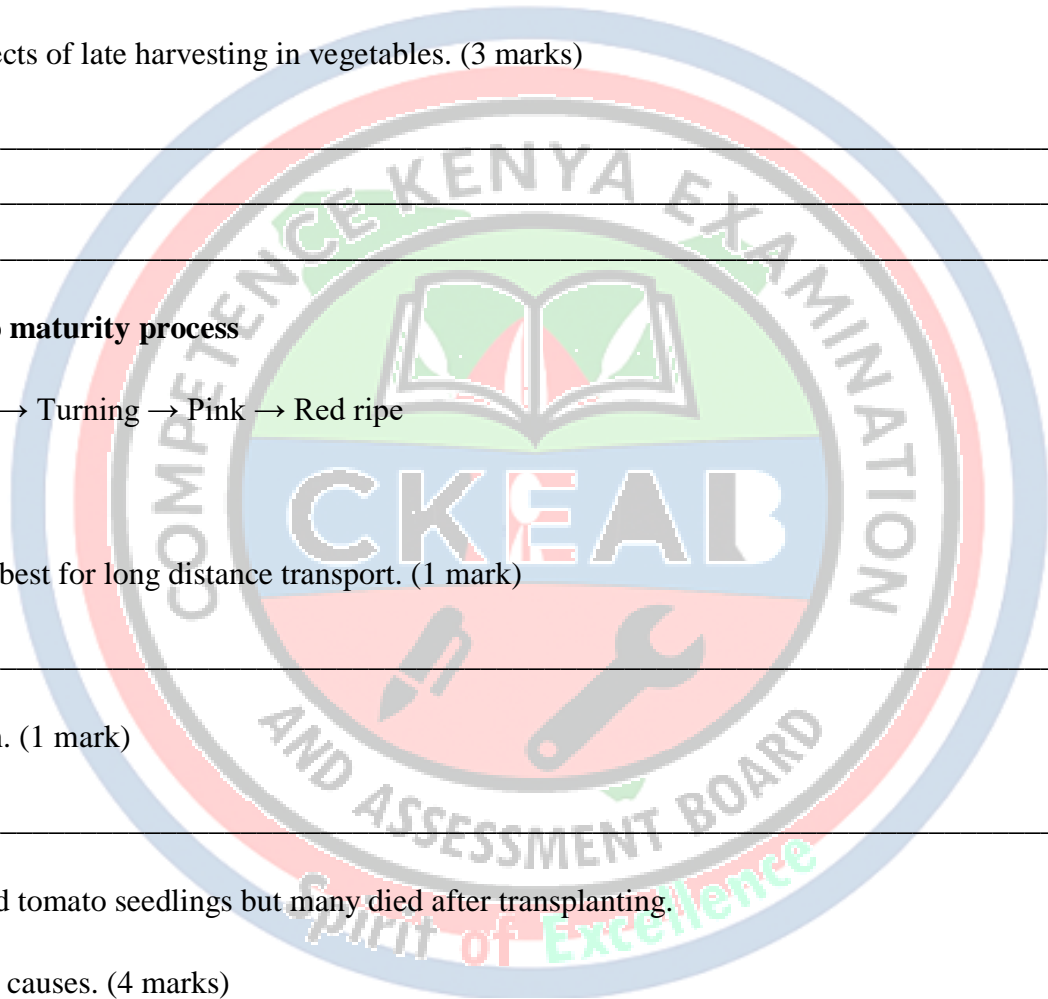
b) Give one reason. (1 mark)

- i. \_\_\_\_\_

46. A farmer raised tomato seedlings but many died after transplanting.

State four possible causes. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



47. A nursery bed is attacked by damping-off disease.

a) State two symptoms of damping-off. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b) Suggest two control measures. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

48. Explain why crop management practices must change depending on the crop type (tomatoes, onions, cabbage). (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

49. A group of learners is growing capsicum as a school project.

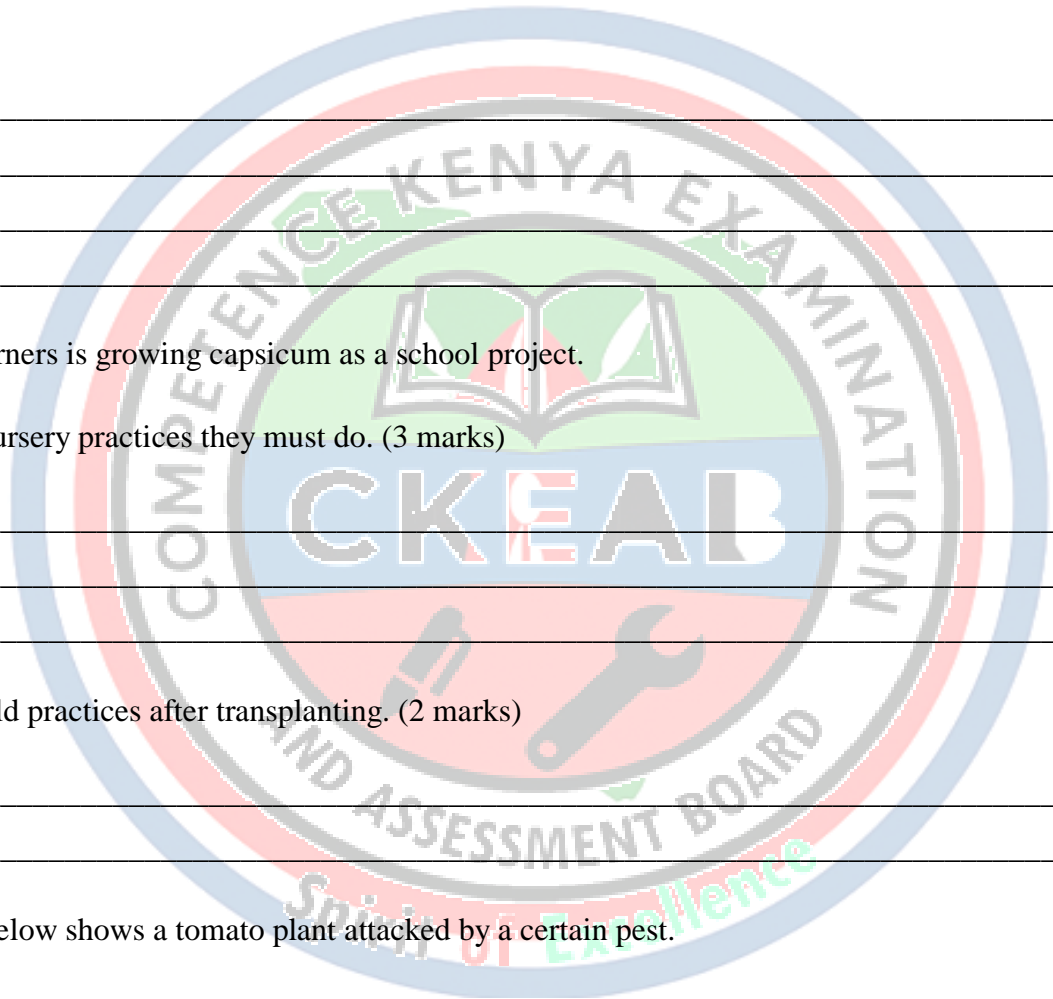
a) Suggest three nursery practices they must do. (3 marks)

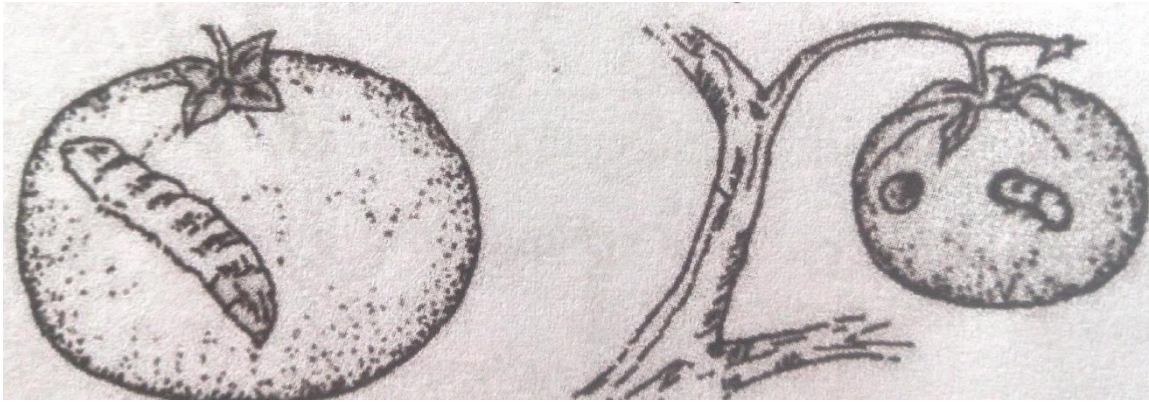
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

b) Suggest two field practices after transplanting. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

50. The diagram below shows a tomato plant attacked by a certain pest.





a). Identify the pest (1 mk)

\_\_\_\_\_

b). Give two harmful effects caused by pest on tomato plants (2 mks)

**I.** \_\_\_\_\_

**II.** \_\_\_\_\_

c). Give the control measure of the above pest. (1 mk)

**i.** \_\_\_\_\_

d). Name other pests of tomato plants (1 mk)

**i.** \_\_\_\_\_

51. The teacher has provided you with a tomato plants that appears to have stunted growth and yellowing leaves. Using science knowledge

a. Identify two possible causes of the problem. (2 Marks)

\_\_\_\_\_

\_\_\_\_\_

b. Suggest two solutions to address the problem. (2 Marks)

\_\_\_\_\_

\_\_\_\_\_

52. State three control measures for blossom end -rot disease in tomatoes. (1 ½ mks)

**i.** \_\_\_\_\_

**ii.** \_\_\_\_\_

**iii.** \_\_\_\_\_

SUBSTRAND 1.6: CROP PROTECTION (WEEDS)

INSTRUCTIONS: Answer ALL questions.

1.

(a) Define the term weed. (2 marks)

---

---

(b) Below are diagrams of common weeds found in the farm. Use them to answer questions that follow.



a) Identify weeds Q, R and S. (3mks)

Q: \_\_\_\_\_

R: \_\_\_\_\_

S: \_\_\_\_\_

b) Mention one harmful effect of weed Q and R. (1mk)

---

---

c) Give a reason why weed S is referred to as a parasitic weed. (1mk)

---

---

2. State four characteristics of weeds. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

3. Give four examples of common weeds found in crop fields in Kenya. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

4. State three reasons why weeds grow faster than crops. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

5. Explain why weed identification is important before choosing a control method. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

6. State four places where weeds can be found on a farm. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

7. State three ways of classifying weeds. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

8. Classify weeds based on life cycle into three groups. (3 marks)

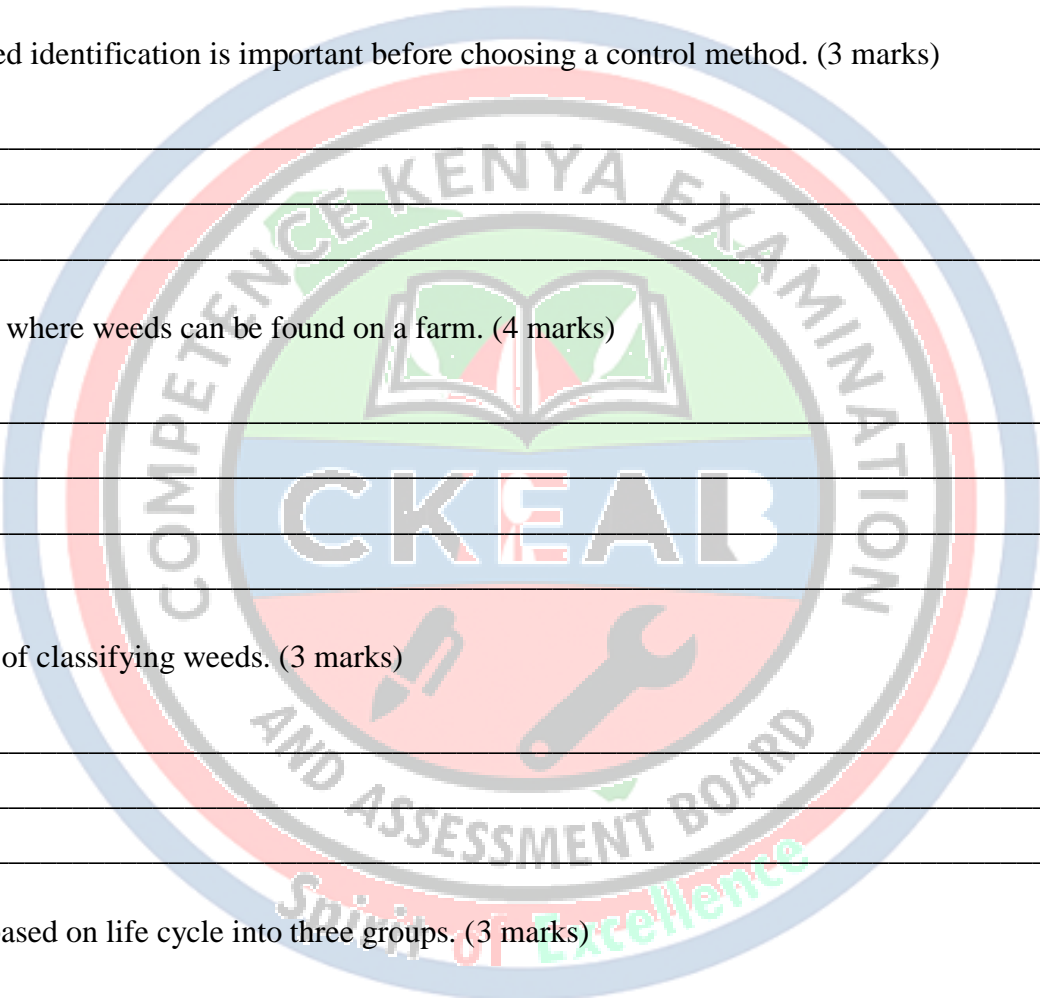
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

9. Define the following:

a) Annual weeds (2 marks)

\_\_\_\_\_

\_\_\_\_\_



b) Biennial weeds (2 marks)

---

---

c) Perennial weeds (2 marks)

---

---

10. Give two examples of annual weeds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

11. Give two examples of biennial weeds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

12. Give two examples of perennial weeds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

13.

a) State one feature of grass weeds. (1 mark)

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b) State one feature of broadleaf weeds. (1 mark)

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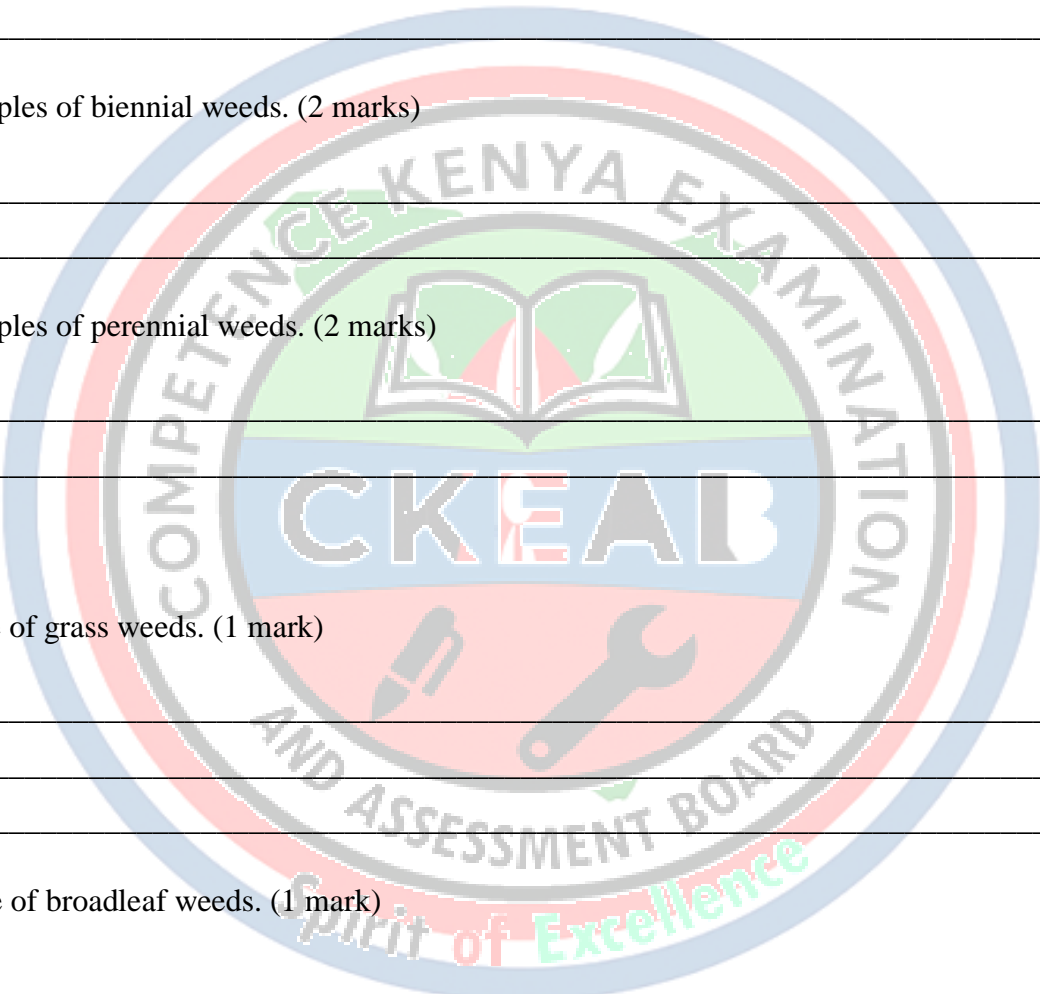
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c) State one feature of sedges. (1 mark)

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14. Differentiate between grass weeds and sedge weeds. (2 marks)

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15. Explain why sedge weeds are difficult to control. (3 marks)

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16. State four harmful effects of weeds in crop production. (4 marks)

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

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17. Explain three ways weeds reduce crop yield. (6 marks)

- i.
- ii.
- iii.

---

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---

18. State three ways weeds affect livestock production. (3 marks)

- i.
- ii.
- iii.

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19. State four ways weeds can increase farming costs. (4 marks)

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

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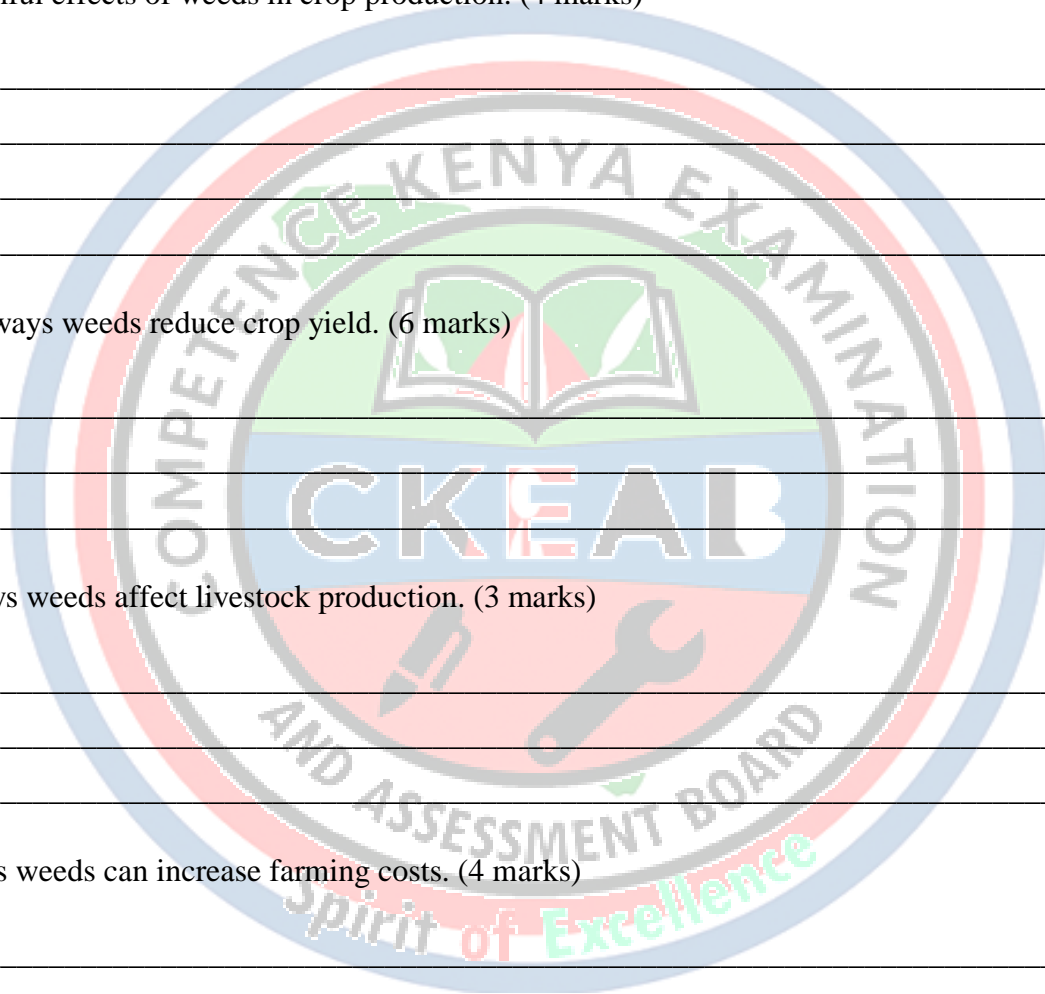
20. State three beneficial uses of weeds in a farming household. (3 marks)

- i.
- ii.
- iii.

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21. Explain two ways weeds can help in soil conservation. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. List five methods of weed control. (5 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

v. \_\_\_\_\_

23. Explain the meaning of physical weed control. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

24. State four examples of physical weed control methods. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

25. Explain the meaning of cultural weed control. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

26. State four cultural weed control methods. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

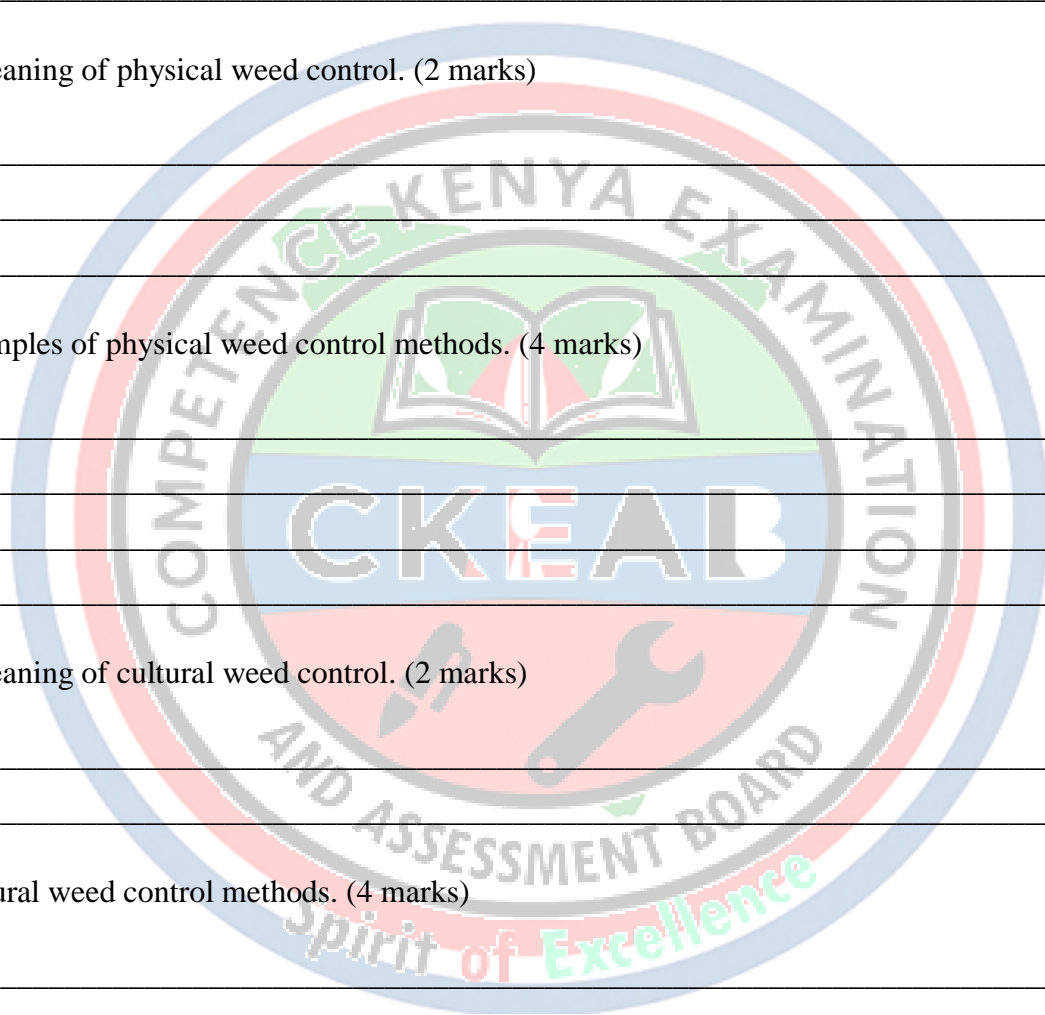
iii. \_\_\_\_\_

iv. \_\_\_\_\_

27. Explain the meaning of biological weed control. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



28. State three examples of biological weed control. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

29. Explain the meaning of chemical weed control. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

30. State four advantages of chemical weed control. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

31. State four disadvantages of chemical weed control. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

32. Explain the meaning of legislative weed control. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

33. Give three examples of legislative weed control measures. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

34. Name the equipment shown in Diagram 3. (1 mark)

\_\_\_\_\_



35. State three safety precautions when using the equipment. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

36. Define the term integrated weed management. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

37. State four benefits of integrated weed management. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

38. State four factors that determine the method of weed control used. (4 marks)

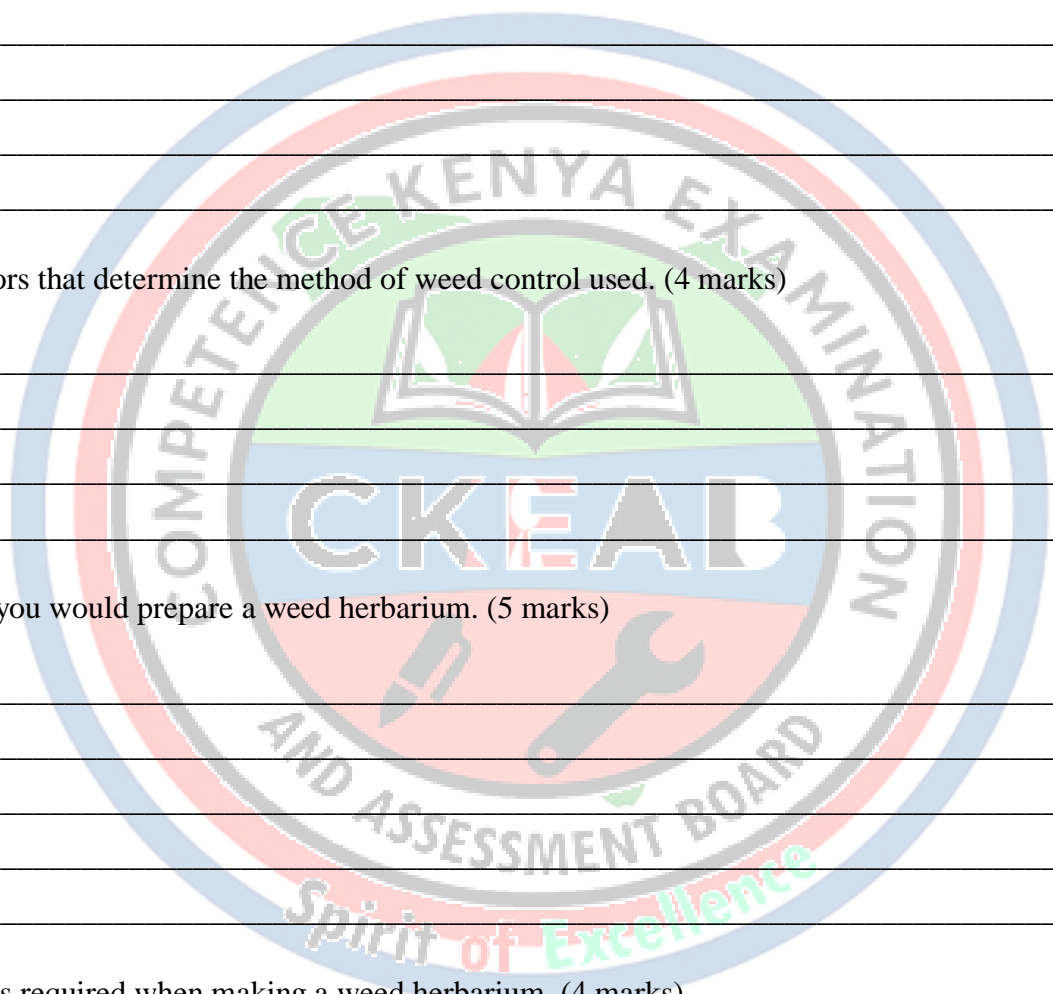
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

39. Describe how you would prepare a weed herbarium. (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

40. State four items required when making a weed herbarium. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_



41. A learner uproots weeds and leaves them in the field.

a) State one disadvantage of this practice. (1 mark)

---

---

b) Suggest two correct ways of disposing weeds. (2 marks)

- i. 

---
- ii. 

---

42. Describe steps followed in hand weeding of a vegetable garden. (4 marks)

- i. 

---
- ii. 

---
- iii. 

---
- iv. 

---

43. Explain why early weed control is recommended in crop production. (4 marks)

- i. 

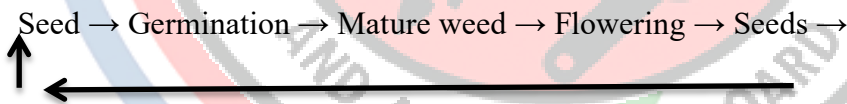
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- ii. 

---
- iii. 

---
- iv. 

---

Study the chart below and answer the questions that follow.



44.

a) Identify the best stage to control weeds. (1 mark)

---

b) Give one reason. (1 mark)

---

---

45. A farmer sprays herbicide but weeds regrow after 2 weeks.

Give four possible reasons. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

46. Explain why perennial weeds are harder to control than annual weeds. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

47. A maize farmer wants to control weeds without using chemicals.

a) Suggest three suitable methods. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

b) Give two disadvantages of using only non-chemical methods. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

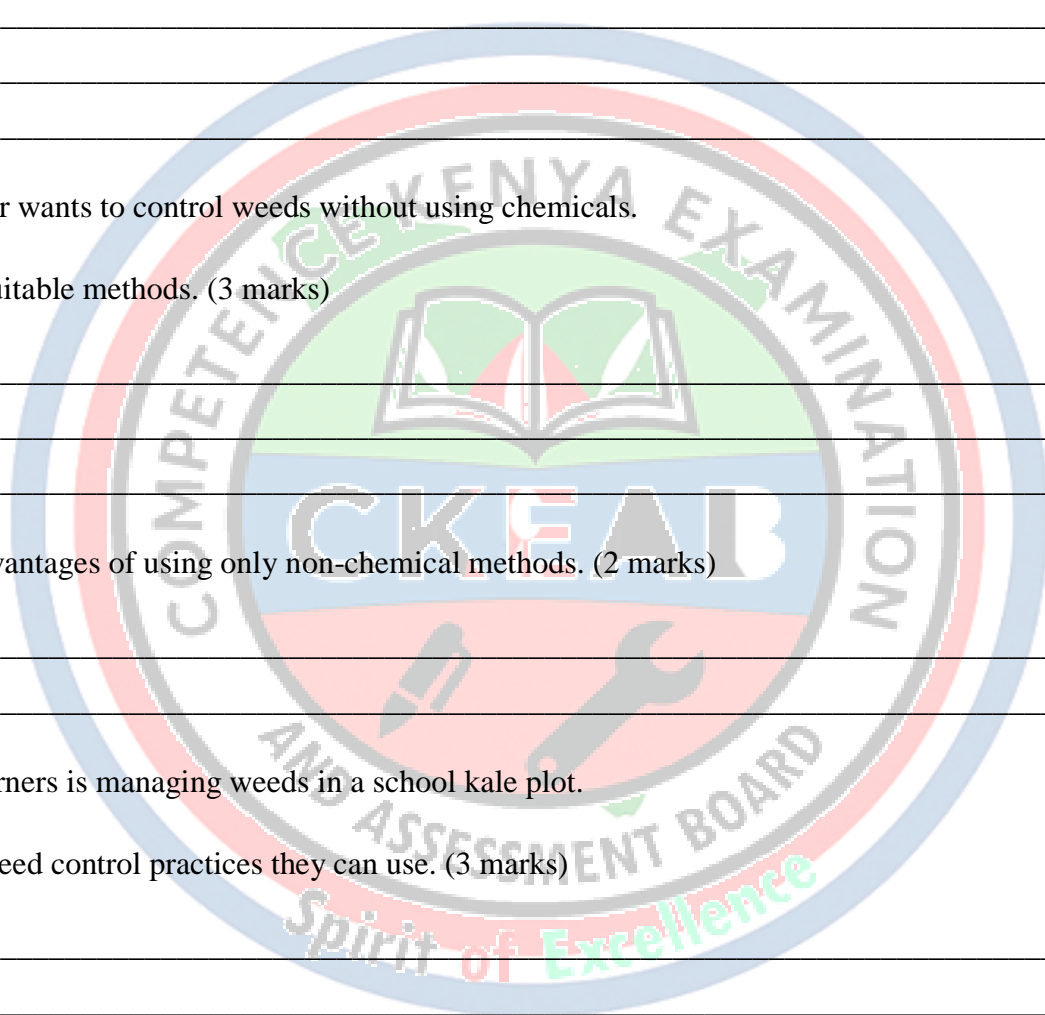
48. A group of learners is managing weeds in a school kale plot.

a) Suggest three weed control practices they can use. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

b) State two safety rules they should follow. (2 marks)

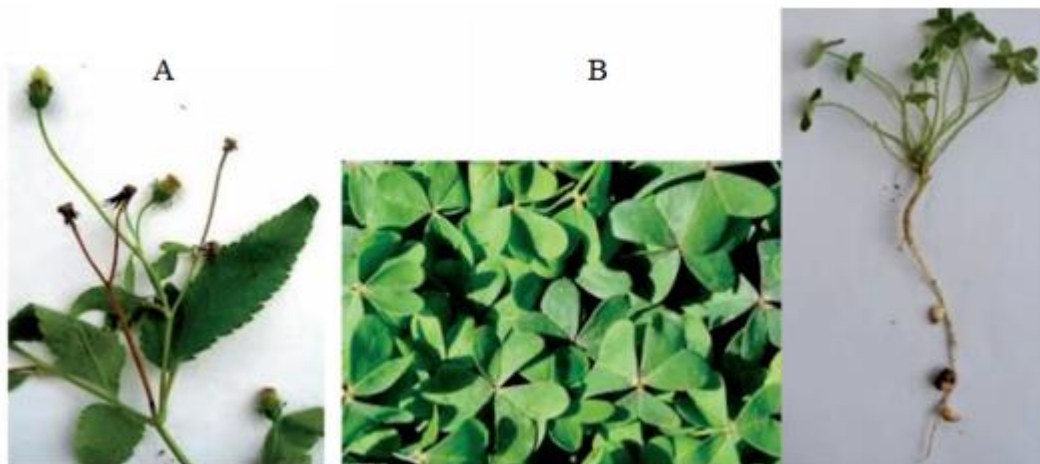
- i. \_\_\_\_\_
- ii. \_\_\_\_\_



49. Explain the importance of weed control in preventing pests and diseases. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

50. The photograph below shows weeds labeled **A** and **B**.



a. Identify the weed labeled **A**. (1 mark)

\_\_\_\_\_

b. State **one** mechanical control measure for the weed labeled **A**. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

c. Which category of herbicide will be most suitable to control the weeds labelled **A** and **B**? (1 mark)

\_\_\_\_\_

d. Give a reason for your answer on weed **B** in (c) above. (1 mark)

\_\_\_\_\_

51. Study the weeds illustrated below and answer the questions that follow



a. Identify the weeds shown (2 mks)

A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

D. \_\_\_\_\_

b. Give one economic importance of each one of the weeds (2 mks)

A- \_\_\_\_\_

B- \_\_\_\_\_

c. State the advantage of weed C on the farm (1 mk)

\_\_\_\_\_  
\_\_\_\_\_

d. Why is weed D difficult to control (1 mk)

\_\_\_\_\_  
\_\_\_\_\_

STRAND 2.0: ANIMAL PRODUCTION

SUBSTRAND 2.1: BREEDS OF LIVESTOCK

**CATTLE BREEDS**

1. Define the term breed in livestock. (2 marks)

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---

2. Name two dairy cattle breeds found in Kenya. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

3. Name two beef cattle breeds found in Kenya. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

4. State three observable characteristics of Holstein Friesian cattle. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

5. State three observable characteristics of Boran cattle. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

6. Explain two differences between dairy and beef cattle. (4 marks)

Dairy cattle	Beef cattle

7. State two purposes of keeping dairy cattle. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

8. State two purposes of keeping beef cattle. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

9. Explain one reason why crossbreeding is done in cattle. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

10. (a) A farmer wants high milk production but low adaptability. Suggest one suitable breed. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

(b) State the origin of each of the following dual purpose cattle breeds. (1 mark)

a. Sahiwal: \_\_\_\_\_

b. Red poll: \_\_\_\_\_

c) Identify the names of the following breeds of cattle



A



B



C



D



E

A: \_\_\_\_\_

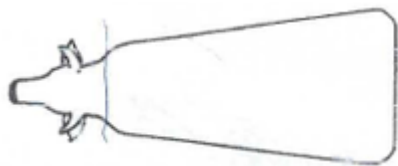
E: \_\_\_\_\_

B: \_\_\_\_\_

C: \_\_\_\_\_

D: \_\_\_\_\_

d) Below is an illustration showing a birds view of a cow.



a) With a reason identify, the type of cattle shown above. (2mks)

---

---

b) State three other ideal features of the above animal not seen from the illustration. (3mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

**PIG BREEDS**

11. Name two breeds of pigs found in Kenya. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

12. State two observable characteristics of Large White pigs. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

13. State two observable characteristics of Landrace pigs. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

14. Differentiate commercial pigs from local pigs. (3 marks)

Commercial pigs	Local pigs

15. State two purposes of keeping pigs. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

16. Explain why pigs require balanced feed for productivity. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

17.(a) State two advantages of keeping improved pig breeds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

b) Identify the following breeds of livestock:

- i. A pig with dished face, erect ears and white colour \_\_\_\_\_ (1mk)
- ii. A beef breed of cattle which is cream in colour and the male weighs up to 1200 kg  
\_\_\_\_\_
- iii. A breed of goat usually with long hair \_\_\_\_\_ (1 mk)
- iv. A wool sheep with long curly wool usually covers its face \_\_\_\_\_ (1 mk)

c) The photographs labeled D and E are pig breeds. Study them and answer the questions that follow.



D



E

G

i) Identify the breeds D and E (1 mark)

D: \_\_\_\_\_

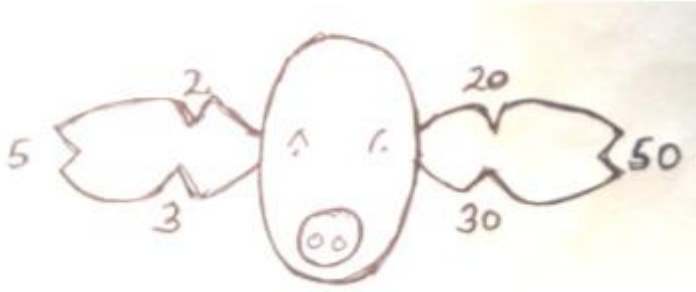
E: \_\_\_\_\_

ii) Name the part labeled G on the diagram E (1 mark)

iii) State the main product got from breed D (1mark)

---

d) Study the diagram below and answer the questions that follow



i. Name the practice illustrated above (1mk)

---

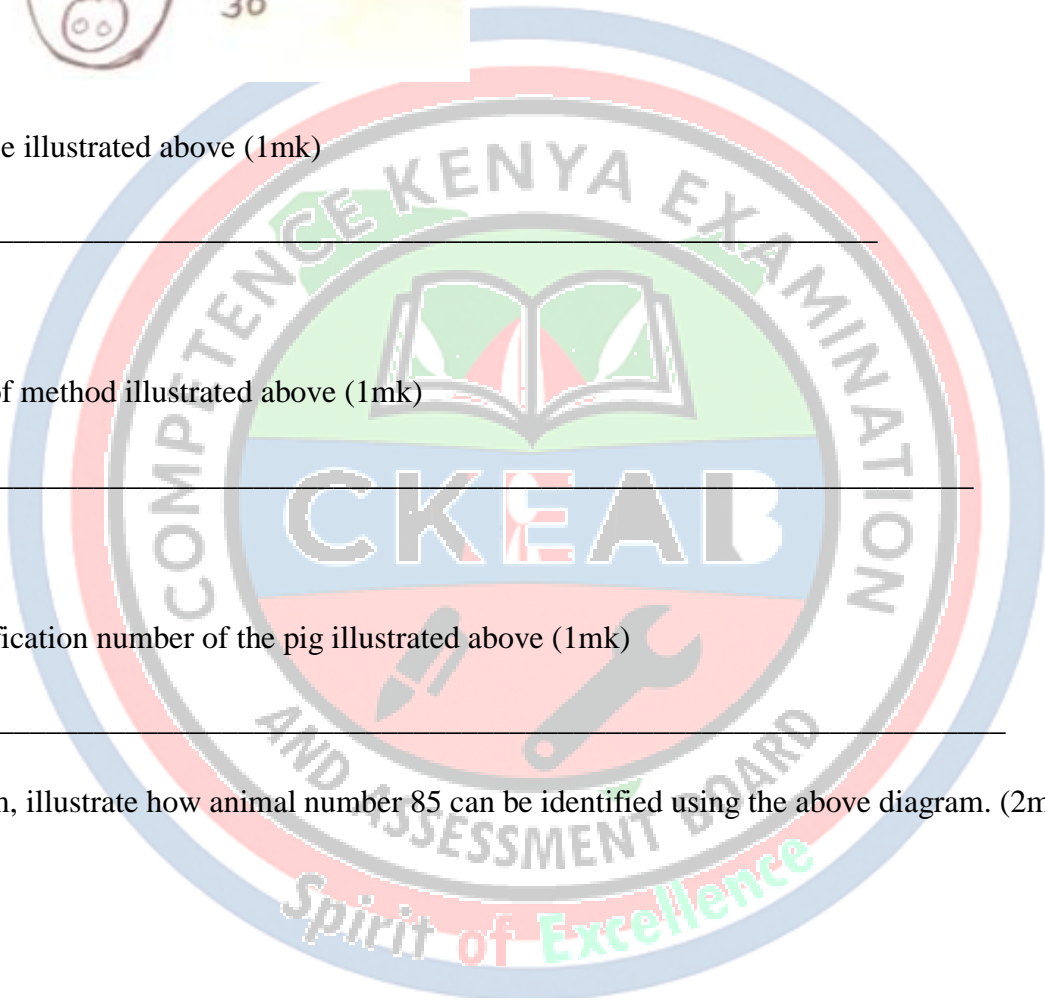
ii. Name the type of method illustrated above (1mk)

---

iii. Give the identification number of the pig illustrated above (1mk)

---

iv. Using a diagram, illustrate how animal number 85 can be identified using the above diagram. (2mks)



**RABBIT BREEDS**

18. Name two breeds of rabbits used in Kenya. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

19. State three characteristics of New Zealand White rabbits. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

20. State three characteristics of Californian rabbits. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

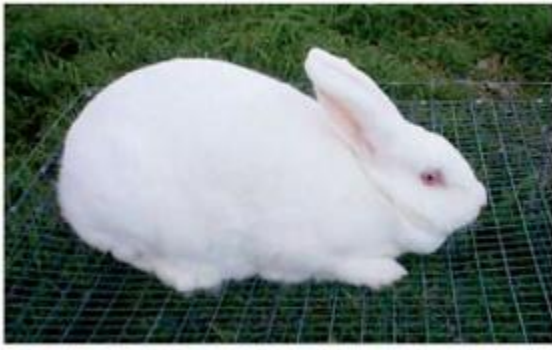
21. Explain two reasons why rabbits are kept in small-scale farming. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

22. (a) State two differences between meat rabbits and fancy rabbits. (2 marks)

Meat rabbits	Fancy rabbits

b) The pictures below illustrate two rabbit breeds.



A



B

i. Name the rabbit breeds shown above.

A \_\_\_\_\_ (1 mark)

B \_\_\_\_\_ (1 mark)

ii. Name the major feeding practice missing from the photograph labeled B. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

iii. Give **one** advantage of housing the rabbits on the floor illustrated above. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

d) Below is a photograph of a rabbit breed, study it and answer the questions that follow.



a) Identify two observable characteristics used to identify the above rabbit breed. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b) State one reason why the above rabbit breed is preferred by most farmers. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

c) Give two reasons why rabbit keeping is gaining more popularity in Kenya. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

**SHEEP BREEDS**

23. Name two breeds of sheep in Kenya. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

24. State three characteristics of Dorper sheep. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

25. State three characteristics of Merino sheep. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

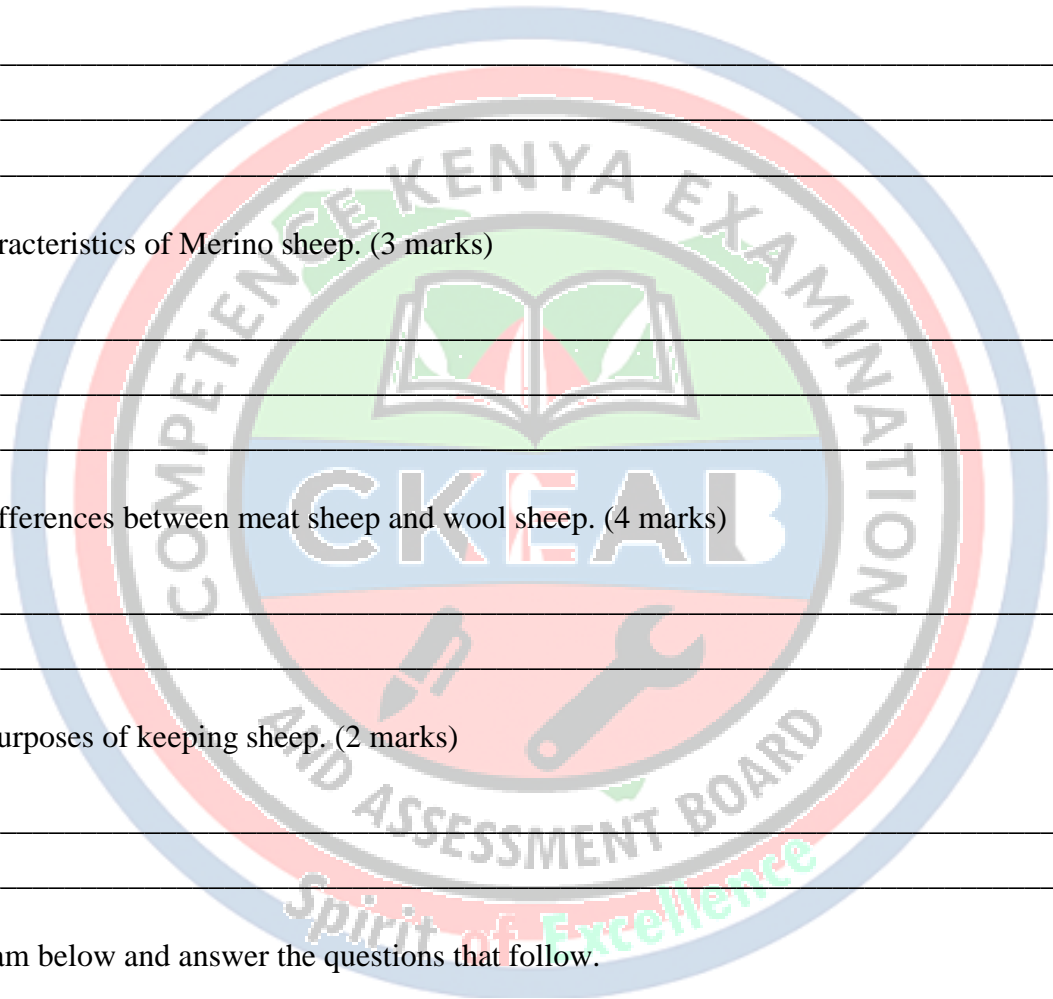
26. Explain two differences between meat sheep and wool sheep. (4 marks)

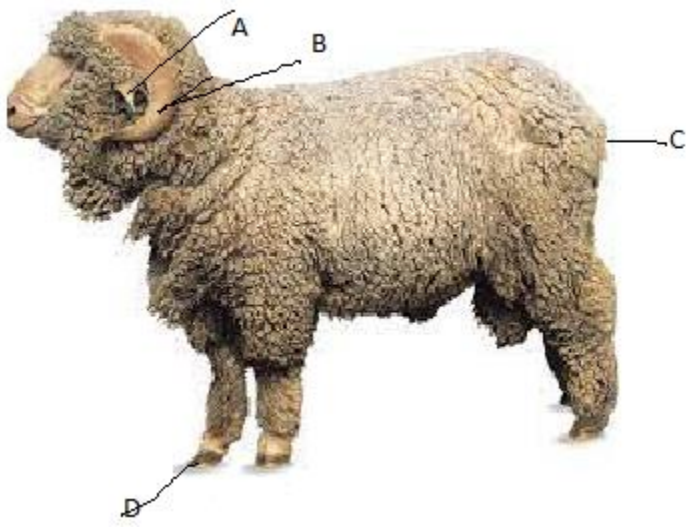
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

27. (a) State two purposes of keeping sheep. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b) Study the diagram below and answer the questions that follow.





i. Identify the sheep breed illustrated (1 mark)

\_\_\_\_\_

ii. Identify the practice that can be carried out at point labeled C and D (2 marks)

C: \_\_\_\_\_

D: \_\_\_\_\_

iii. Name the practice that should be carried at point B at the early stages of development. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

iv. Identify the practice that can be carried out at point labeled C and D (2 marks)

C: \_\_\_\_\_

D: \_\_\_\_\_

**GOAT BREEDS**

28. Name two goat breeds in Kenya. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

29. State three characteristics of Saanen goats. (3 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

30. State three characteristics of Boer goats. (3 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

31. State two differences between dairy and meat goats. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

32.(a) Explain two purposes of keeping goats. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

b)

i: identify two exotic Dairy breed of goats reared in Kenya

i. \_\_\_\_\_

ii. \_\_\_\_\_

ii: identify two breeds of Meat goats reared in Kenya

i. \_\_\_\_\_

ii. \_\_\_\_\_

c) The picture below shows a breed of goat kept in East Africa. Use it to answer questions that follow.



i. Identify the breed \_\_\_\_\_ (1mk)

ii. Classify the breed according to the purpose it is kept for (1mk)

\_\_\_\_\_

iii. Name other three breeds in the class named in (b) above. (3mks)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

d) State the colour difference between the Galla and saanen goat breeds. (1marks)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

e) Name one goat breed that is reared for

a. Mohair:- \_\_\_\_\_ (1/2 marks)

b. meat : \_\_\_\_\_ (1/2 marks)

33. Explain two factors that determine productivity of livestock breeds. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. State two observable traits used to compare cattle productivity. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

35. State two observable traits used to compare goat productivity. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

36. Explain two reasons why exotic breeds may fail in some Kenyan areas. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

37. State two advantages of keeping indigenous breeds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

38. State two disadvantages of keeping exotic breeds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

39. A group of learners observed livestock breeds in a farm.

a) Suggest four traits they should record. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

b) Explain two ways to ensure accurate observations. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

40. Describe four steps to take during a field trip to identify cattle breeds. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

41. State two safety precautions when handling pigs during breed observation. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

42. Explain two methods of distinguishing meat sheep from wool sheep in a farm. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

43. Describe two ways to assess productivity of dairy goats. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

44. A farmer wants high milk yield and resistance to disease in goats.

Suggest two suitable breeds and justify your choice. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

45. A learner compared two breeds of pigs: Landrace and Large White.

a) State two differences in productivity. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) Suggest one reason for the differences. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

46. Explain why crossbreeding may increase livestock productivity. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

47. A farmer noticed low growth rate in local sheep.

a) State two causes. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

b) Suggest two interventions to improve growth. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

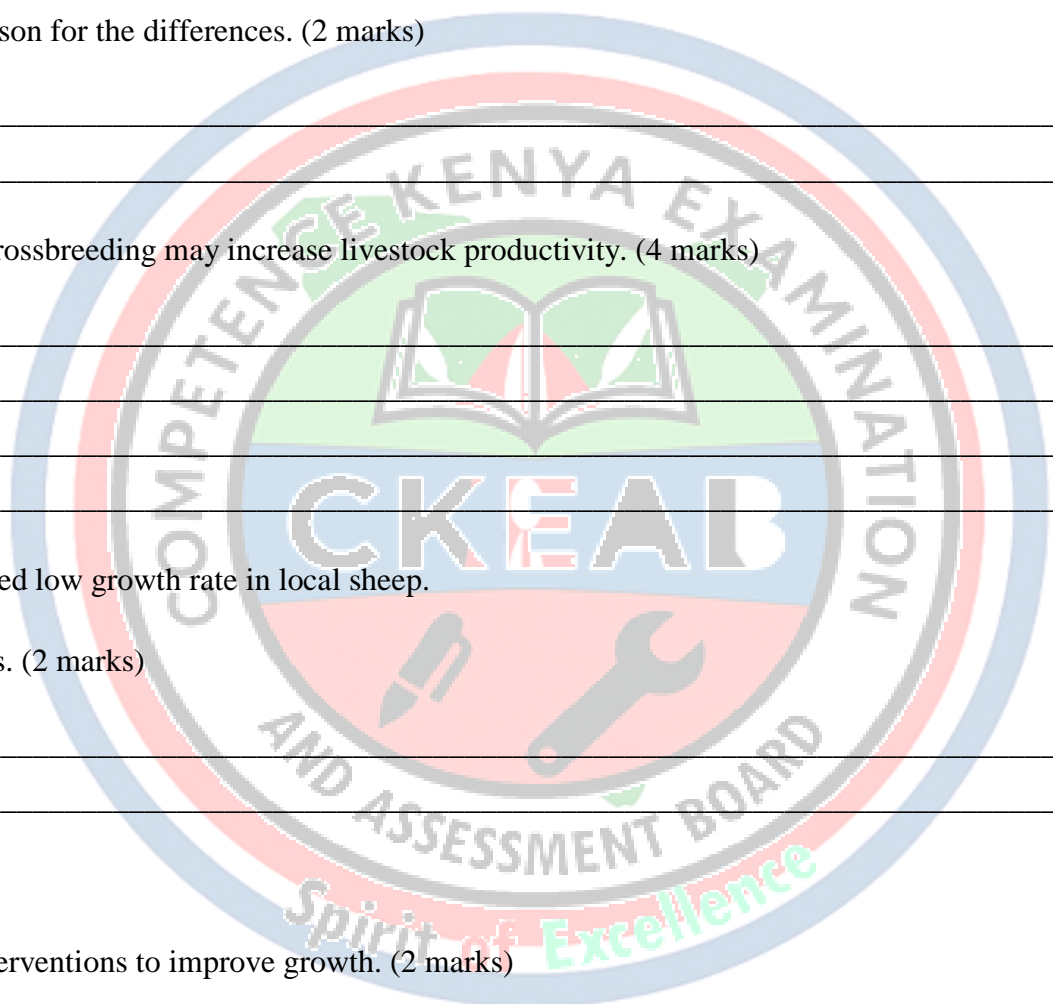
48. Explain why exotic cattle may perform poorly under harsh Kenyan conditions. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_



49. A farmer wants to start a rabbit project for income generation.

a) Suggest two suitable breeds. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b) Explain two reasons for choosing them. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



**SUBSTRAND 2.2: ANIMAL HANDLING AND SAFETY**

**INSTRUCTIONS: Answer ALL questions.**

1. Define animal handling. (2 marks)

---

---

2. State two forms of animal handling commonly used in farms. (2 marks)

- i. \_\_\_\_\_

ii. \_\_\_\_\_

3. Explain two reasons why correct handling of animals is important. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

4. State two inhumane methods of handling domestic animals. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

5. Explain one effect of overworking draught animals. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

6. Explain two consequences of poor transport methods on animals. (4 marks)

iv. \_\_\_\_\_

v. \_\_\_\_\_

7. State two ways of humane slaughtering. (2 marks)

vi. \_\_\_\_\_

vii. \_\_\_\_\_

8. Describe one inappropriate harnessing method that should be avoided. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Give two reasons why beating animals is considered inhumane. (2 marks)

viii. \_\_\_\_\_

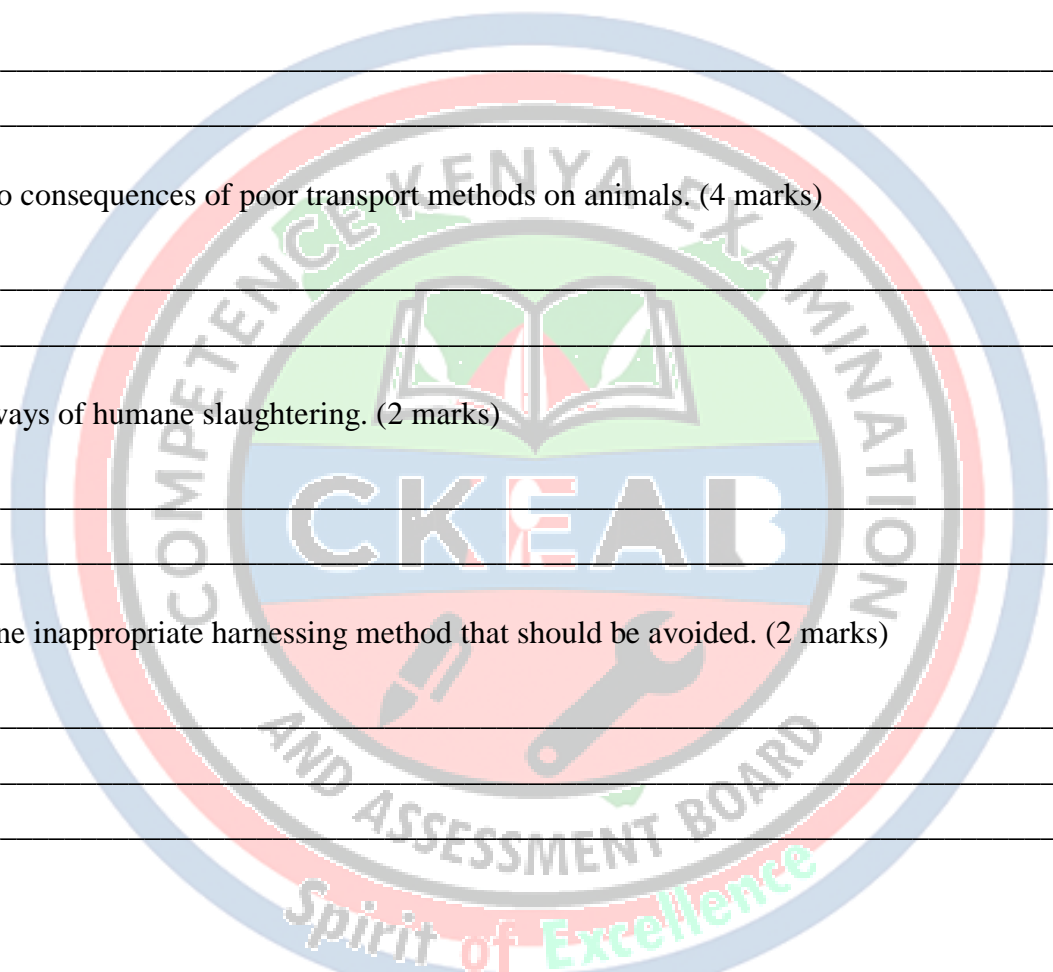
ix. \_\_\_\_\_

10. Explain two effects of poor castration practices. (4 marks)

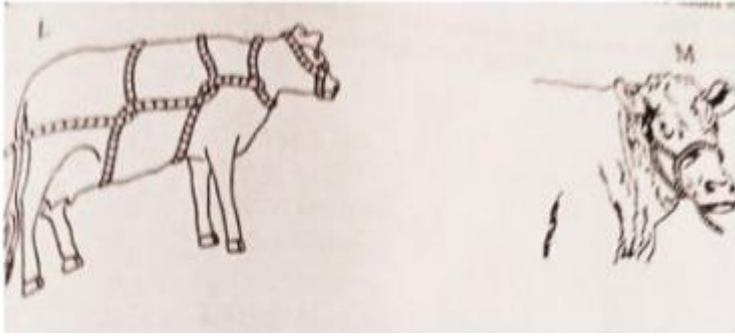
x. \_\_\_\_\_

xi. \_\_\_\_\_

xii. \_\_\_\_\_



11. The diagram below shows two methods of handling livestock in the farm. Study them and answer the questions that follow.



a. Identify the methods of handling livestock labelled L and M. (1 mark)

\_\_\_\_\_

b. Give **two** occasions when it may be necessary to carry out the practice labelled L above. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

c. Give **two** animal conditions under which method L above cannot be used. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. Name two structures used for safe handling of domestic animals. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

13. State two purposes of restraining chutes. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

14. Describe one way pens help in animal safety. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

15. State two ways crushes are used in cattle handling. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

16. Explain two advantages of using fences in farms. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

17. Name two structures used to restrain pigs safely. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

18. Explain one use of a tethering post. (2 marks)

- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

19. State two benefits of having separate handling areas for different livestock. (2 marks)

- v. \_\_\_\_\_
- vi. \_\_\_\_\_

20. Explain one reason why well-maintained farm structures enhance safety. (2 marks)

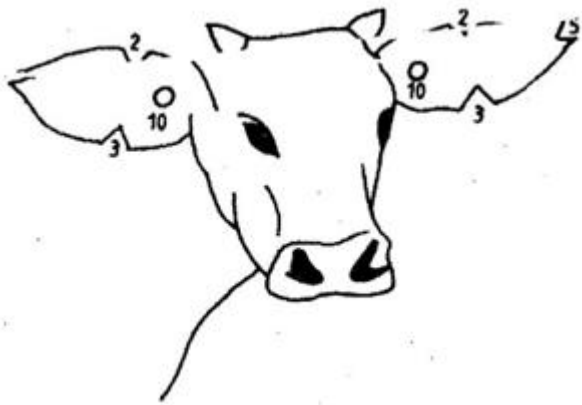
\_\_\_\_\_

\_\_\_\_\_

21. Describe two ways proper flooring in animal handling areas prevents injuries. (4 marks)

- vii. \_\_\_\_\_
- viii. \_\_\_\_\_

22. . a. The diagram below illustrates a method of identification in livestock production. Study the diagram and answer the questions that follow.



i. Name the type of identification illustrated above (1 mk)

\_\_\_\_\_

ii. Give the identification number of the animal illustrated in the diagram above(1mk)

iii. Using diagrams illustrate how you can identify animals Nos 24 and 36 using he above method (2 mks)

Animal No 24

Animal No 36

b. If a sow was successfully served on 27<sup>th</sup> September, 2026, state the date she is likely to have farrowed. (1 mk)

23. The diagram below shows a livestock parasite.



(a) Identify the parasite. (1 mark)

(b) Explain how the parasite can be passed from

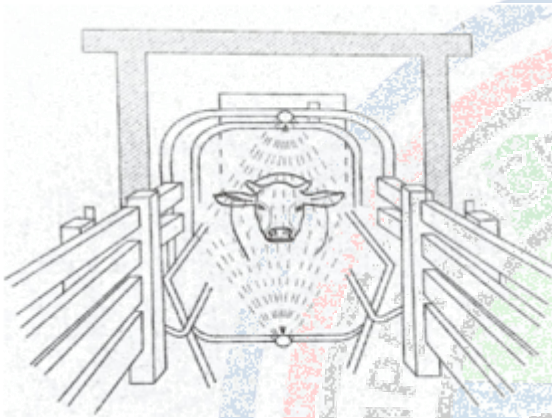
(i) Livestock to human beings (1 mark)

(ii) Human beings to animals (1 mark)

(c) State two control measures for the parasite in a zero-grazing unit. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

24. The diagram below shows a farm structure. Use it to answer the questions that follow.



a. Identify the practice being carried out. (1 mk)

\_\_\_\_\_

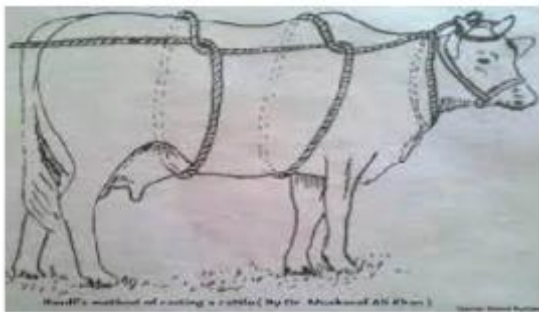
b. Name the structure in which the practice is being carried out. (1 mk)

\_\_\_\_\_

c. Give THREE advantages of the structure above over a plunge dip. (3 mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

25. Study the diagram below and answer the questions that follow



(a) Identify the practice (1 mark)

\_\_\_\_\_

(b) Outline three management practices that are usually carried out after restraining an animal (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

(c) Name one precaution observed when carrying out the practice (1 mark)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

26. Name two tools used to restrain cattle. (2 marks)

- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

27. Name two tools used to restrain goats or sheep. (2 marks)

- v. \_\_\_\_\_
- vi. \_\_\_\_\_

28. Explain one use of a lead stick. (2 marks)

- vii. \_\_\_\_\_
- viii. \_\_\_\_\_

29. Describe two ways a halter improves handling safety. (4 marks)

- ix. \_\_\_\_\_
- x. \_\_\_\_\_

30. State two precautions when using a bull ring. (2 marks)

xi. \_\_\_\_\_  
xii. \_\_\_\_\_

31. Explain two ways restraining ropes prevent accidents. (4 marks)

xiii. \_\_\_\_\_  
xiv. \_\_\_\_\_

32. State two reasons why proper tools reduce stress in animals. (2 marks)

xv. \_\_\_\_\_  
xvi. \_\_\_\_\_

33. Name one tool used for restraining pigs. (1 mark)

\_\_\_\_\_

34. Explain one effect of using improper tools in animal handling. (2 marks)

\_\_\_\_\_

35. State two benefits of using appropriate equipment in farms. (2 marks)

xvii. \_\_\_\_\_  
xviii. \_\_\_\_\_

36. The photographs below show a rearing practice carried out on farm animals. Study them carefully and answer the questions that follow.



a).Name the routine management practice shown above. (1 mark)

b). Name the tool shown above used to carry out the practice. (1 mark)

c).State three reasons for carrying out the practice shown above. (3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

37. The pictures below show some of the farm tools, observe them and answer the questions that follow.



(a) Identify each of the tools shown above (4 marks)

- W.....
- D.....
- Y.....
- Z.....

(b) State the use of the tool labeled Y and W (1 marks)

- Y.....
- W.....

38. Below are illustrations of equipment used on the farm. Study them carefully and answer the questions that follow.



(a) Identify the set of equipment illustrated above. (1 mark)

\_\_\_\_\_

(b) State the appropriate use of the set of equipment illustrated above. (1 mark)

\_\_\_\_\_

(c) Describe the appropriate procedure followed when using the equipment above. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

(d) Name the tools which are complementary to the tools below. (1 mark)

(i) Elastrator

\_\_\_\_\_

(ii) Syringe.

\_\_\_\_\_

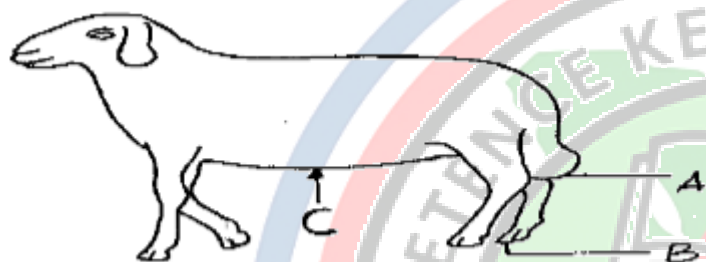
39. List **THREE** farm tools used during castration of farm animals. (1½mks)

- xix. \_\_\_\_\_
- xx. \_\_\_\_\_
- xxi. \_\_\_\_\_

40. Name the set of tools used for the following farm operations. (1mk)

- a. Controlling bloat: \_\_\_\_\_
- b. Restraining an animal during agricultural show exhibition.: \_\_\_\_\_

41. Below is an illustration of a sheep with some parts labeled A, B and C. Study the diagram and answer questions that follows?



a). State the practices carried out on the part labeled A,B and C (3marks)

- A \_\_\_\_\_
- B \_\_\_\_\_
- C \_\_\_\_\_

b). State two reasons for carrying out the operation on the part labeled A. (1mark)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

c). Name one tool used for operation carried out on the part labeled A and B (1mark)

- i. \_\_\_\_\_

42. State two ways to ensure the safety of a person handling cattle. (2 marks)

- xxii. \_\_\_\_\_
- xxiii. \_\_\_\_\_

43. Explain two correct positions when restraining a goat. (4 marks)

xxiv. \_\_\_\_\_  
xxv. \_\_\_\_\_

44. Describe two ways to safely hold animals during examination. (4 marks)

xxvi. \_\_\_\_\_  
xxvii. \_\_\_\_\_

45. State two precautions to take when working with bulls. (2 marks)

xxviii. \_\_\_\_\_  
xxix. \_\_\_\_\_

46. Explain two safety measures when handling pigs. (4 marks)

xxx. \_\_\_\_\_  
xxxi. \_\_\_\_\_

47. Give two reasons why keeping a safe distance from animals is important. (2 marks)

xxxii. \_\_\_\_\_  
xxxiii. \_\_\_\_\_

48. Explain one reason why handlers should wear protective clothing. (2 marks)

xxxiv. \_\_\_\_\_  
xxxv. \_\_\_\_\_

49. State two precautions to take when tying animals. (2 marks)

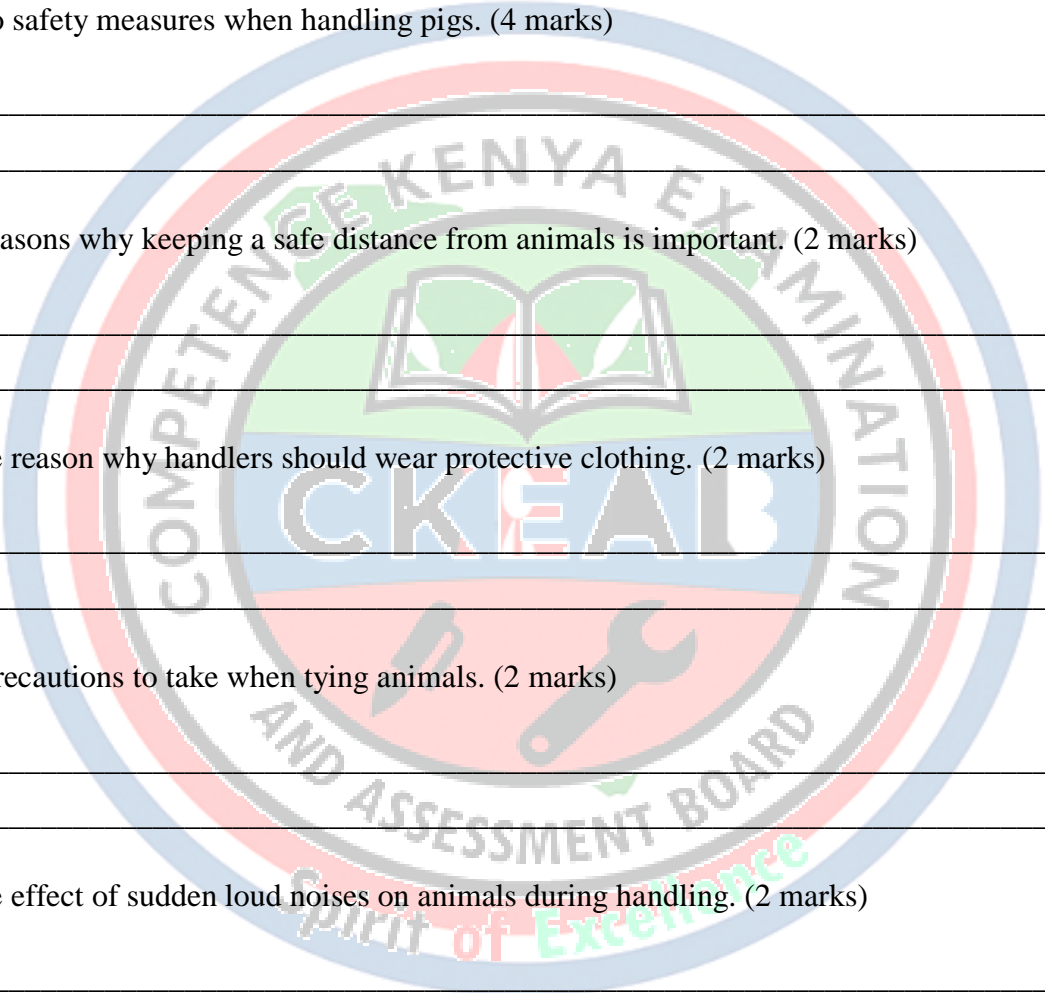
xxxvi. \_\_\_\_\_  
xxxvii. \_\_\_\_\_

50. Explain one effect of sudden loud noises on animals during handling. (2 marks)

xxxviii. \_\_\_\_\_  
xxxix. \_\_\_\_\_

51. Describe two ways to reduce stress in animals during handling. (4 marks)

xl. \_\_\_\_\_  
xli. \_\_\_\_\_



52. A farmer observed overloading of draught oxen.

State two effects on animal health. (2 marks)

xlii. \_\_\_\_\_

xliii. \_\_\_\_\_

53. Describe two humane methods of transporting livestock. (4 marks)

xliv. \_\_\_\_\_

xliv. \_\_\_\_\_

54. A learner visited a farm to observe animal handling.

State four traits to record for safe handling. (4 marks)

xlvi. \_\_\_\_\_

xlvii. \_\_\_\_\_

xlviii. \_\_\_\_\_

xliv. \_\_\_\_\_

55. Describe two improvements that could be made to farm structures to enhance safety. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

56. State two ways the community can promote animal safety. (2 marks)

iii. \_\_\_\_\_

iii. \_\_\_\_\_

57. Explain two consequences of inhumane treatment on productivity. (4 marks)

liv. \_\_\_\_\_

iv. \_\_\_\_\_

58. Describe two ways to safely restrain a goat during vaccination. (4 marks)

lvi. \_\_\_\_\_

lvii. \_\_\_\_\_

59. A farmer uses improper harnessing.

a) State two risks to the animal. (2 marks)

lviii. \_\_\_\_\_

lix. \_\_\_\_\_

b) State two risks to the handler. (2 marks)

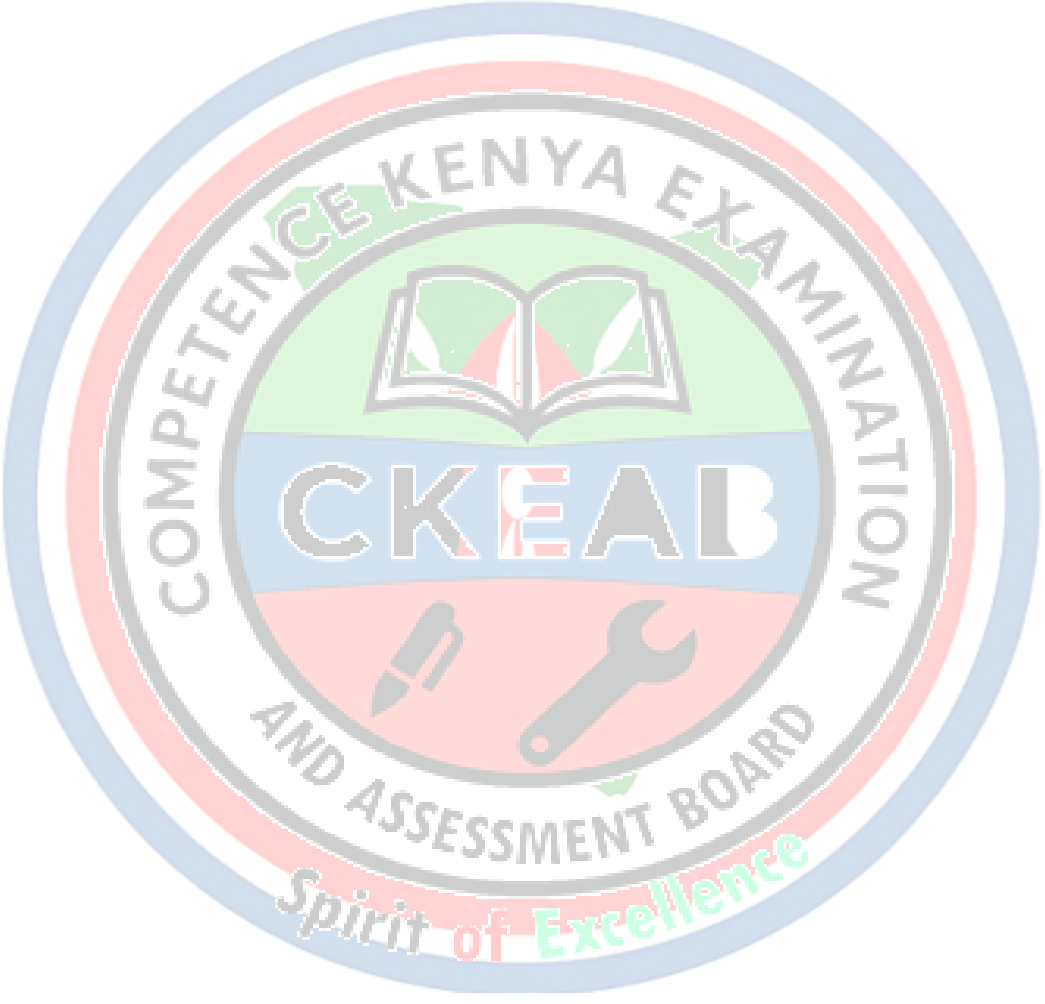
lx. \_\_\_\_\_

lxi. \_\_\_\_\_

60. Explain two ways observation of animals in the community helps improve handling practices. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



## SUBSTRAND 2.3: GENERAL ANIMAL HEALTH

**INSTRUCTIONS:** Answer ALL questions.

DIAGRAM 1: SIGNS OF ILL HEALTH IN ANIMALS (INSERT IMAGE)

1. Define the term animal health. (2 marks)

---

---

2. State two benefits of keeping animals healthy. (2 marks)

iii. 

---

iv. 

---

3. Explain two ways healthy animals contribute to increased productivity. (4 marks)

v. 

---

vi. 

---

4. Study the illustration below showing an animal suffering from a disease and answer the question below



(a). Identify the disease the animal is suffering from. (1mk)

---

(b). What causes the disease shown above? (1mk)

---

---

(c). Give three symptoms shown by a cow suffering from the disease above. (3mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

5. Discuss black quarter under the following sub-headings:-

a. Animal affected (1 mk)

---

---

b. Casual organism (1 mk)

---

---

c. Symptoms of disease (3 mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

d. Control measures (2 mks)

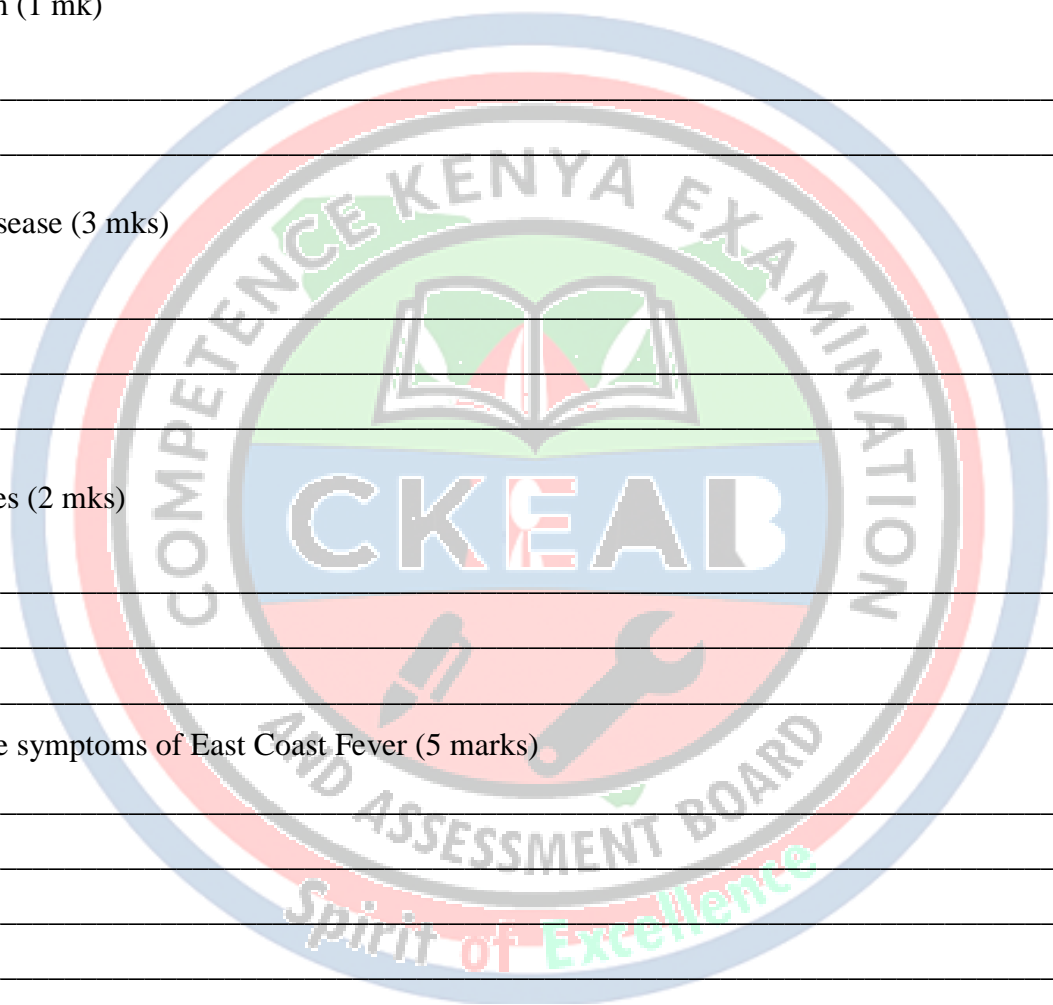
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

6. a. State five symptoms of East Coast Fever (5 marks)

- vii. \_\_\_\_\_
- viii. \_\_\_\_\_
- ix. \_\_\_\_\_
- x. \_\_\_\_\_
- xi. \_\_\_\_\_

b. Give five advantages of using animal power (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_



c. Give five characteristics of beef cattle breed (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

d. Describe the reasons why bees may abscond from a beehive (5 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

7. a) Describe trypanosomiasis disease under the following sub-headings.

i) Causal organism (1 Mk)

\_\_\_\_\_

ii) Animal attacked (1 Mk)

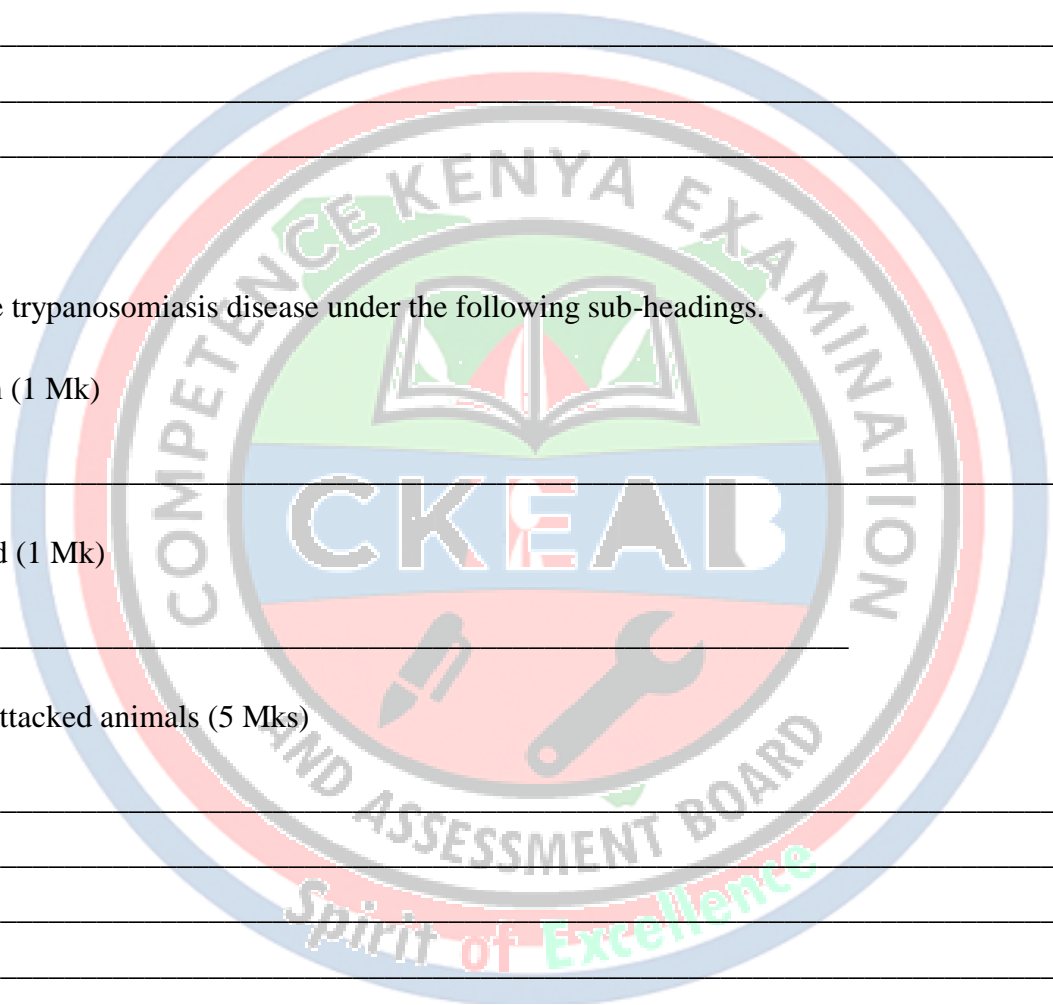
\_\_\_\_\_

iii) Symptoms of attacked animals (5 Mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

iv) Control measures (3 Mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_



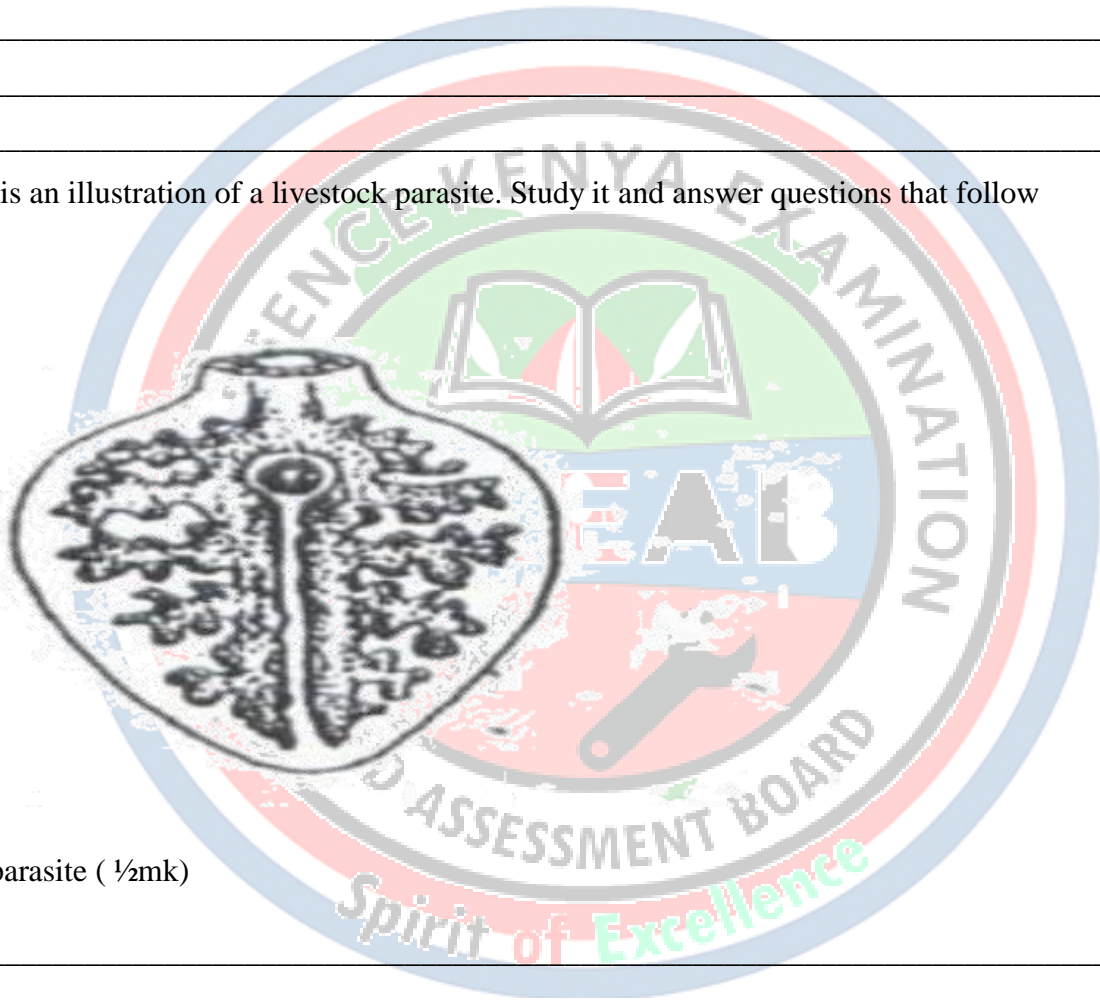
b) Describe five control measures for cannibalism in poultry (5 Mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- xii. \_\_\_\_\_
- xiii. \_\_\_\_\_
- xiv. \_\_\_\_\_

(c) Explain the procedure in establishment of foundation in farm buildings (5mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

8. Below is an illustration of a livestock parasite. Study it and answer questions that follow



(a) Name the parasite ( ½mk)

\_\_\_\_\_

(b) State three symptoms that may be observed in an animal that has been attacked by the above parasite. (1 ½ mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- xv. \_\_\_\_\_

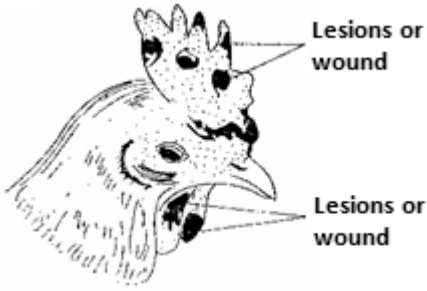
(c) State the intermediate host of the parasite. ( ½ mk)

\_\_\_\_\_

(d) Give two control measures of the above parasite. (2mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

9. The following diagram illustrate symptoms of a disease in poultry. Study it carefully and answer the question that follows.



(a) Identify:

(i) The disease. (½ mark)

\_\_\_\_\_

(ii) The causal organism. (½ mark)

\_\_\_\_\_

(b) State **two** other symptoms of the disease apart from lesion.(2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

(c) State **two** control measures for the disease. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

10. A cow was diagnosed with the following symptoms: swollen feet, animal walking with a limping gait, lameness and pus with rotten smell oozing out of the hooves and animal spending most of time lying down.

a) Suggest the disease the animal was suffering from. (1 mark)

\_\_\_\_\_

b) Name the possible cause of the disease. (1 mark)

\_\_\_\_\_

c) Apart from cattle name other two farm animals attacked by the above disease. (2marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

d) State four control methods of the disease. (2marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

11. Give two reasons why animal health is important in dairy production. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. Give two reasons why animal health is important in meat production. (2 marks)

iii. \_\_\_\_\_

iv. \_\_\_\_\_

13. Explain two economic benefits of keeping livestock healthy. (4 marks)

v. \_\_\_\_\_

vi. \_\_\_\_\_

14. State two social benefits of healthy livestock in a community. (2 marks)

vii. \_\_\_\_\_

viii. \_\_\_\_\_

15. Explain one reason why neglecting animal health leads to poor productivity. (2 marks)

ix. \_\_\_\_\_

x. \_\_\_\_\_

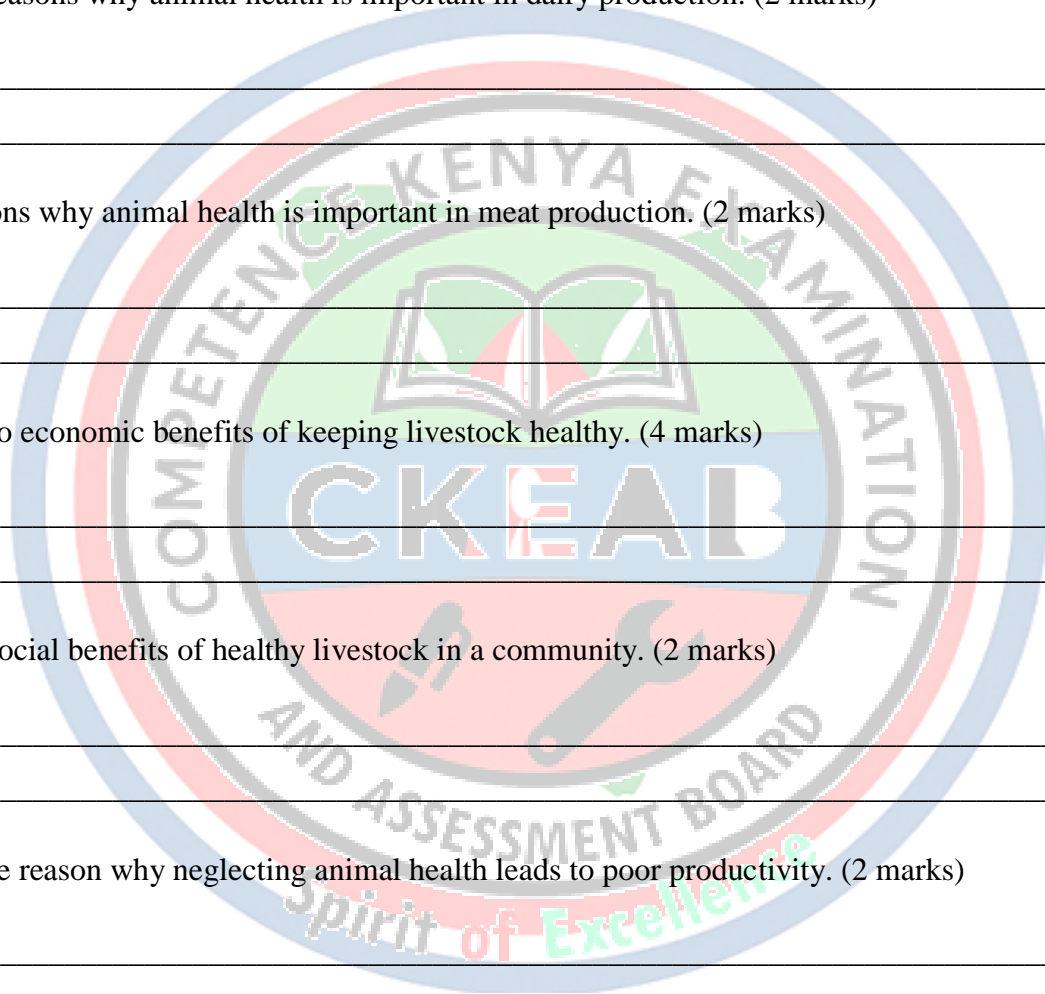
16. Give two benefits of animal vaccination in livestock production. (2 marks)

xi. \_\_\_\_\_

xii. \_\_\_\_\_

17. Explain two reasons why record-keeping is important in maintaining animal health. (4 marks)

xiii. \_\_\_\_\_



xiv. \_\_\_\_\_

18. State two general signs of ill health in cattle. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

19. State two signs of ill health in goats. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

20. State two signs of ill health in pigs. (2 marks)

iii. \_\_\_\_\_

iv. \_\_\_\_\_

21. Explain two behavioral changes in sick animals. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. State two physical signs that indicate poor animal health. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

23. Explain two signs of internal parasite infestation in sheep. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

24. State two signs of external parasite infestation in livestock. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

25. Explain one visual sign of respiratory infection in animals. (2 marks)

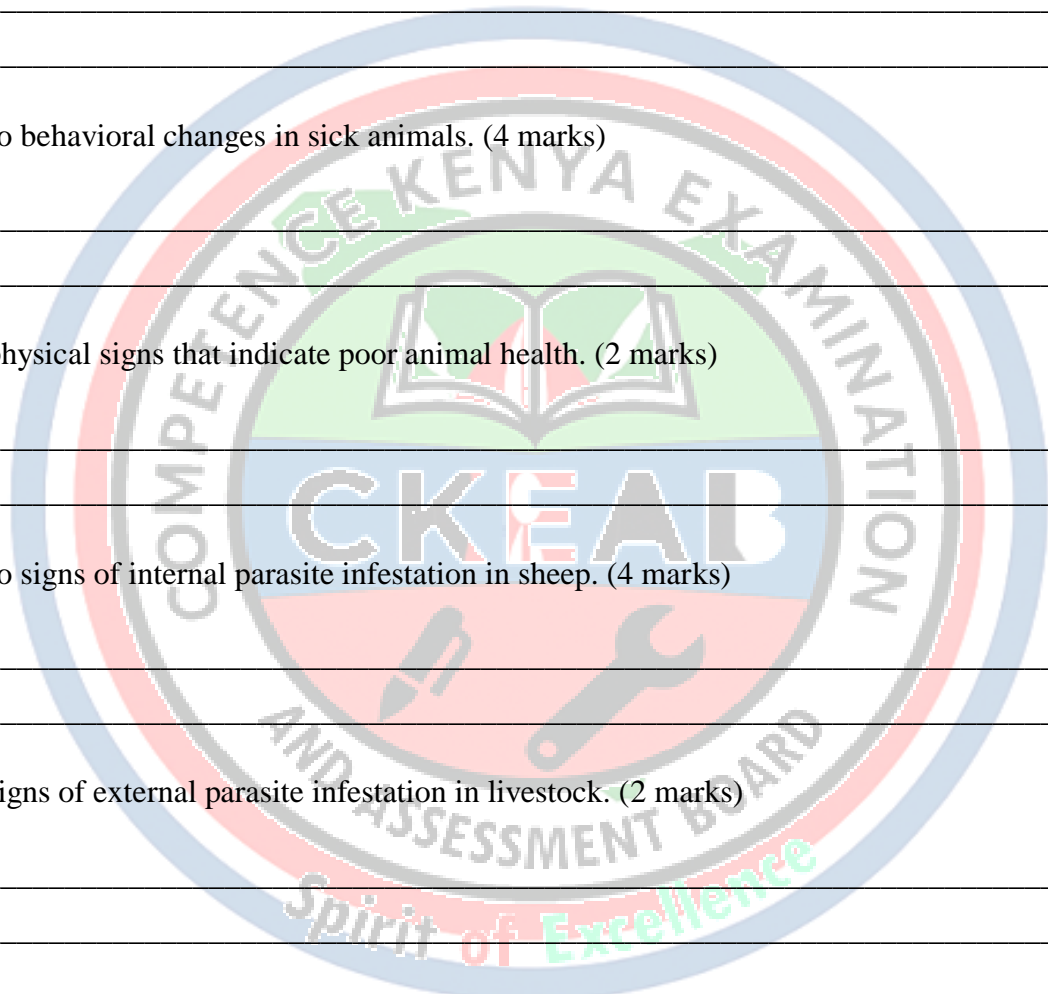
\_\_\_\_\_

\_\_\_\_\_

26. State two signs of malnutrition in livestock. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



27. Explain two ways to differentiate minor illnesses from severe illnesses. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

21. Name two general control measures of ill health in livestock. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

22. Explain two ways vaccination helps prevent animal diseases. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

23. State two hygiene practices to prevent livestock diseases. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

24. Explain two ways quarantine helps in disease control. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

25. State two ways proper nutrition contributes to disease prevention. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

26. Explain two benefits of regular deworming in livestock. (4 marks)

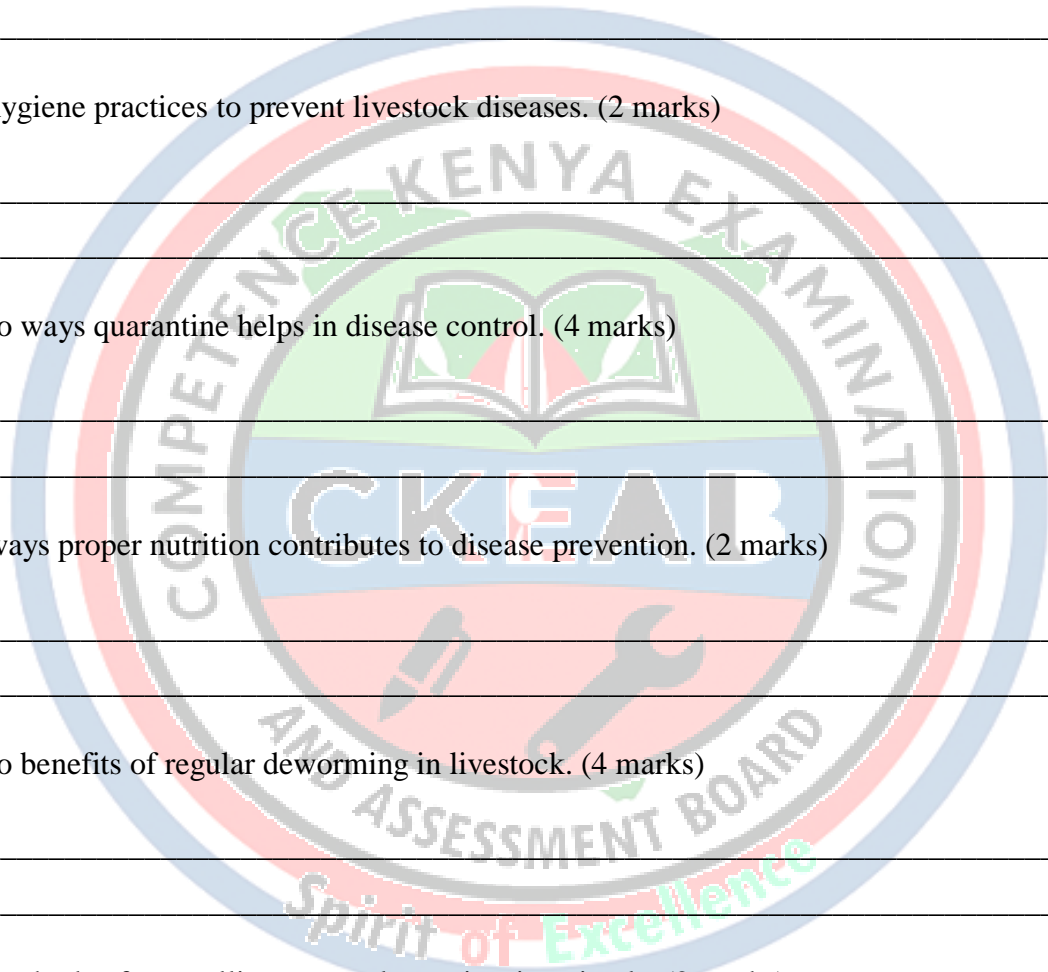
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

27. State two methods of controlling external parasites in animals. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

28. Explain one method of controlling vector-borne diseases in livestock. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_



29. State two ways farmers can prevent mastitis in dairy cows. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

30. Explain two ways to minimize stress in animals to prevent disease. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

31. State two routine practices that maintain livestock health. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

32. Explain two reasons for providing clean water to animals. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

33. Describe two benefits of good housing in animal health. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

34. State two benefits of regular observation of animals. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

35. Explain two reasons why proper feeding ensures good health. (4 marks)

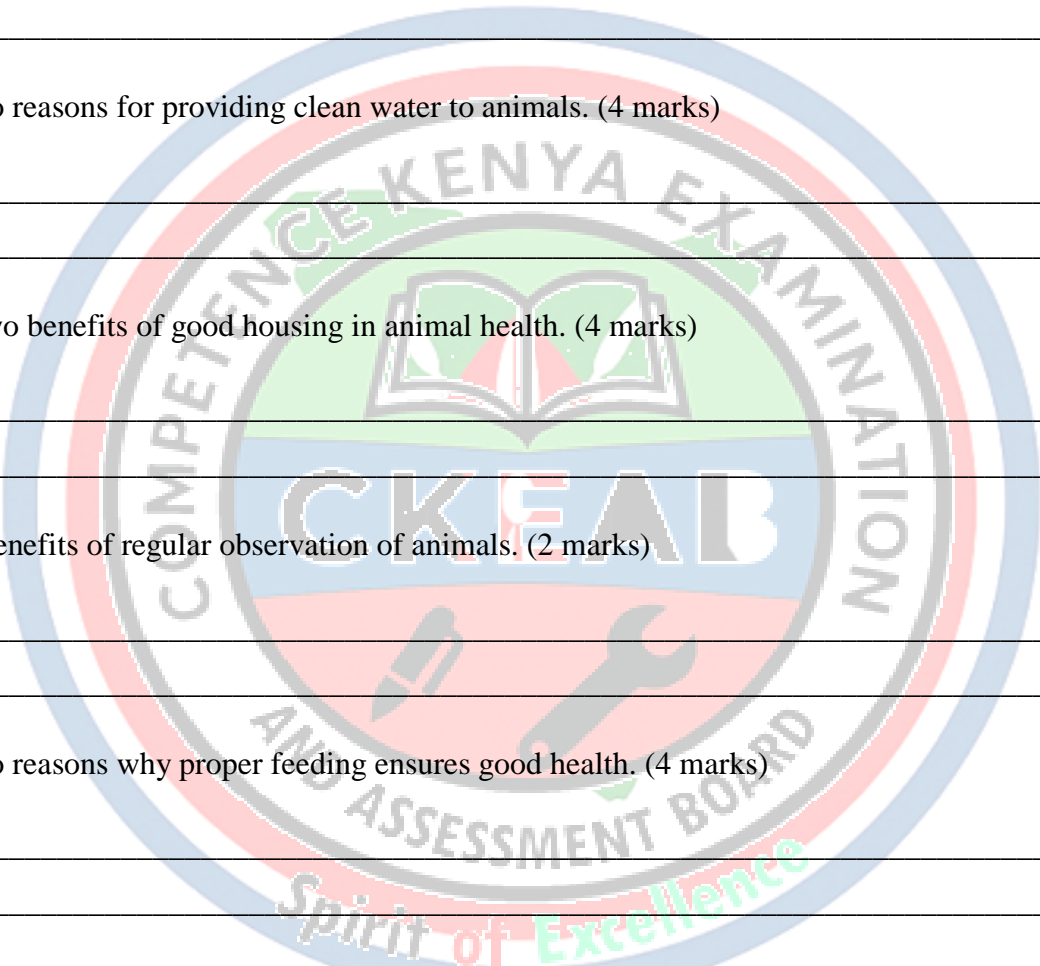
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

36. State two benefits of maintaining proper stocking density. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

37. Explain two benefits of record-keeping on treatments given to livestock. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



38. State two practices used to prevent foot rot in livestock. (2 marks)

iii. \_\_\_\_\_

iv. \_\_\_\_\_

39. Explain two benefits of separating sick animals from healthy ones. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

40. Describe two advantages of using proper tools and equipment in maintaining animal health. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

41. During a farm visit, learners observed a sick cow.

a) State four signs they should record. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

b) Suggest two immediate actions to improve the cow's health. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

42. Explain two ways the community can promote general animal health. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

43. Describe four steps in observing livestock for early signs of ill health. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

44. Explain two preventive measures for internal parasites in goats. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

45. Explain two preventive measures for external parasites in cattle. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

46. Describe two practices that maintain hygiene in livestock housing. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

47. State two benefits of using clean equipment during milking. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

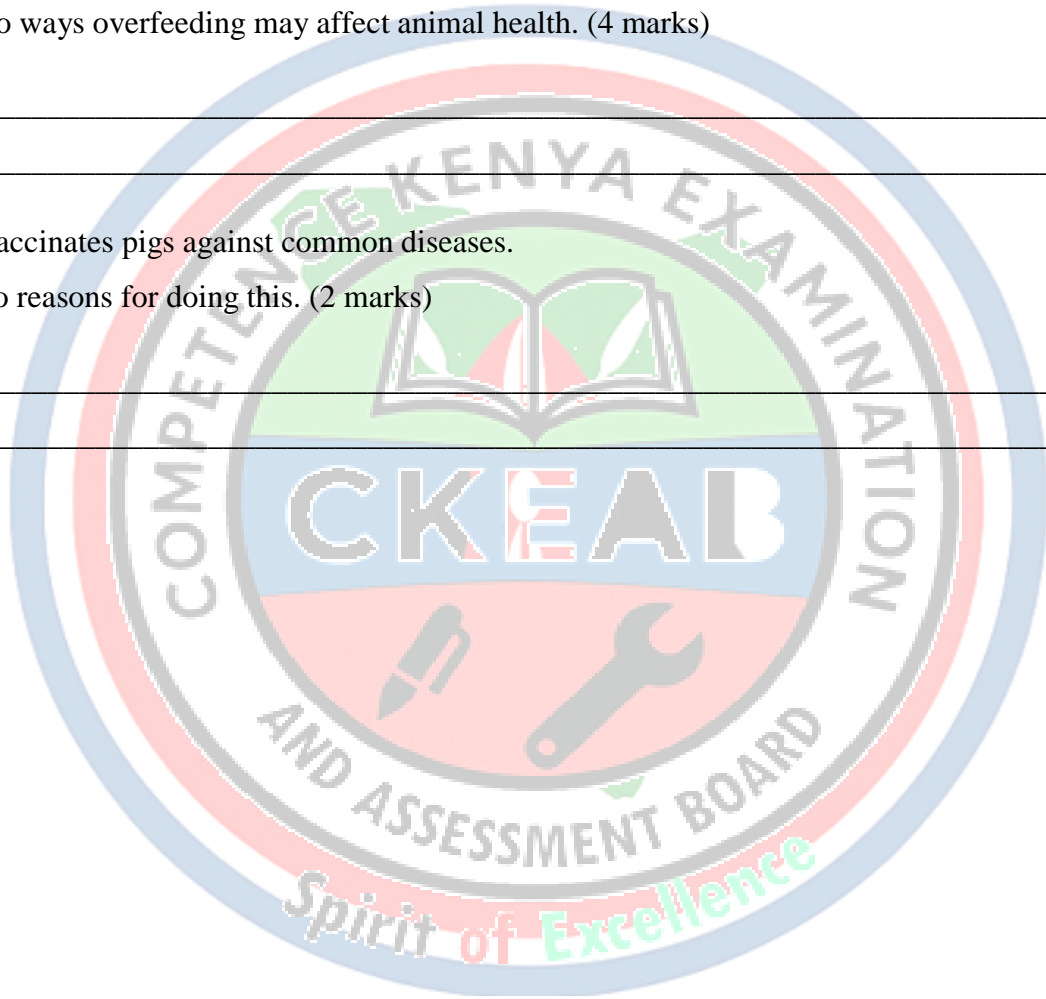
48. Explain two ways overfeeding may affect animal health. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

49. A farmer vaccinates pigs against common diseases.

a) State two reasons for doing this. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



## SUBSTRAND 2.4: BEEKEEPING

INSTRUCTIONS: Answer ALL questions.

1. Define the term apiary. (2 marks)

---

---

2. State two purposes of an apiary. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

3. Explain two factors to consider when selecting a site for an apiary. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

4. State two reasons why bees should have access to water near the hive. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

5. Explain two reasons for planting bee-friendly flowers near the apiary. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

6. State two advantages of shading the hives. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

7. Explain two reasons for having hives away from human habitation. (4 marks)

- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

8. State two factors to consider regarding wind and hive placement. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

9. Explain two reasons for spacing hives apart. (4 marks)

v. \_\_\_\_\_

vi. \_\_\_\_\_

10. State two precautions to take when siting hives in agricultural farms. (2 marks)

vii. \_\_\_\_\_

viii. \_\_\_\_\_

11. Describe two ways to protect hives from predators. (4 marks)

ix. \_\_\_\_\_

x. \_\_\_\_\_

12. State two reasons why the flight path should be clear. (2 marks)

xi. \_\_\_\_\_

xii. \_\_\_\_\_

13. Explain two effects of poorly sited hives on honey production. (4 marks)

xiii. \_\_\_\_\_

xiv. \_\_\_\_\_

14. State two environmental factors that affect hive productivity. (2 marks)

xv. \_\_\_\_\_

xvi. \_\_\_\_\_

15. Explain two economic benefits of proper apiary siting. (4 marks)

xvii. \_\_\_\_\_

xviii. \_\_\_\_\_

16. Define bee colony. (2 marks)

\_\_\_\_\_

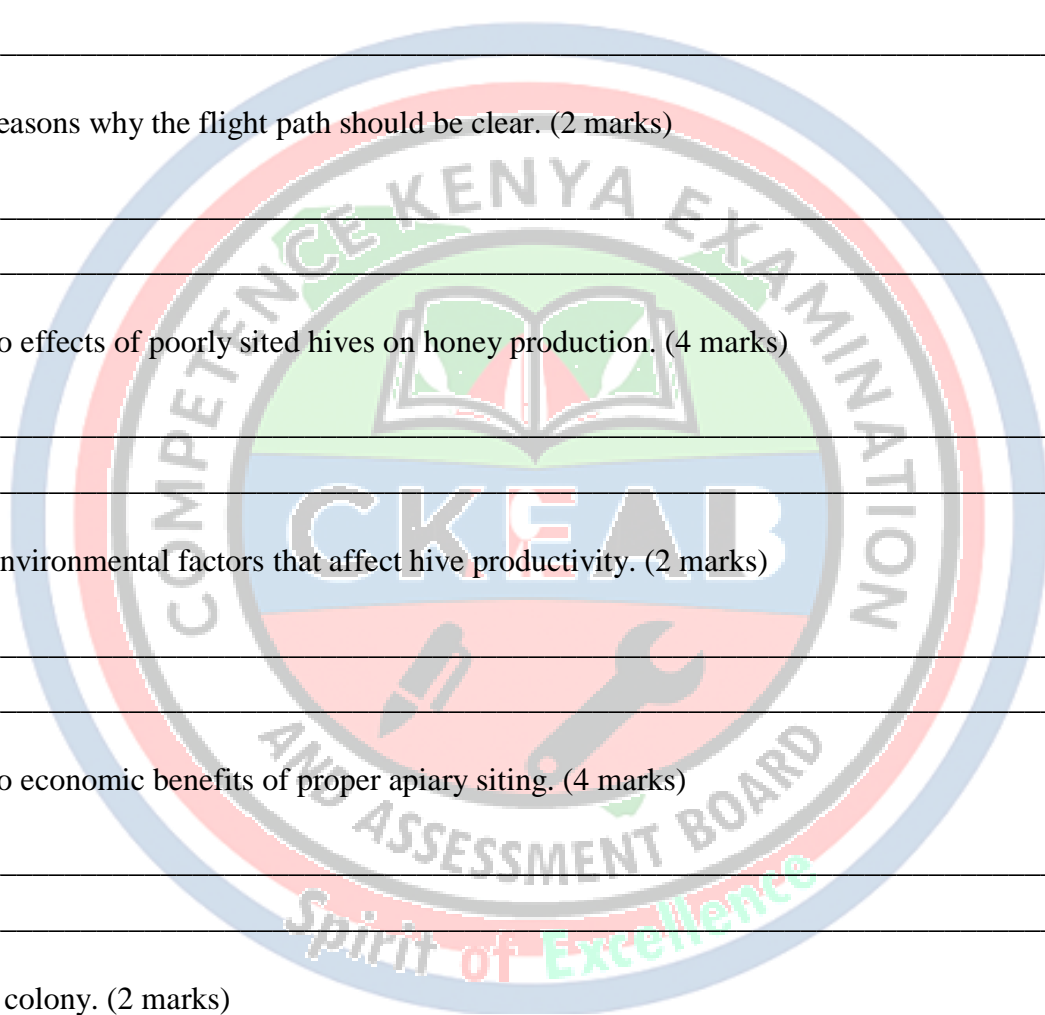
\_\_\_\_\_

17. Name three components of a bee colony. (3 marks)

xix. \_\_\_\_\_

xx. \_\_\_\_\_

xxi. \_\_\_\_\_



18. Describe four steps involved in stocking a new hive. (4 marks)

- xxii. \_\_\_\_\_
- xxiii. \_\_\_\_\_
- xxiv. \_\_\_\_\_
- xxv. \_\_\_\_\_

19. Explain two reasons for inspecting a newly stocked hive. (4 marks)

- xxvi. \_\_\_\_\_
- xxvii. \_\_\_\_\_

20. State two methods of introducing bees to a hive. (2 marks)

- xxviii. \_\_\_\_\_
- xxix. \_\_\_\_\_

21. Explain one reason why the queen bee should be introduced first. (2 marks)

- \_\_\_\_\_
- \_\_\_\_\_

22. State two precautions when handling bees during stocking. (2 marks)

- xxx. \_\_\_\_\_
- xxxi. \_\_\_\_\_

23. Explain two signs that indicate the hive has accepted the new bees. (4 marks)

- xxxii. \_\_\_\_\_
- xxxiii. \_\_\_\_\_

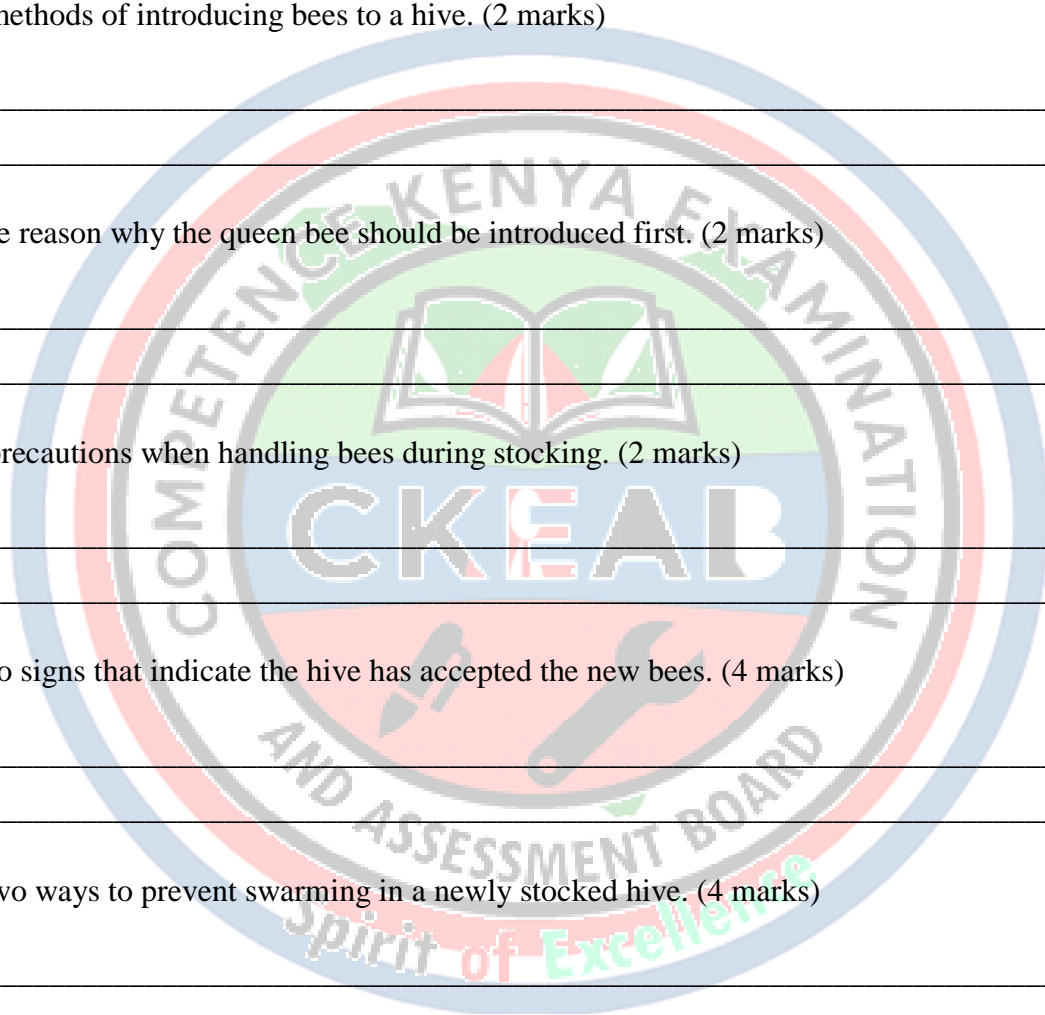
24. Describe two ways to prevent swarming in a newly stocked hive. (4 marks)

- xxxiv. \_\_\_\_\_
- xxxv. \_\_\_\_\_

25. State two tools used when stocking a hive. (2 marks)

- xxxvi. \_\_\_\_\_
- xxxvii. \_\_\_\_\_

26. State two reasons for wearing protective clothing while working with bees. (2 marks)



xxxviii. \_\_\_\_\_

xxxix. \_\_\_\_\_

27. Explain two uses of a bee smoker. (4 marks)

xl. \_\_\_\_\_

xli. \_\_\_\_\_

28. State two hygiene practices in apiary management. (2 marks)

xlii. \_\_\_\_\_

xliii. \_\_\_\_\_

29. Explain two reasons why hive inspections should be regular. (4 marks)

xliv. \_\_\_\_\_

xlv. \_\_\_\_\_

30. Describe two ways to control pests in an apiary. (4 marks)

xlvi. \_\_\_\_\_

xlvii. \_\_\_\_\_

31. State two advantages of replacing old frames regularly. (2 marks)

xlviii. \_\_\_\_\_

xlix. \_\_\_\_\_

32. Explain two reasons why colonies should be monitored for diseases. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

33. State two methods to prevent robber bees from attacking hives. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. Explain two reasons for maintaining good records in apiary management. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

35. Describe two ways to avoid damaging the hive during inspections. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

36. State two precautions when opening hives on windy days. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

37. Explain two benefits of rotating hives periodically in an apiary. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

38. State two environmental hazards that can affect bee safety. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

39. Explain two reasons why young bees should be handled carefully. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

40. Describe two ways to ensure safety of people working in the apiary. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

41. State two purposes of harvesting honey. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

42. Describe four steps in harvesting honey safely. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

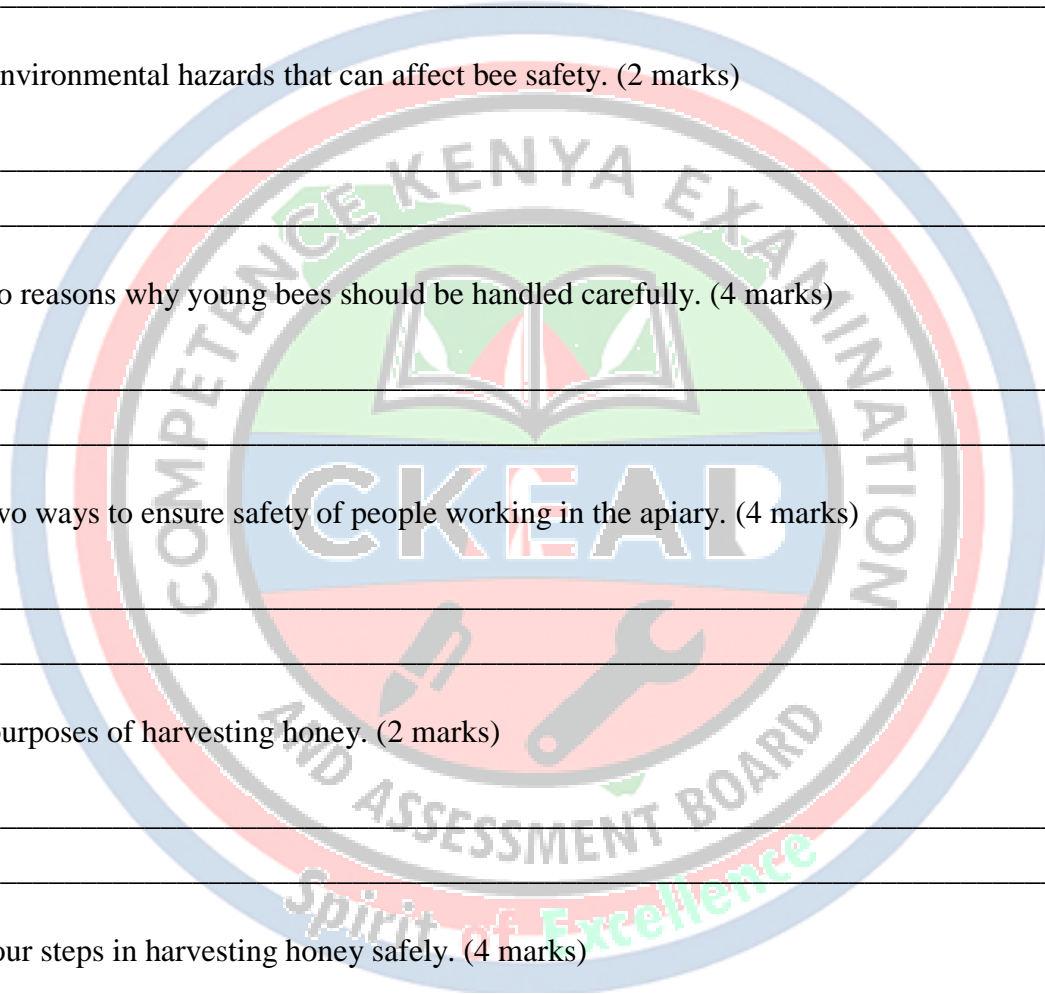
iii. \_\_\_\_\_

iv. \_\_\_\_\_

43. State two tools used in honey harvesting. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



44. Explain two precautions to avoid harming bees during harvesting. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

45. Describe two methods of extracting honey from the comb. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

46. State two safety practices when using a honey extractor. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

47. Explain two reasons for filtering honey before storage. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

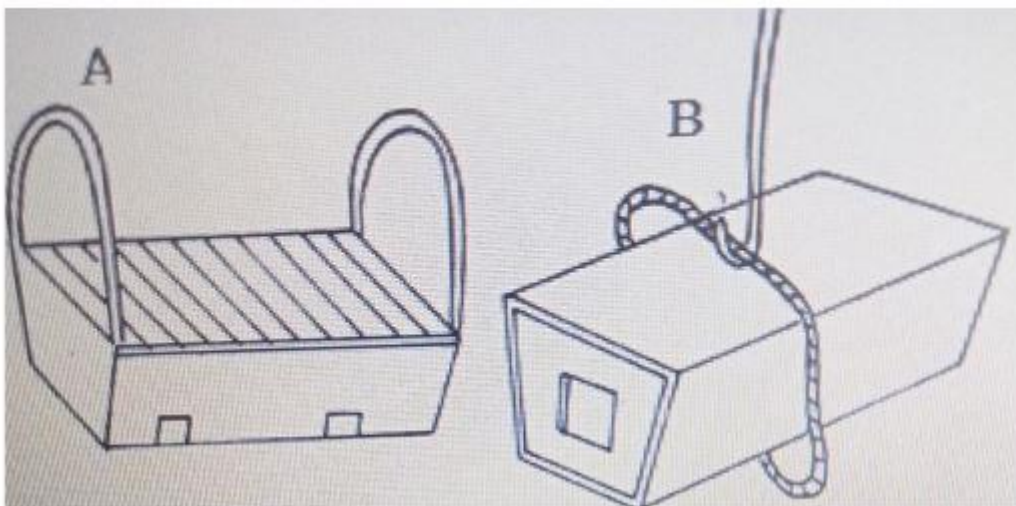
48. State two ways harvested honey can be stored safely. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

49. Describe two indicators that a frame is ready for harvesting. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

50. The diagram labelled A and B below shows two types of beehives. Study them carefully and answer the questions that follow.



a. Identify the types of bee hives A and B. (2 marks)

A \_\_\_\_\_.

B \_\_\_\_\_.

b. State two advantages of A over B. (2 marks)

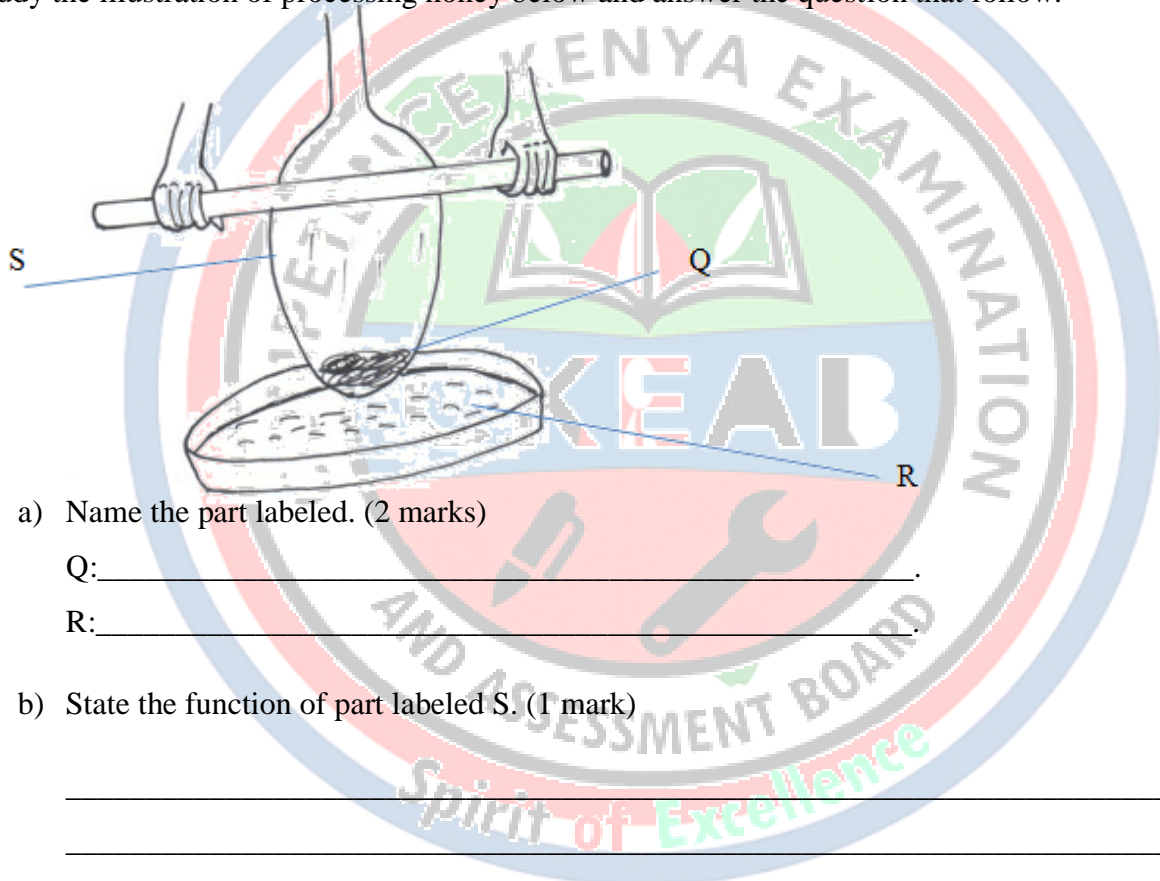
i. \_\_\_\_\_

ii. \_\_\_\_\_

c. Give one maintenance practice carried out on hive A. (1 marks)

\_\_\_\_\_  
\_\_\_\_\_

51. Study the illustration of processing honey below and answer the question that follow.



a) Name the part labeled. (2 marks)

Q: \_\_\_\_\_.

R: \_\_\_\_\_.

b) State the function of part labeled S. (1 mark)

\_\_\_\_\_  
\_\_\_\_\_

c) State four equipments used for harvesting honey (4 marks)

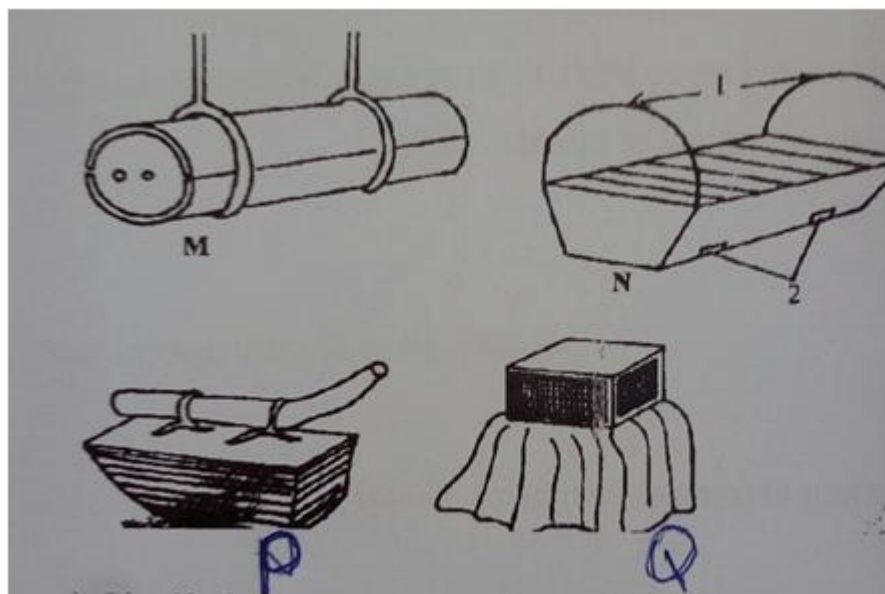
i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

52. The diagrams M, N, P, and Q show some structure used in apiculture.



a) Identify the structures labeled M, N, P, and Q. (2mks)

M – \_\_\_\_\_

N – \_\_\_\_\_

P – \_\_\_\_\_

Q – \_\_\_\_\_

b) State the uses of P and Q. (2mks)

P – \_\_\_\_\_

Q – \_\_\_\_\_

53.

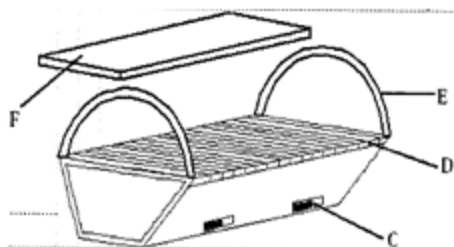
a. Describe the reasons why bees may abscond from a beehive. (10 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_
- vi. \_\_\_\_\_
- vii. \_\_\_\_\_
- viii. \_\_\_\_\_
- ix. \_\_\_\_\_
- x. \_\_\_\_\_
- xi. \_\_\_\_\_

b. Describe the factors considered in siting an apiary on the farm. (10 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_
- v. \_\_\_\_\_

54. Below is a diagram of an equipment used in Agriculture. Study it carefully and answer the questions that follow.



a. Identify the equipment. (1 mark)

\_\_\_\_\_

b. Name the parts labelled C, D and F. (1½ mark)

C \_\_\_\_\_

D \_\_\_\_\_

F \_\_\_\_\_

c.i. State one role played by the parts labelled C, D, E and F. (4 marks)

C \_\_\_\_\_

D \_\_\_\_\_

E \_\_\_\_\_

F \_\_\_\_\_

ii. Name other two types of equipments which serve the same function as the one illustrated above (1 mark)

\_\_\_\_\_

\_\_\_\_\_

## SUBSTRAND 2.5: ANIMAL REARING PROJECT

**INSTRUCTIONS:** Answer ALL questions.

1. Define the term animal rearing project. (2 marks)

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2. State two purposes of having an animal rearing project in school. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

3. Explain two reasons for selecting a suitable animal for the project. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

4. State two factors to consider when selecting a site for the project. (2 marks)

iii. \_\_\_\_\_

iv. \_\_\_\_\_

5. Explain two reasons why project planning is important. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

6. State two types of animals suitable for school rearing projects. (2 marks)

iii. \_\_\_\_\_

iv. \_\_\_\_\_

7. Explain two benefits of having a project template. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

8. State two records that should be kept in an animal project. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

9. Describe two ways to involve learners in project planning. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

10. State two reasons why observing similar projects is helpful before starting. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

11. Explain two steps in developing the objectives of the project. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

12. State two materials needed for setting up an animal rearing project. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

13. Describe two considerations when choosing the animal breed for the project. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

14. Explain two reasons for including a timeline in the project plan. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

15. State two benefits of conducting a feasibility study before starting the project. (2 marks)

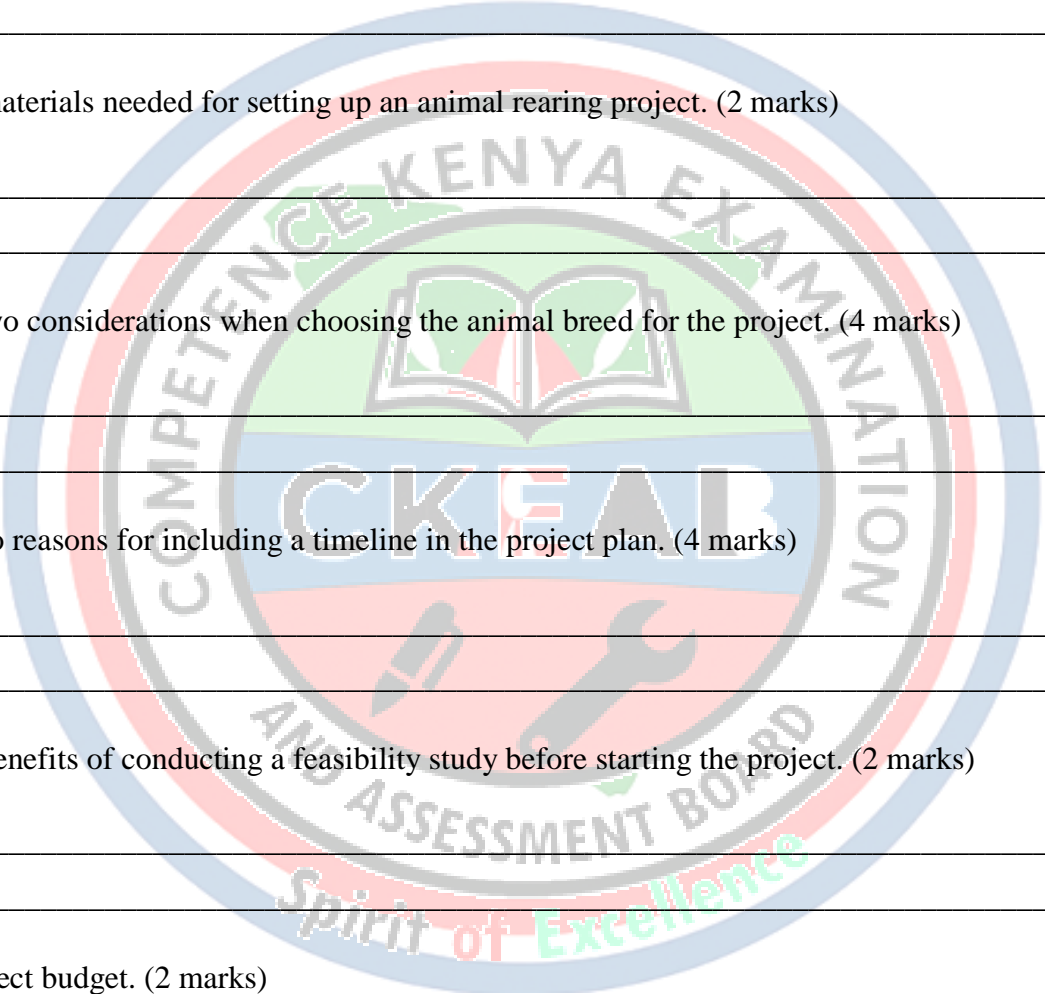
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

16. Define project budget. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

17. State two purposes of preparing a budget for an animal rearing project. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



18. List two types of costs involved in animal rearing projects. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

19. Explain two reasons why accurate budgeting is important. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

20. State two items that must be included in a feeding budget. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

21. Explain two factors affecting the cost of animal housing. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. State two ways to reduce project costs without affecting animal welfare. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

23. Describe two ways to plan for unexpected expenses. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

24. State two financial records to maintain during the project. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

25. Explain two advantages of tracking project expenditure. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

26. Describe two steps to prepare the site for the animal project. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

27. State two precautions when installing animal housing. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

28. Explain two reasons for providing clean water to animals. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

29. State two feeding practices for a small-scale project. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

30. Explain two ways to ensure the health of newly stocked animals. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

31. State two records to keep during the stocking phase. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

32. Describe two tasks involved in daily management of animals. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

33. Explain two ways to avoid overcrowding in the project. (4 marks)

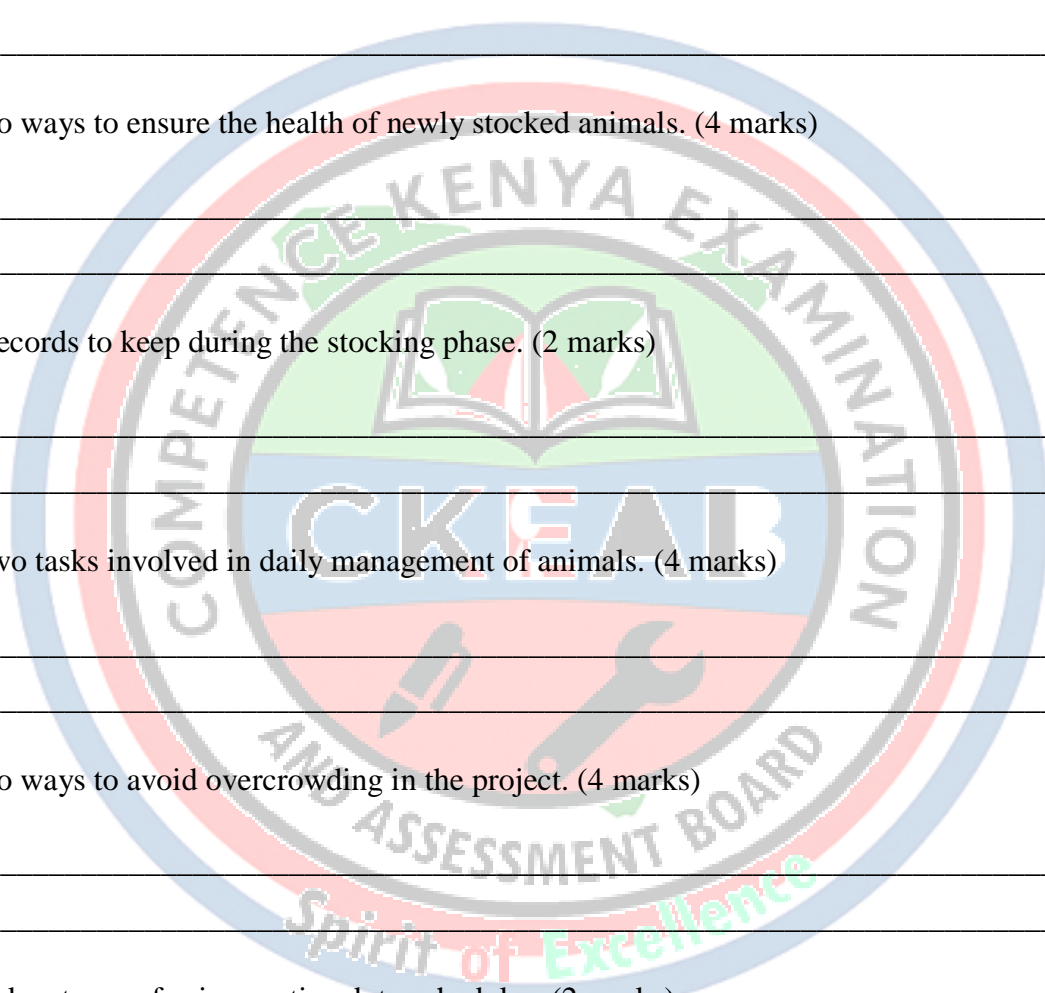
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

34. State two advantages of using routine duty schedules. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

35. Explain two methods for monitoring growth and production of animals. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



36. State two hygiene practices for the project. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

37. Describe two ways to prevent diseases in the project. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

38. Explain two benefits of regular observation of animals. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

39. State two ways to handle manure safely. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

40. Explain two methods of controlling pests in the animal project. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

41. State two feeding practices that promote health. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

42. Explain two reasons why records should be updated daily. (4 marks)

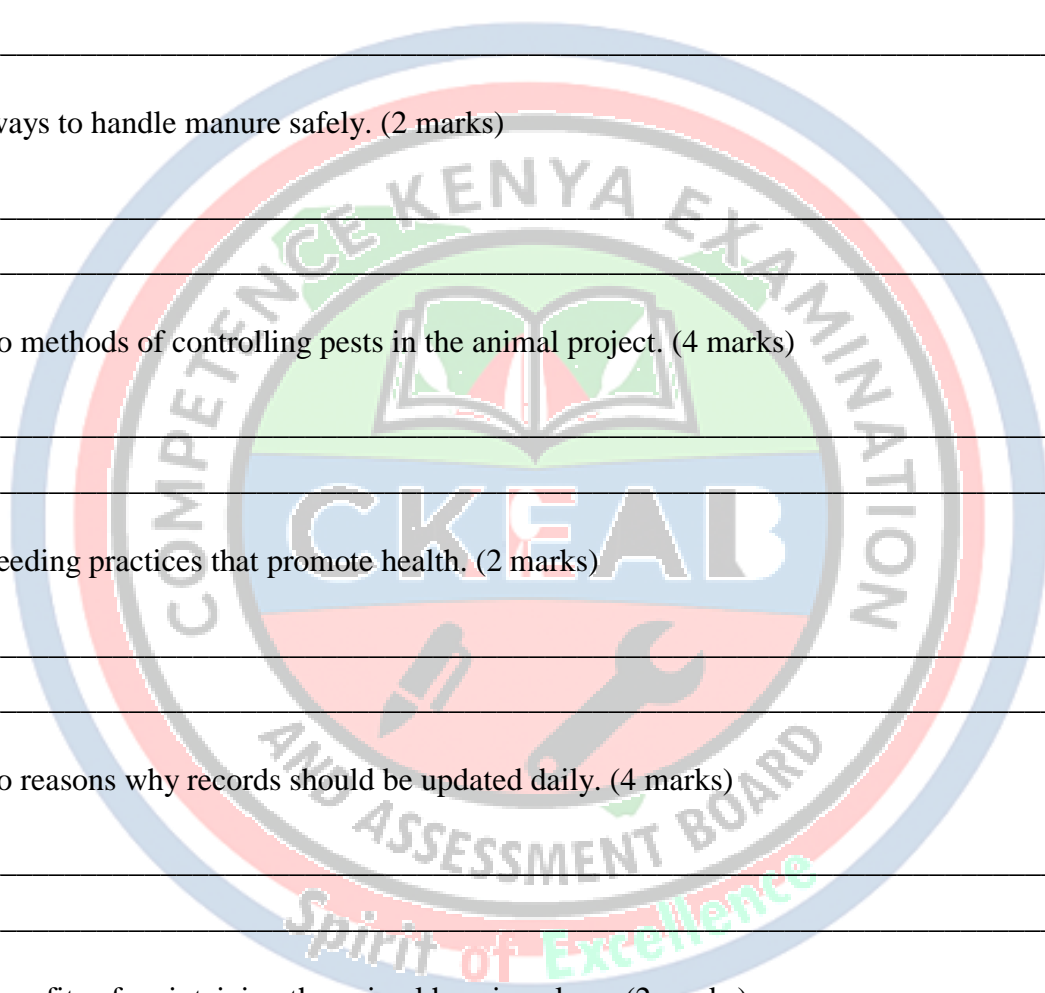
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

43. State two benefits of maintaining the animal housing clean. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

44. Explain two methods for checking the health status of animals. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



45. Describe two benefits of observing animal behavior during routine management. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

46. State two indicators of success in an animal rearing project. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

47. Explain two ways to evaluate project performance. (4 marks)

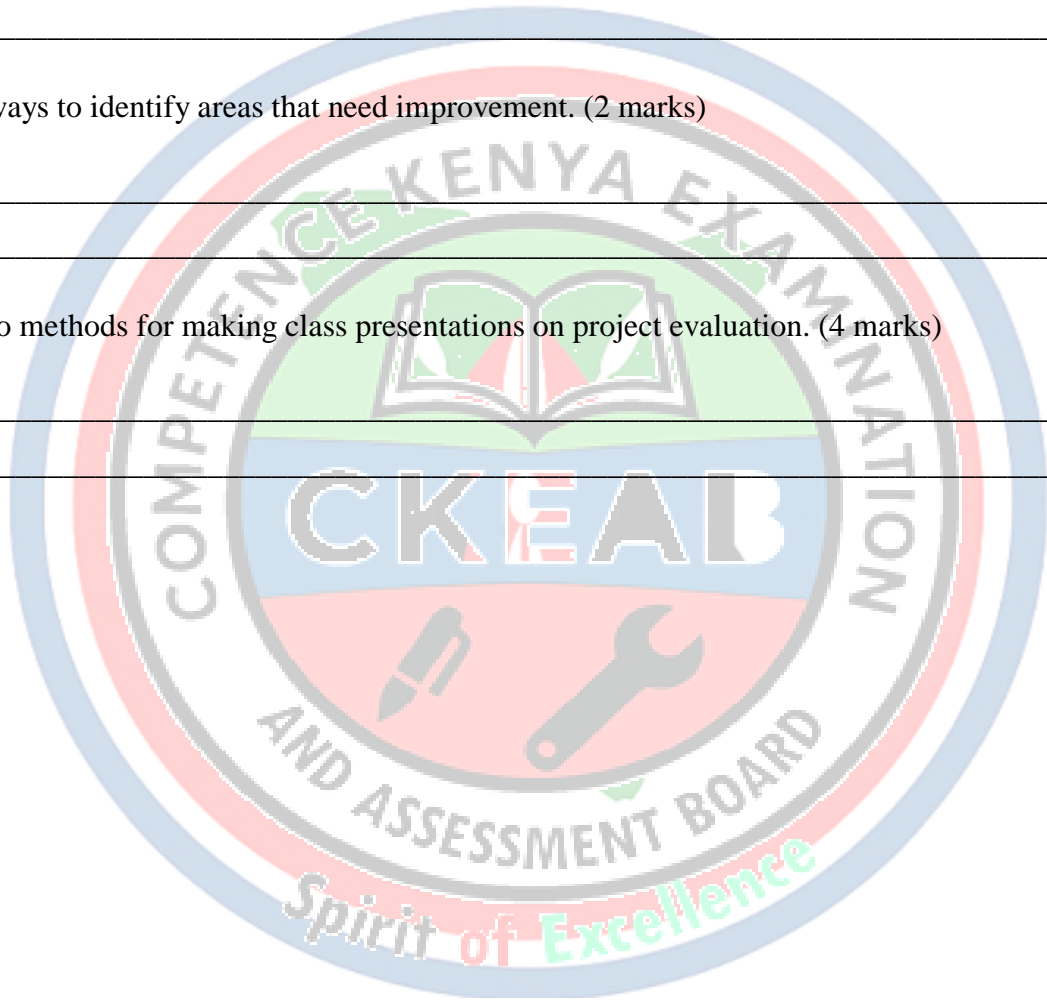
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

48. State two ways to identify areas that need improvement. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

49. Explain two methods for making class presentations on project evaluation. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



# STRAND 3.0: AGRICULTURAL TECHNOLOGIES AND ENTREPRENEURSHIP

## SUBSTRAND 3.1: TOOLS AND EQUIPMENT

**INSTRUCTIONS: Answer ALL questions.**

1. Define the term agricultural tools and equipment. (2 marks)

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---

2. State two gardening tools used in crop production. (2 marks)

i. 

---

ii. 

---

3. State two tools used in livestock production. (2 marks)

i. 

---

ii. 

---

4. Identify two assembling/disassembling tools used on farms. (2 marks)

i. 

---

ii. 

---

5. Explain two reasons why it is important to identify the correct tool for a task. (4 marks)

i. 

---

ii. 

---

6. State two hand tools commonly used in small-scale farming. (2 marks)

i. 

---

ii. 

---

7. State two mechanical tools used on a farm. (2 marks)

i. 

---

ii. 

---

8. Explain two differences between hand tools and mechanical tools. (4 marks)

Hand tools	Mechanical tools
<hr/>	<hr/>
<hr/>	<hr/>

9. Identify two cutting tools used in crop management. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

10. Explain two purposes of a wheelbarrow in farm work. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

11. State two tools used in soil preparation. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. Explain two functions of a watering can and garden sprayer. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

13. Identify two tools used in planting. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

14. State two tools used in harvesting crops. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

15. Explain two tools used for pruning and trimming. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

16. Describe two ways to use a hoe for land preparation. (4 marks)

i. \_\_\_\_\_

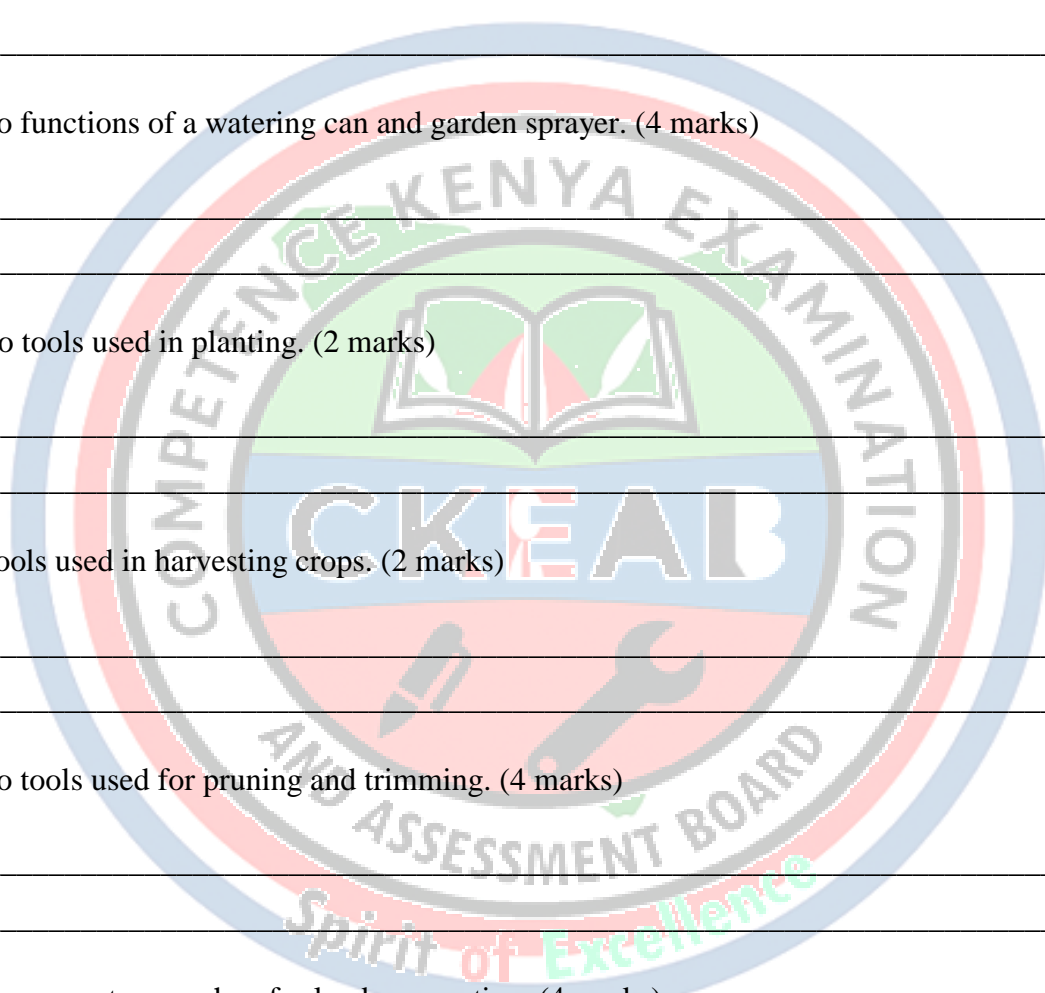
ii. \_\_\_\_\_

17. Explain two steps in planting seedlings using a trowel. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



iv. \_\_\_\_\_

18. State two precautions when using a sickle. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

19. Describe two ways to use a wheelbarrow safely. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

20. Explain two uses of a watering can in crop production. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

21. State two ways to safely use pruning shears. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. Describe two steps in applying top dressing using a hand spreader. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

23. Explain two tasks that can be carried out using a spade. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

24. State two methods of using a rake to prepare seedbeds. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

25. Explain two ways to safely use hand tools in livestock management. (4 marks)

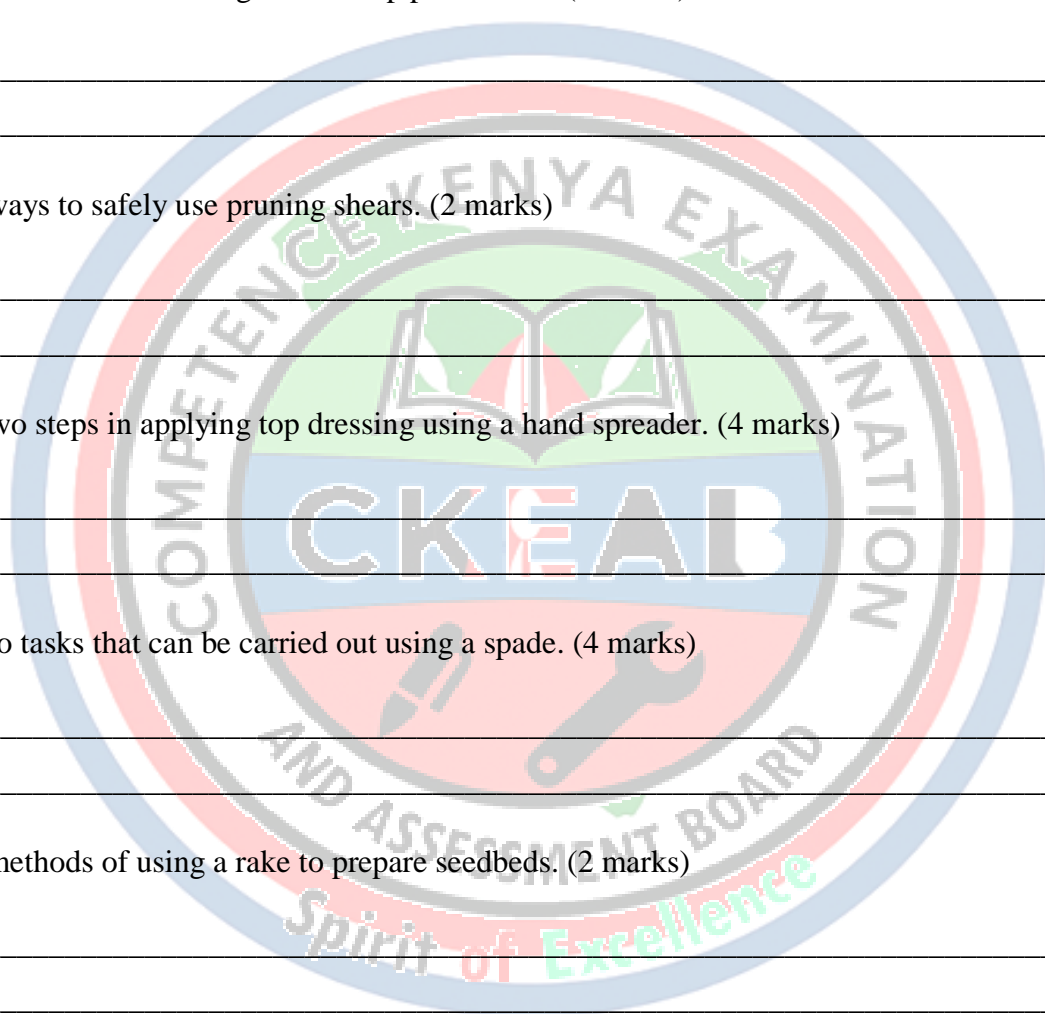
i. \_\_\_\_\_

ii. \_\_\_\_\_

26. Explain two reasons why tools should be cleaned after use. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



27. State two tools that require sharpening before use. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

28. Describe two methods of preventing rust on farm tools. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

29. State two ways to lubricate moving parts of equipment. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

30. Explain two reasons for replacing worn-out parts of farm tools. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

31. Describe two methods for storing tools to maintain them. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

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

i. \_\_\_\_\_

ii. \_\_\_\_\_

33. Explain two benefits of painting metal tools. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. State two signs that a tool requires maintenance. (2 marks)

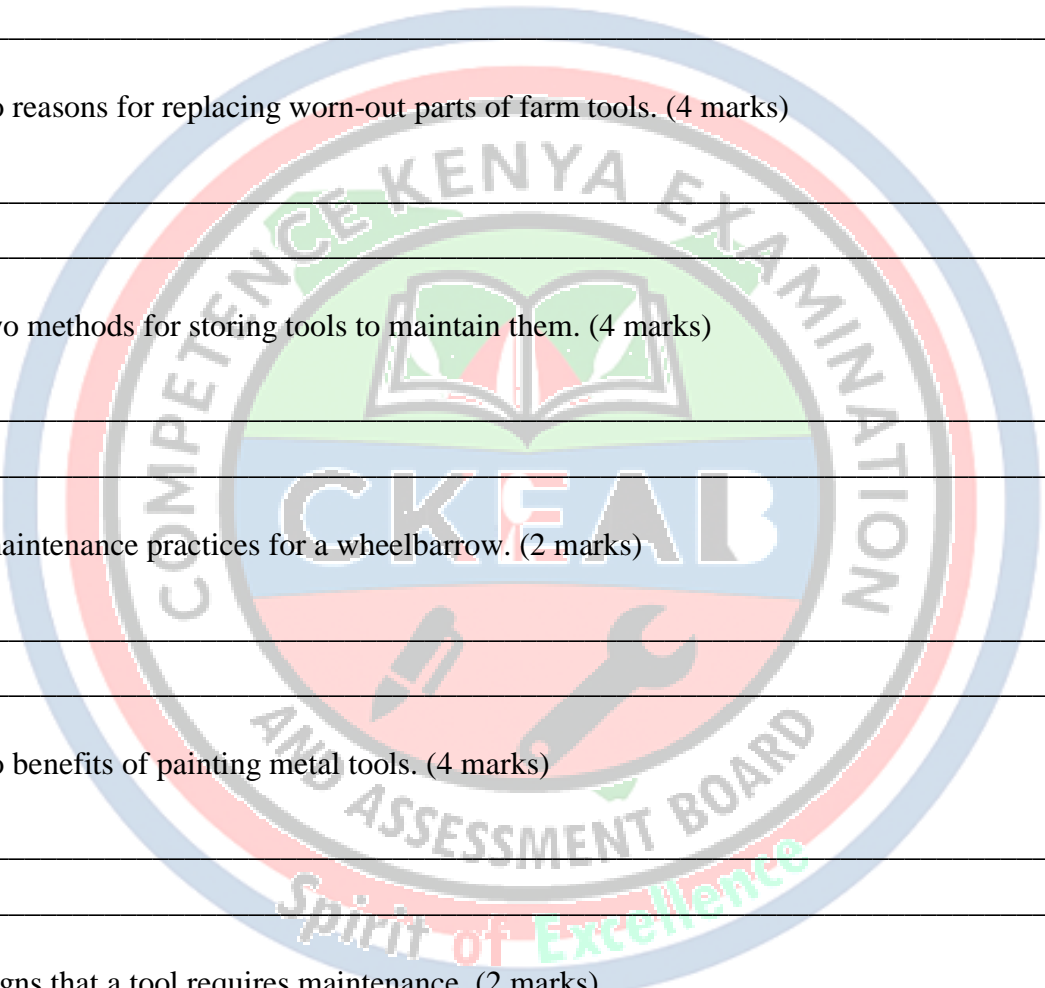
i. \_\_\_\_\_

ii. \_\_\_\_\_

35. Describe two safety precautions during maintenance of tools and equipment. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



36. State two personal protective equipment (PPE) used when handling tools. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

37. Explain two reasons why PPE is important in agriculture. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

38. State two precautions when using sharp tools. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

39. Explain two reasons why tools should be stored safely. (4 marks)

iii. \_\_\_\_\_

iv. \_\_\_\_\_

40. State two ways to prevent accidents while using mechanical tools. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

41. Describe two ways to maintain a safe working distance during farm work. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

42. State two reasons why training is important before using tools. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

43. Explain two methods to avoid fatigue when using hand tools. (4 marks)

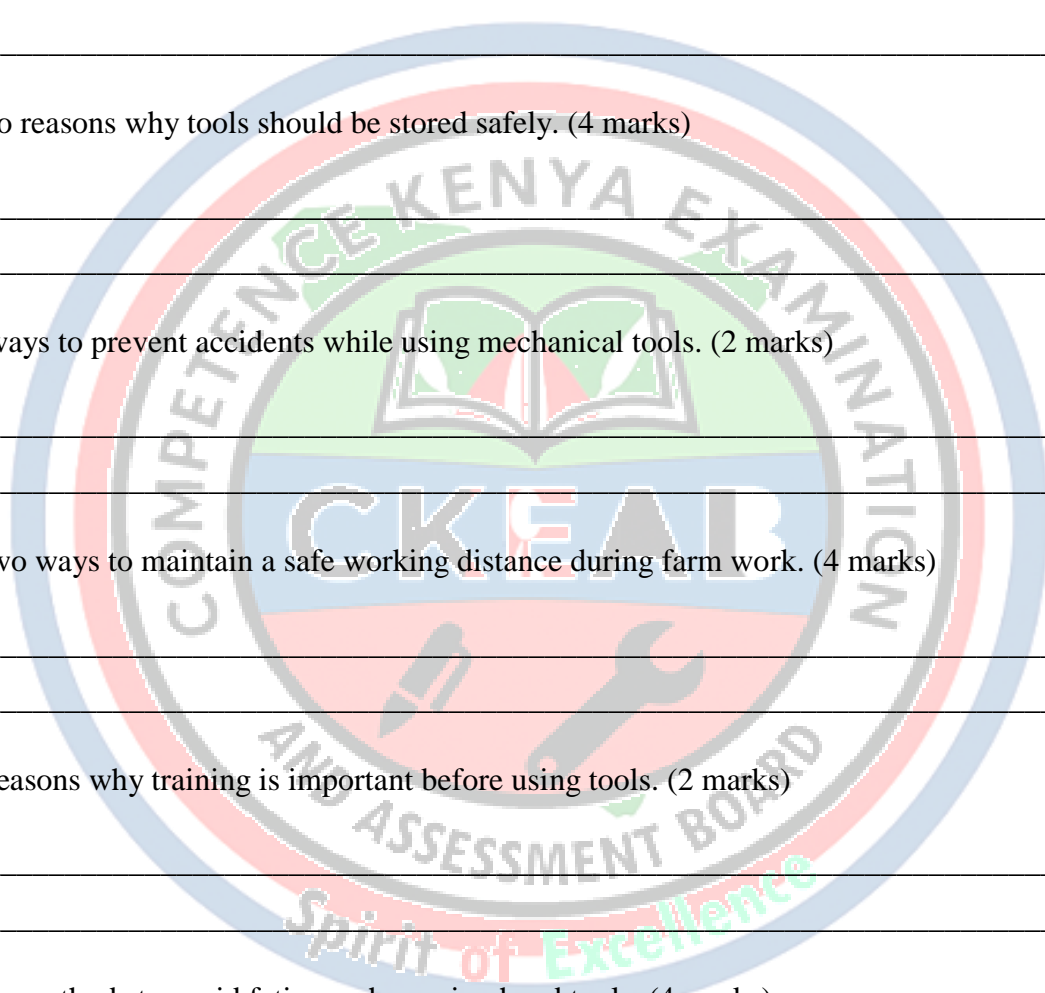
i. \_\_\_\_\_

ii. \_\_\_\_\_

44. State two ways to prevent slips and falls when using farm tools. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



45. Explain two reasons for inspecting tools before use. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

46. State two benefits of maintaining farm tools in good condition. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

47. Explain two reasons why maintenance improves work efficiency. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

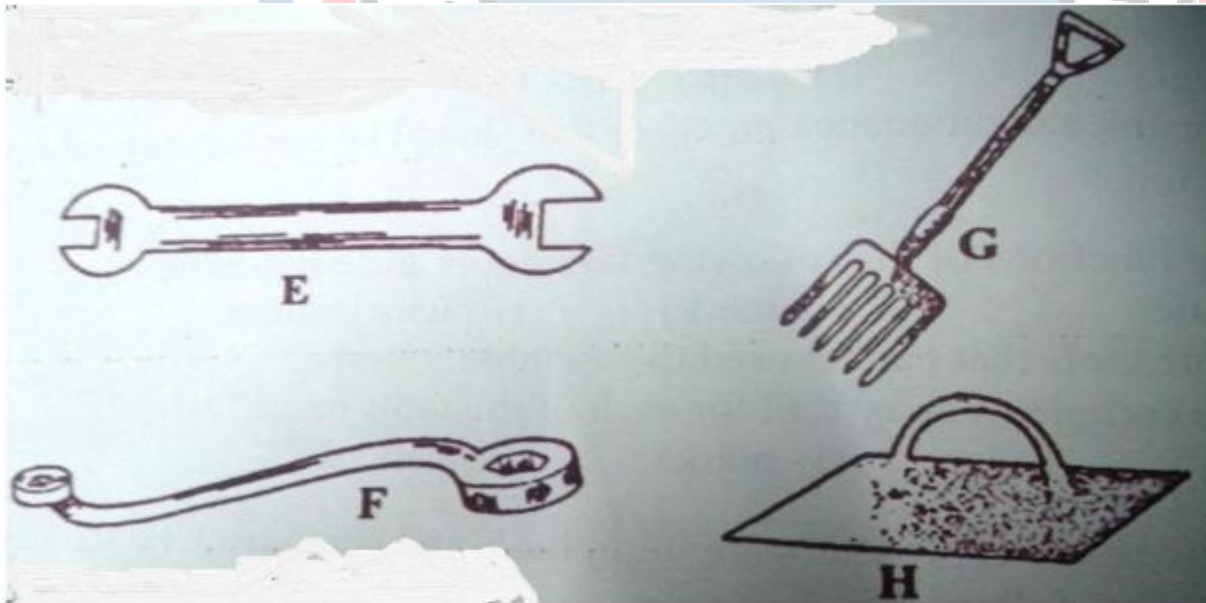
48. State two consequences of neglecting tool maintenance. (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

49. Explain two ways proper tool maintenance contributes to safety. (4 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

50. The diagram below represents farm tools and equipment.



a). Identify the tools labeled E and F (2 mks)

E \_\_\_\_\_

F \_\_\_\_\_

b). State **one** advantage of tool labeled F has over E. (1mk)

---

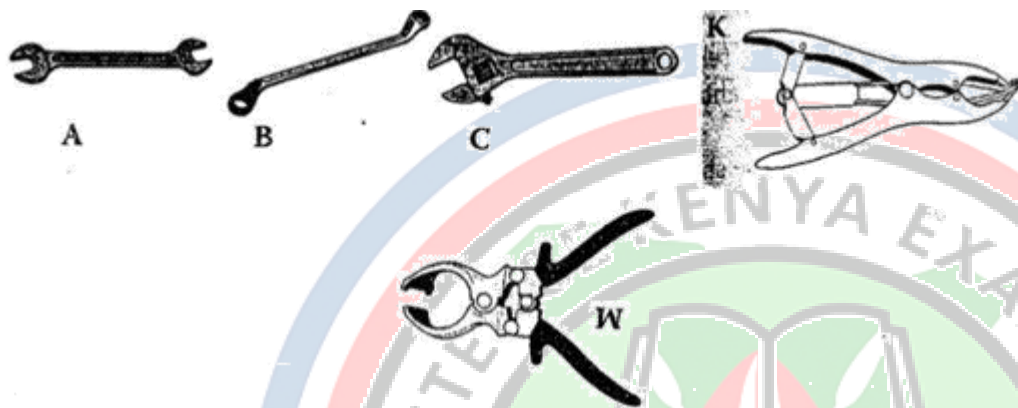
---

c). State **one** use of each of the tool labeled F and G. (2mks)

F: \_\_\_\_\_

G: \_\_\_\_\_

51. The diagrams below show some farm tools. Study them and answer the question that follow.



a) Name the tools. (2 marks)

1. A.....
2. B.....
3. C.....
4. W.....

b) State the functional differences between tools K and W. (1mark)

K \_\_\_\_\_

W \_\_\_\_\_

c) What advantage does C have over A and B? (1 mark)

---

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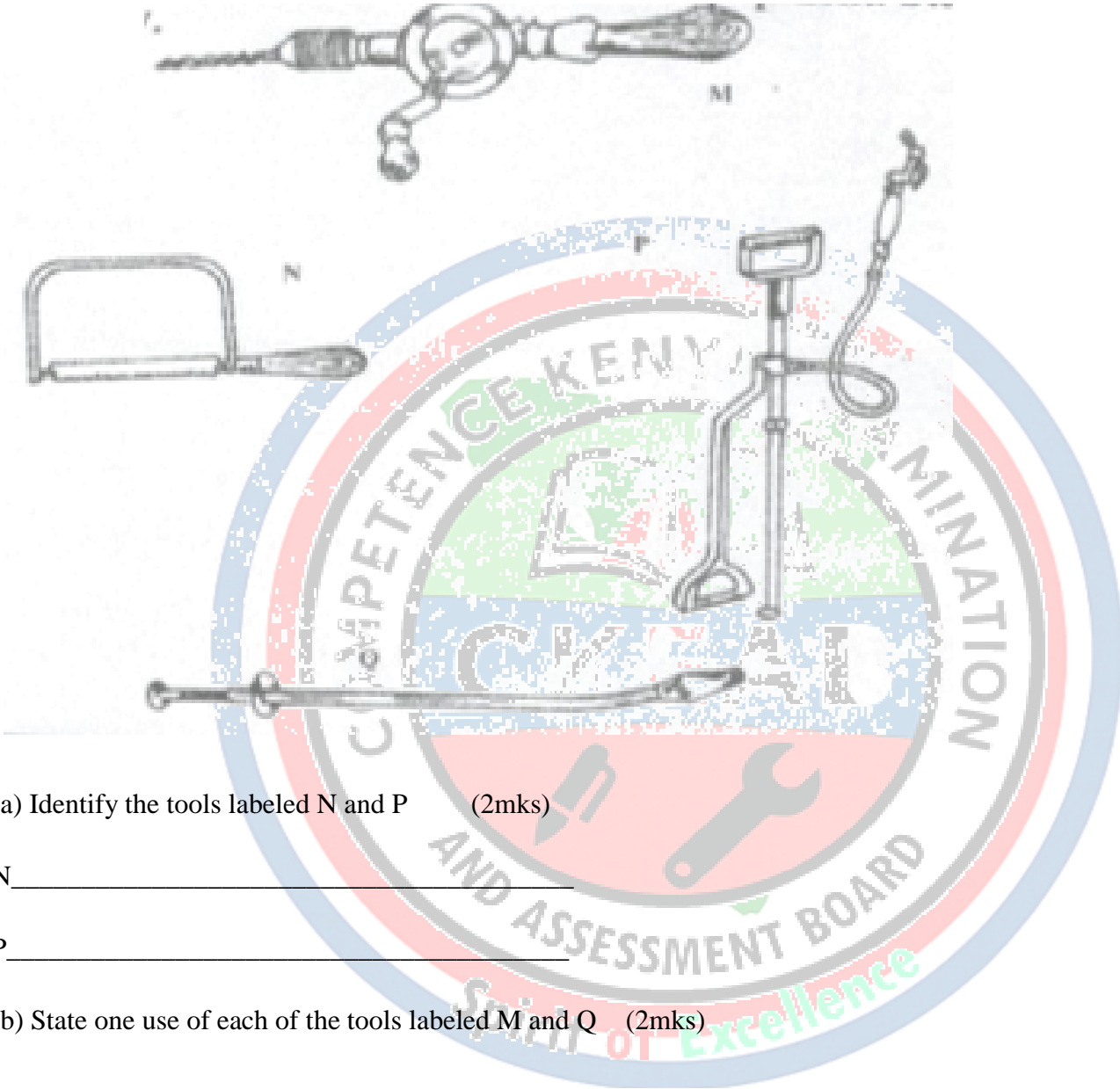
---

d) State **one** common maintenance practice carried out tool C and W. (1 mark)

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---

52. The diagram below represents some farm tools and equipment. Study them and answer the questions that follow



(a) Identify the tools labeled N and P (2mks)

N \_\_\_\_\_

P \_\_\_\_\_

(b) State one use of each of the tools labeled M and Q (2mks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

(c) Explain three maintenance practice carried out on the equipment labeled P (3mks)

iii. \_\_\_\_\_

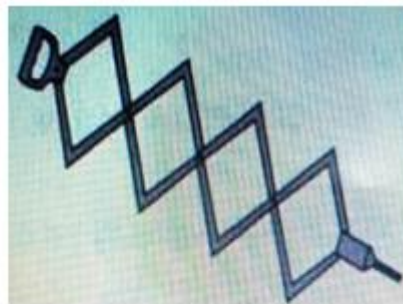
iv. \_\_\_\_\_

v. \_\_\_\_\_

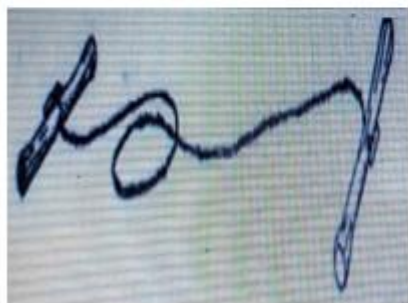
53. The diagram below represents farm tools and equipment



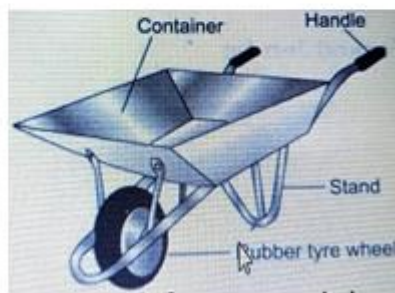
**F**



**E**



**G**



**H**

a) Identify tools labeled E, F, G and H (2 mks)

E \_\_\_\_\_

F \_\_\_\_\_

G \_\_\_\_\_

H \_\_\_\_\_

b) State one use of the tool labelled F [1 mk]

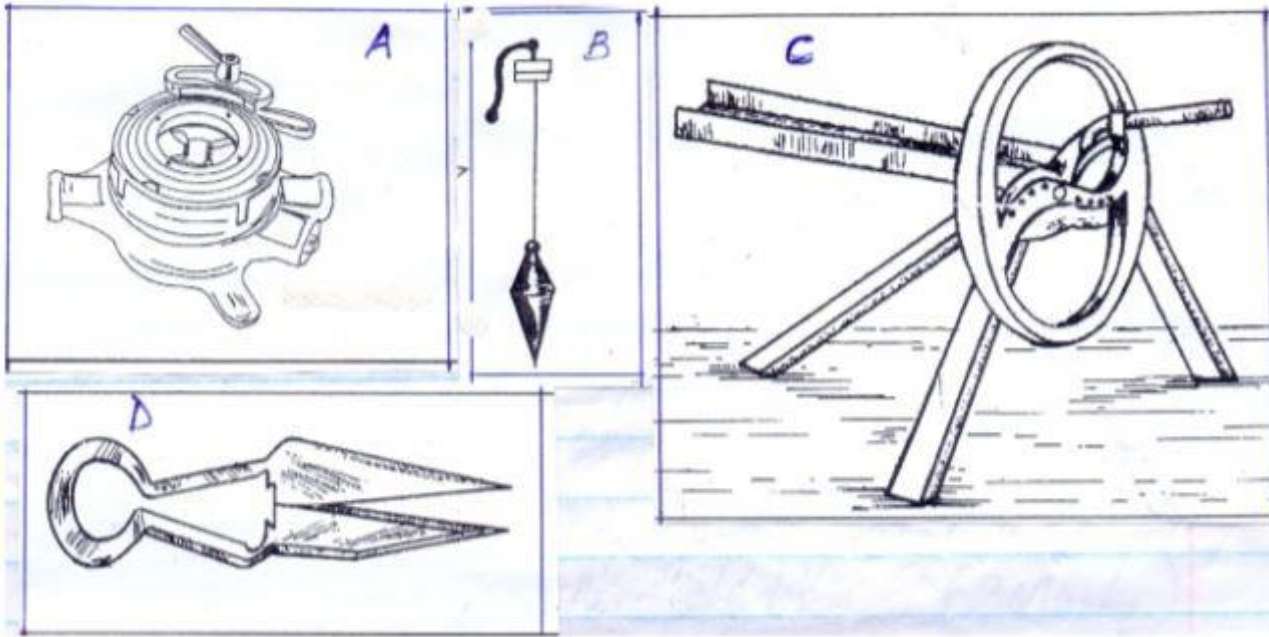
\_\_\_\_\_  
\_\_\_\_\_

c) State two maintenance practices carried out in H (2 mks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

54. The diagrams below represent some farm tools and equipment. Study them and answer the questions that follow.



a. Identify the tools labeled A and B [2marks]

A \_\_\_\_\_

B \_\_\_\_\_

b. State one use of each of the tools labeled C and D [2marks]

C \_\_\_\_\_

D \_\_\_\_\_

c. Explain one maintenance practice carried out on tool D [1mk.]

\_\_\_\_\_

\_\_\_\_\_

55. The diagrams below shows farm tools. Study them and answer the questions that follow.



a) Identify tool J and K (2 marks)

J \_\_\_\_\_ K \_\_\_\_\_

b) Classify the tools under woodwork tools and equipment (2 marks)

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c) State two uses of the tools shown above (2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

56. The diagrams below show some garden tools. Use them to answer the questions that follow.



Tool A

Tool B

a) Identify the tools

A \_\_\_\_\_

B \_\_\_\_\_

b) State the field two conditions of the field that tool B would be more suitable to be used. ( 2mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

57. Below are illustrations of farm tools and equipment.



C

B

a) Identify the tool labelled A and C (2 marks)

A \_\_\_\_\_ C \_\_\_\_\_

b) State the advantage of tool B over tool C (1 mark)

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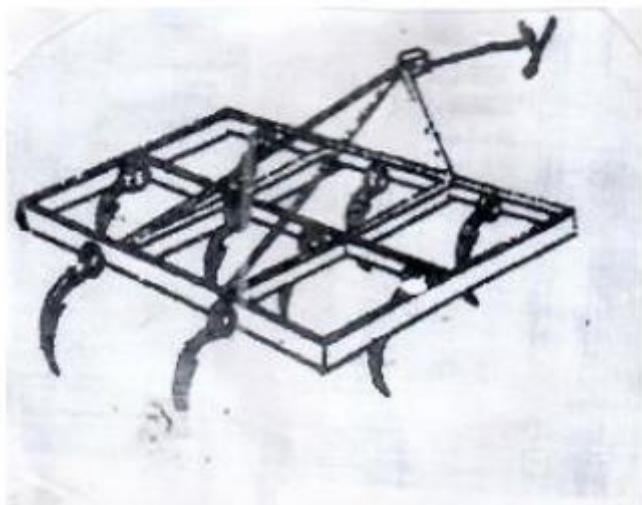
c) State two maintenance practices carried out on tool labelled B. (2 marks)

- i. 

---
- ii. 

---

58. Below is a diagram illustrating a farm implement. Study it and answer the questions that follow.



(a) Identify the implement. (1mk)

---

(b) State:

(i) The role of the part labelled Y. (1mk)

---

---

(ii) **Three** uses of the implement on the farm (3mks)

- i. 

---
- ii. 

---
- iii. 

---

(c) List **two** maintenance practices carried out on the implement. (2mks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_



## SUBSTRAND 3.2: PRODUCT PROCESSING AND VALUE ADDITION

**INSTRUCTIONS:** Answer ALL questions.

1. Define value addition in agriculture. (2 marks)

---

---

2. State two purposes of adding value to agricultural produce. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

3. Suggest two methods of value addition for fruits. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

4. Suggest two methods of value addition for cereals. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

5. Suggest two methods of value addition for tubers. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

6. Suggest two methods of value addition for vegetables. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

7. Suggest two methods of value addition for milk. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

8. Suggest two methods of value addition for honey. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



9. Explain two reasons for carrying out value addition. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

10. State two products that can be made from potatoes through value addition. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

11. State two products that can be made from cereals through value addition. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. Suggest two products that can be made from meat through value addition. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

13. Explain two reasons why packaging adds value to agricultural products. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

14. Suggest two home-based packaging techniques for processed products. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

15. Explain two benefits of value addition to farmers. (4 marks)

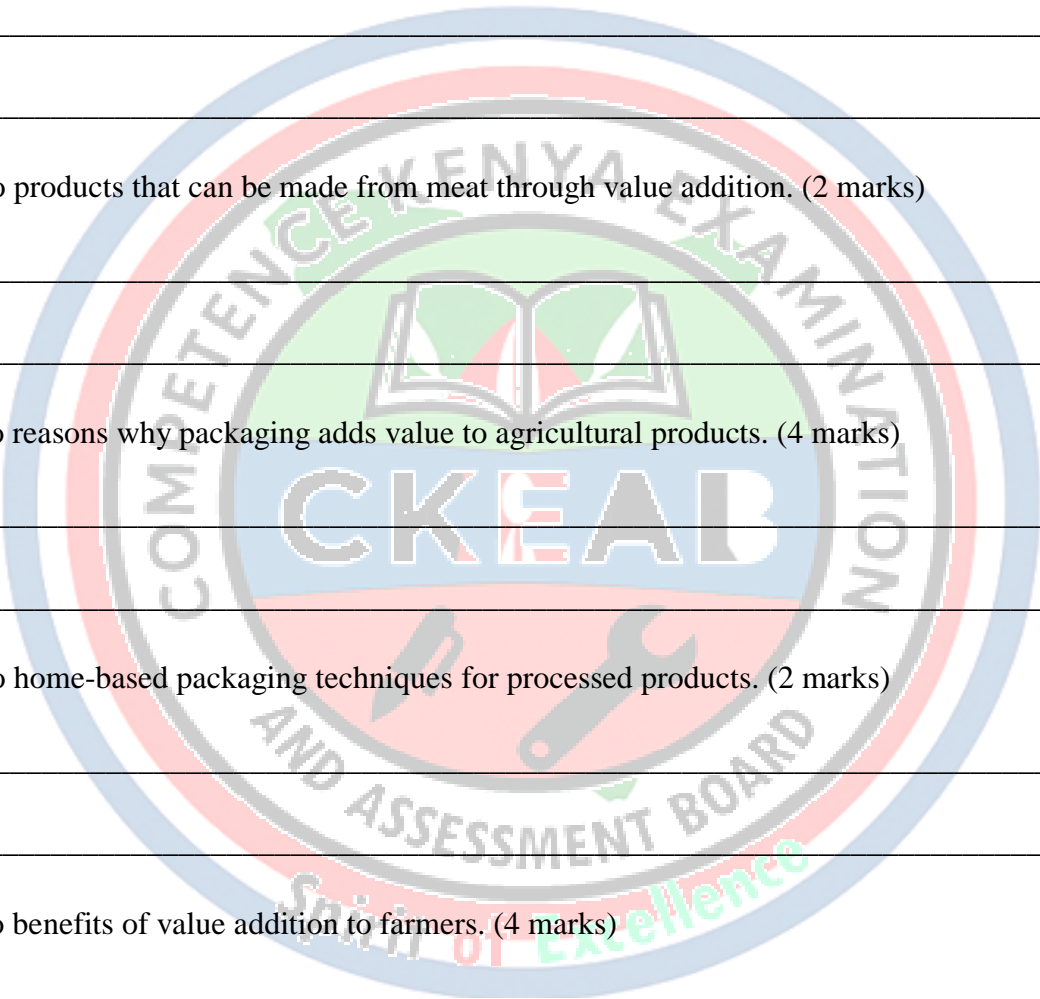
i. \_\_\_\_\_

ii. \_\_\_\_\_

16. State two plant origin products suitable for processing. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



17. Describe four steps involved in processing fruits into juice. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

18. Describe four steps involved in making marmalade. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

19. Describe four steps involved in producing crisps from tubers. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

20. Explain two reasons for washing and sorting produce before processing. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

21. State two pieces of equipment used in plant produce processing. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. Explain two safety precautions when processing plant products. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

23. Describe two methods of drying plant produce. (4 marks)

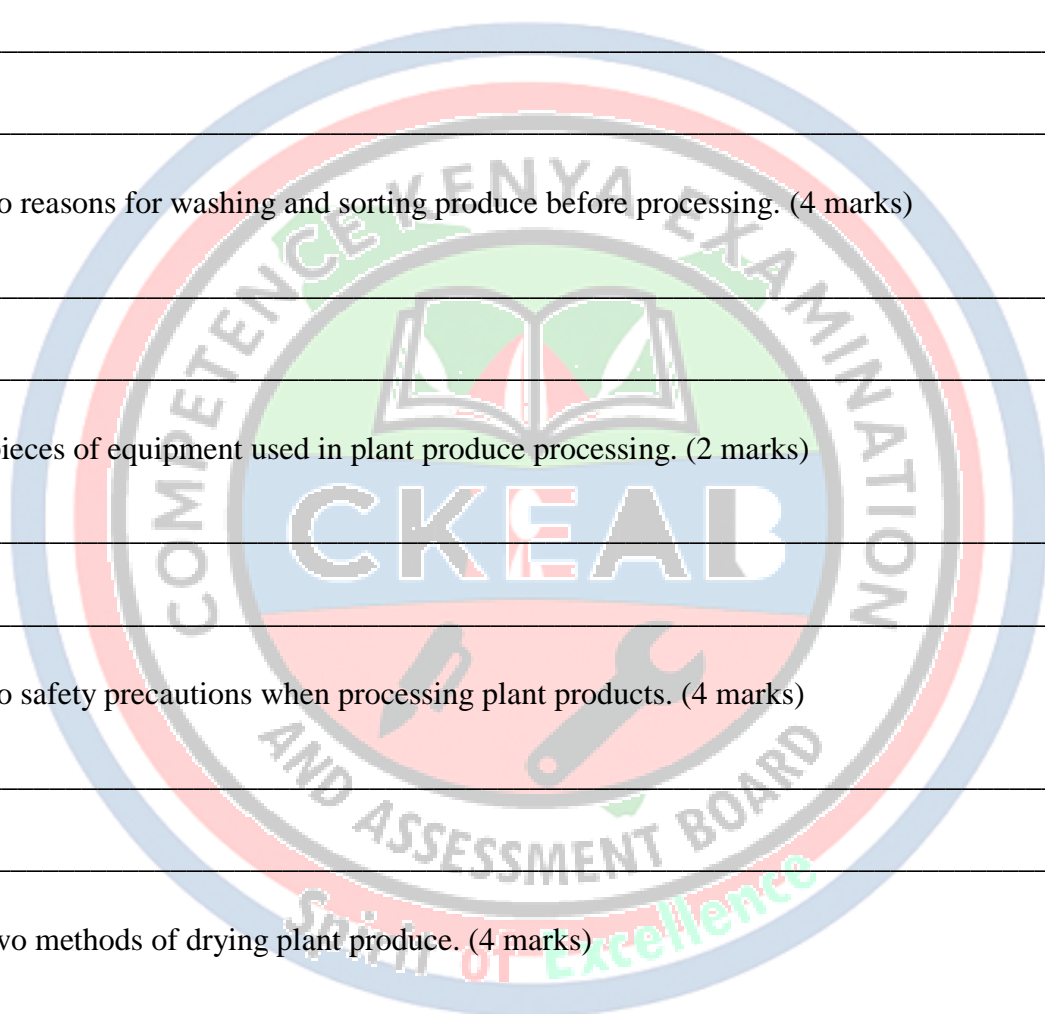
i. \_\_\_\_\_

ii. \_\_\_\_\_

24. Explain two ways to preserve processed plant products for longer shelf life. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



25. Suggest two plant-based products that can be processed and sold locally. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

26. State two animal origin products suitable for processing. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

27. Describe four steps involved in processing milk into butter. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

28. Describe four steps involved in honey extraction. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

29. Explain two reasons for pasteurizing milk before sale. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

30. State two products that can be processed from meat. (2 marks)

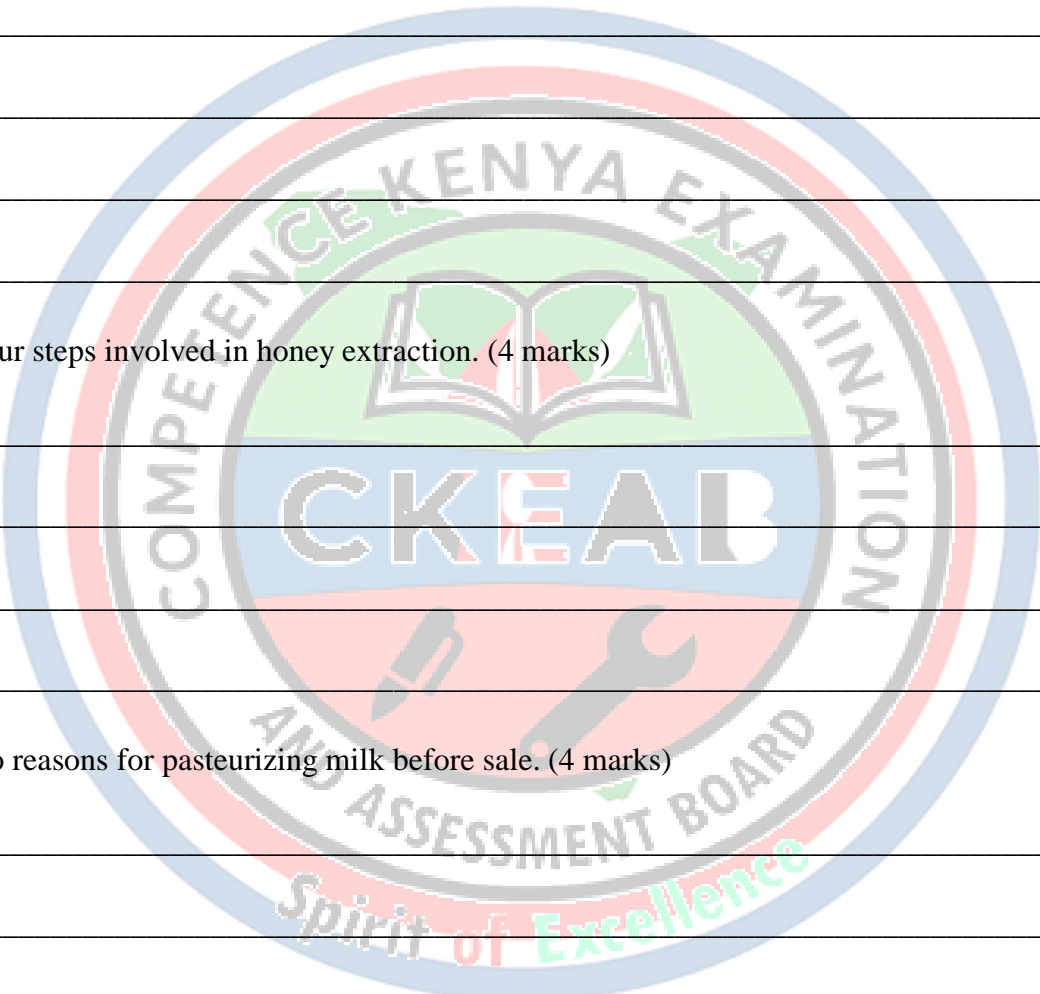
i. \_\_\_\_\_

ii. \_\_\_\_\_

31. Describe two methods of preserving meat for long storage. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



32. State two tools/equipment used in processing hides and skins. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

33. Explain two precautions when processing honey. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. Describe two steps in processing fish for market. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

35. Explain two benefits of processing animal origin products. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

36. Define branding in agricultural products. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

37. State two purposes of branding processed agricultural products. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

38. Describe two methods of packaging plant-based products. (4 marks)

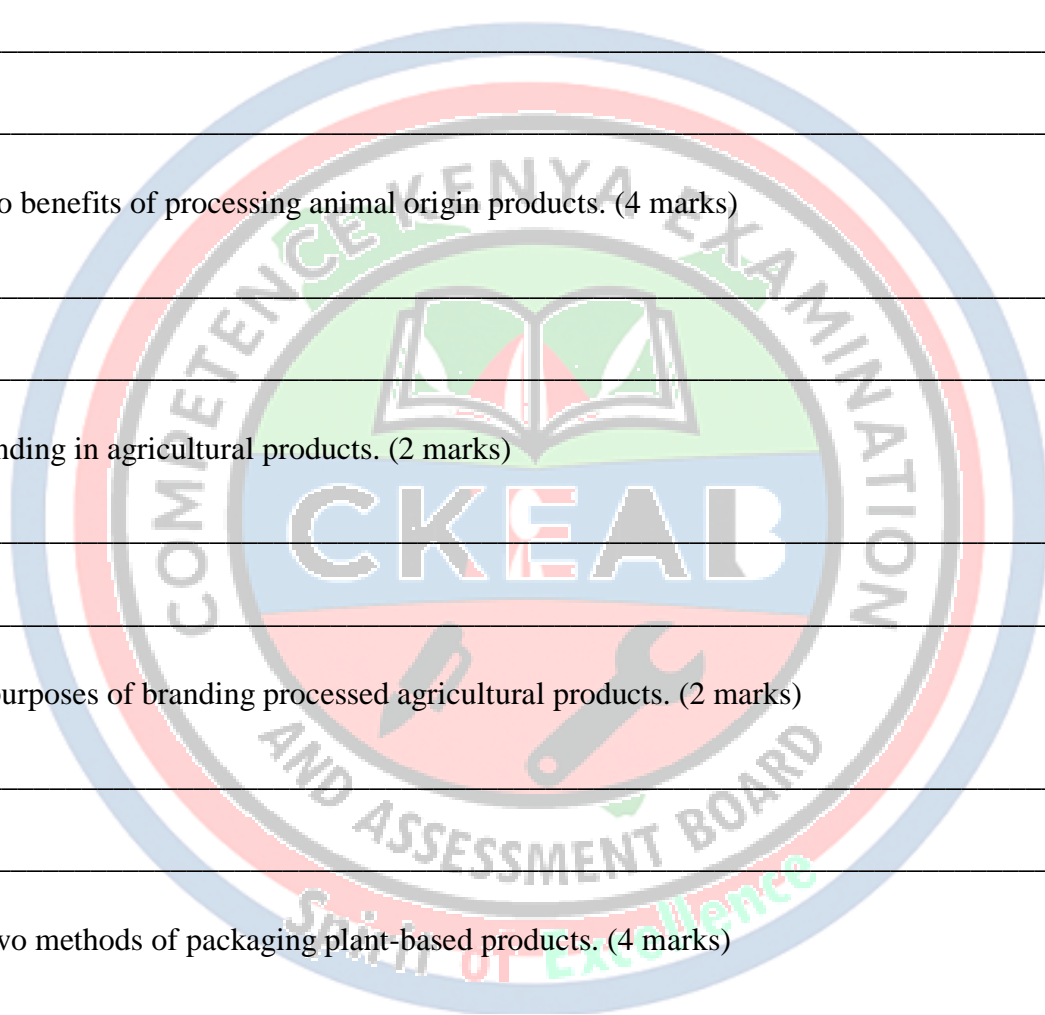
i. \_\_\_\_\_

ii. \_\_\_\_\_

39. Describe two methods of packaging animal-based products. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



40. Explain two ways packaging affects product shelf-life. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

41. State two pieces of equipment used in home-based packaging. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

42. Suggest two innovative ways of labeling products. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

43. Explain two ways packaging improves marketability. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

44. Describe two safety precautions during packaging. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

45. Explain two advantages of attractive packaging for sales. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

46. State two ethical concerns in processing agricultural produce. (2 marks)

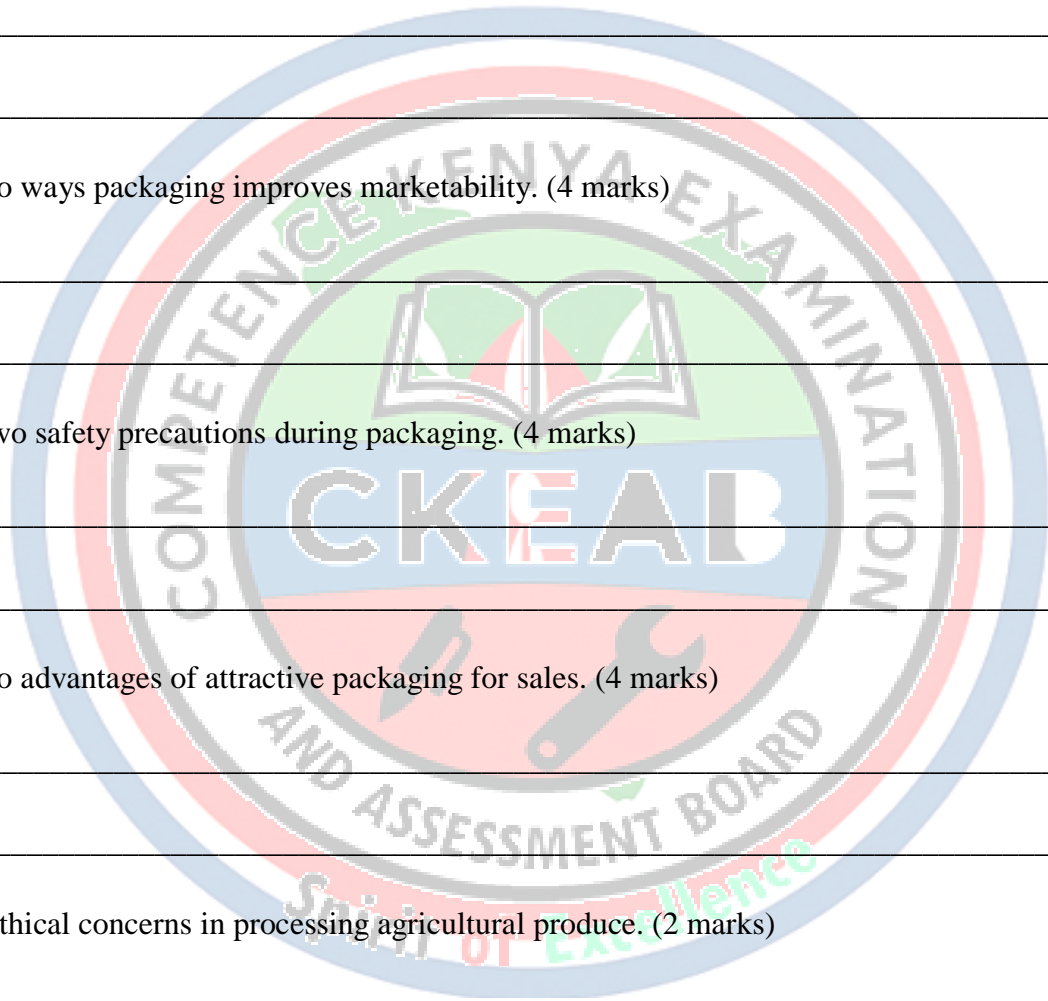
i. \_\_\_\_\_

ii. \_\_\_\_\_

47. Explain two reasons why using expired additives is unethical. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



48. State two consequences of mislabeling products. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

49. Explain two ways to ensure fairness and honesty in product pricing. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



### SUBSTRAND 3.3: ESTABLISHING AGRICULTURAL ENTERPRISE

1. Define the term factors of production. (2 marks)

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---

2. State two types of resources required for agricultural production. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

3. Describe two roles of land/space in an agricultural enterprise. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

4. State two roles of labour in an agricultural enterprise. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

5. Explain two ways entrepreneurship contributes to agricultural enterprise. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

6. State two forms of capital needed to establish an agricultural enterprise. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

7. Explain two reasons why land location is important in enterprise selection. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

8. Describe two qualities of an effective entrepreneur in agriculture. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

9. State two ways labour can be organized in agricultural enterprises. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

10. Explain two factors affecting the availability of capital in an enterprise. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

11. Describe two differences between physical capital and human capital. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. State two benefits of combining all factors of production effectively. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

13. Explain two reasons for having sufficient land area for an agricultural enterprise. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

14. State two challenges of inadequate labour in agricultural enterprises. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

15. Describe two ways entrepreneurship influences productivity in agricultural projects. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

16. Define capital in an agricultural context. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

17. State two sources of capital for starting an agricultural enterprise. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

18. Explain two ways borrowing can be used to acquire capital. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

19. State two methods of saving for capital accumulation. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

20. Explain two reasons why disposing of assets can help raise capital. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

21. State two sources of grants or donations for agricultural enterprises. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. Explain two advantages of using personal savings as capital. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

23. State two precautions when borrowing capital. (2 marks)

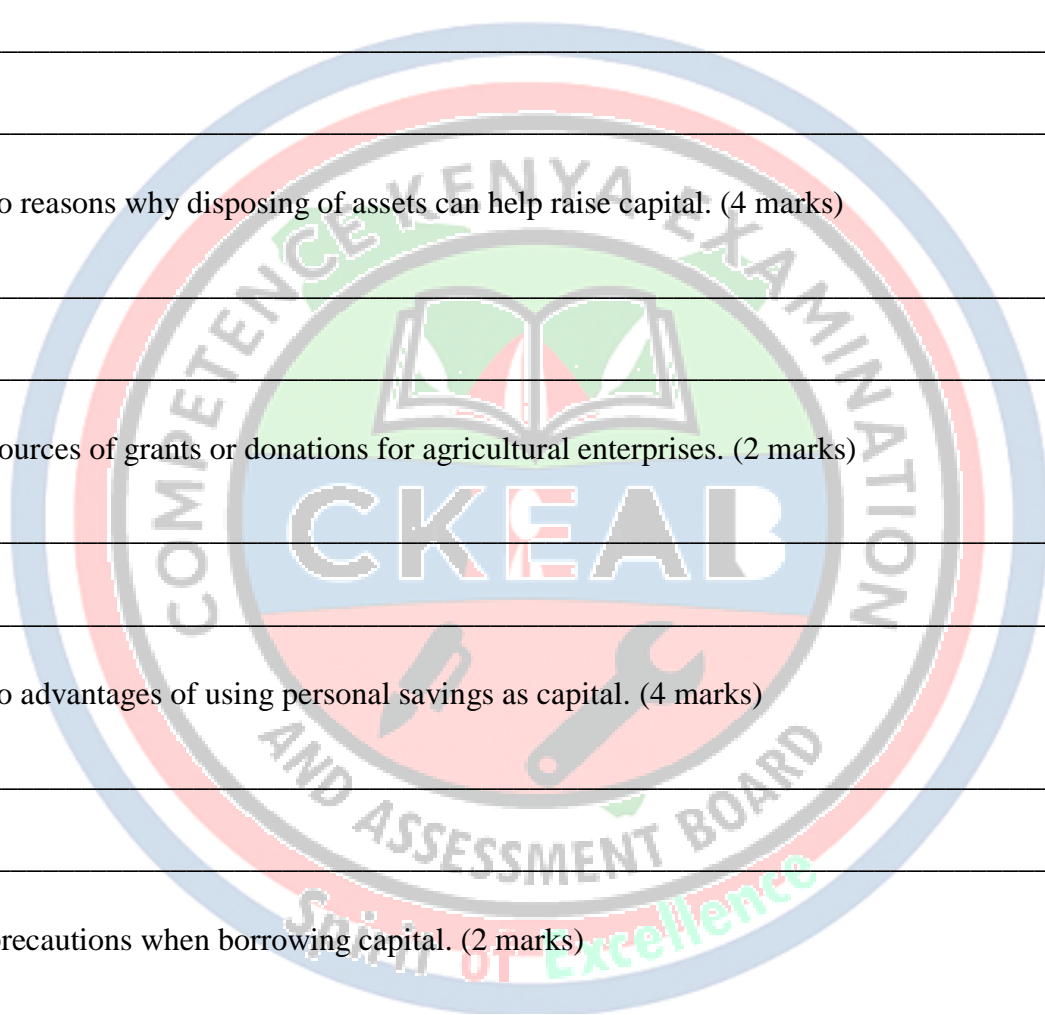
i. \_\_\_\_\_

ii. \_\_\_\_\_

24. Describe two challenges of acquiring capital for agricultural enterprise. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



25. Explain two ways to combine different sources of capital effectively. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

26. State two factors to consider when selecting an agricultural enterprise. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

27. Explain two ways climate affects enterprise selection. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

28. State two considerations of market demand in selecting an enterprise. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

29. Explain two reasons why soil type is important in selecting an enterprise. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

30. State two considerations of labour availability when selecting enterprise. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

31. Explain two ways technology affects enterprise selection. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

32. Describe two environmental considerations when selecting enterprise. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



33. State two examples of enterprises suitable for small-scale farms. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. Explain two reasons why financial resources influence enterprise selection. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

35. State two benefits of selecting an enterprise suited to available resources. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

36. Define support services in agriculture. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

37. State two sources of technical support for agricultural enterprises. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

38. State two sources of financial support for agricultural enterprises. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

39. Explain two reasons why extension services are important in enterprise establishment. (4 marks)

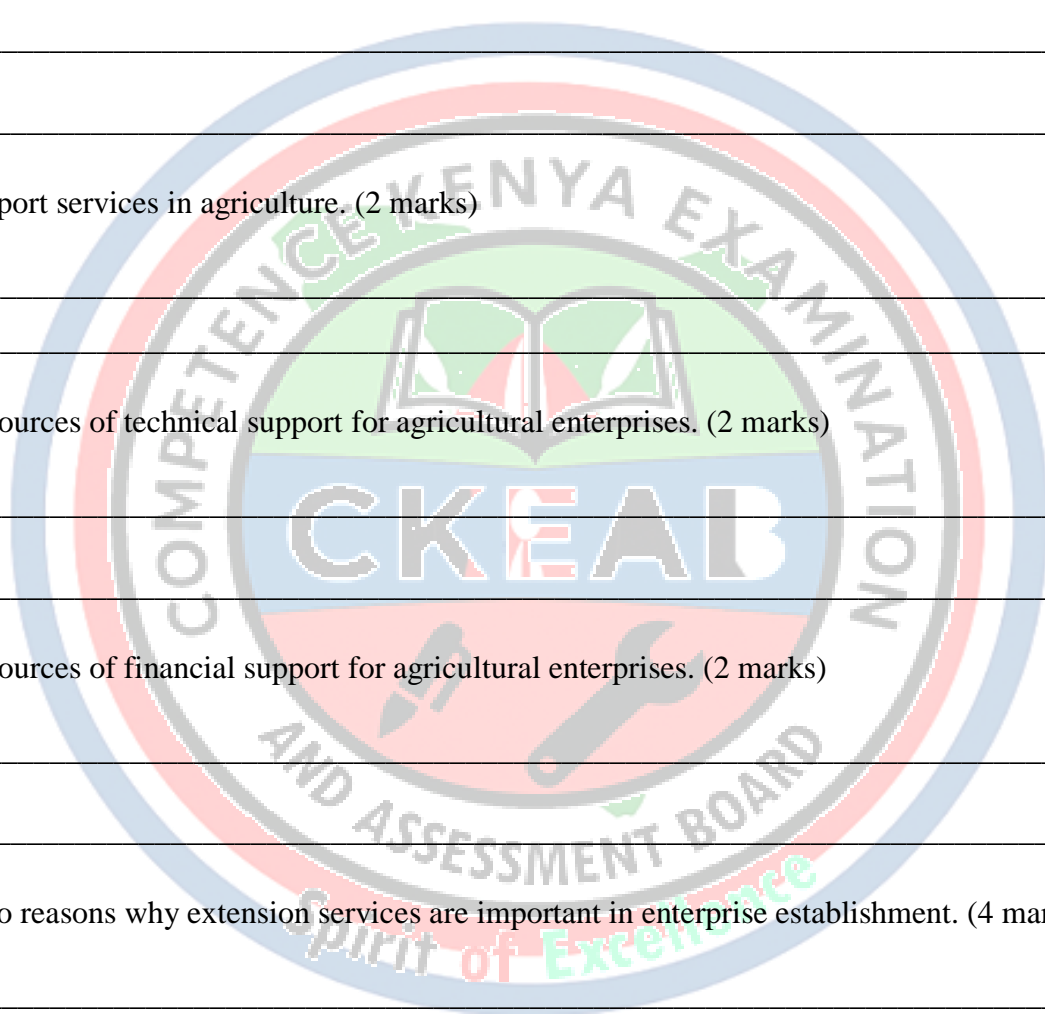
i. \_\_\_\_\_

ii. \_\_\_\_\_

40. State two types of inputs supplied by support services. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



41. Explain two ways support services contribute to productivity. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

42. State two government agencies that provide agricultural support. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

43. Explain two benefits of using private sector support services. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

44. State two roles of community-based support in enterprise establishment. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

45. Describe two ways to evaluate the usefulness of support services. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

46. Explain two ways land contributes to enterprise success. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

47. Explain two ways labour contributes to enterprise success. (4 marks)

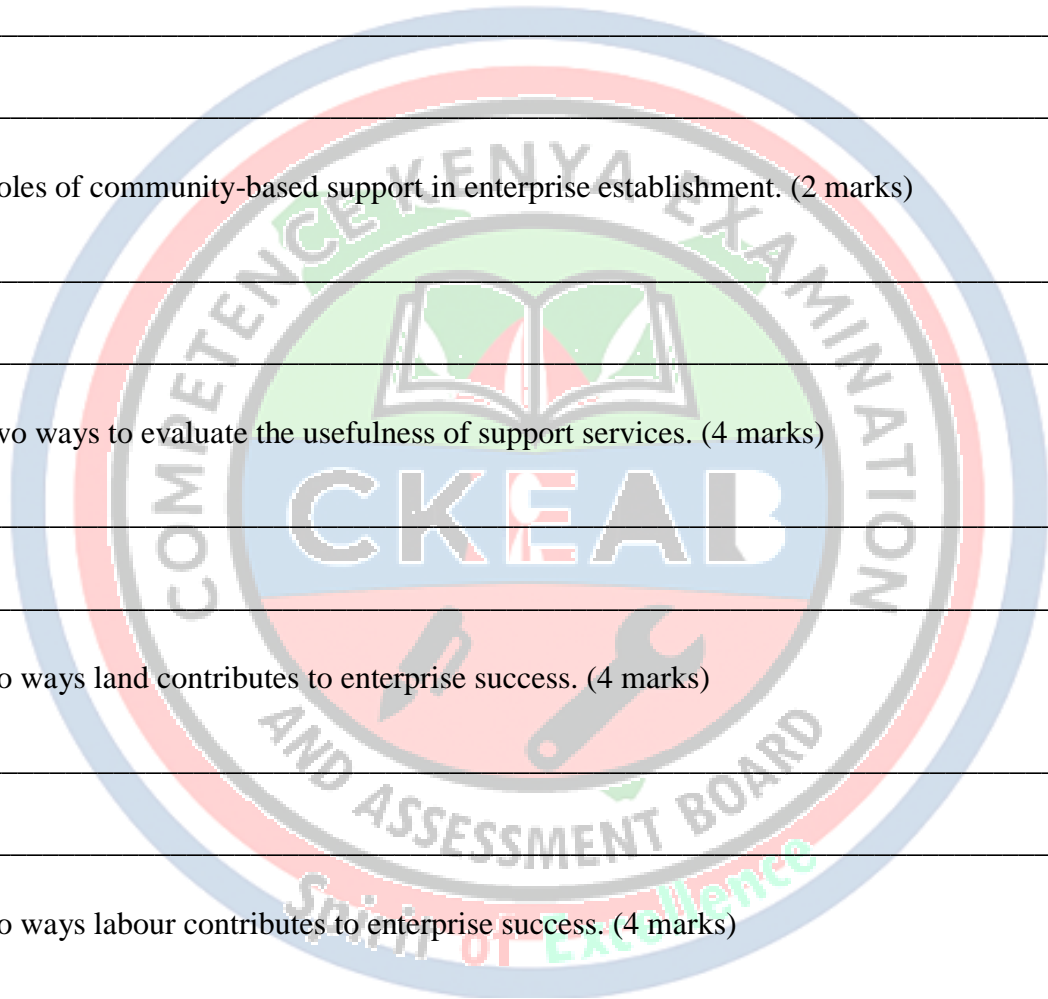
i. \_\_\_\_\_

ii. \_\_\_\_\_

48. Explain two ways capital contributes to enterprise success. (4 marks)

i. \_\_\_\_\_

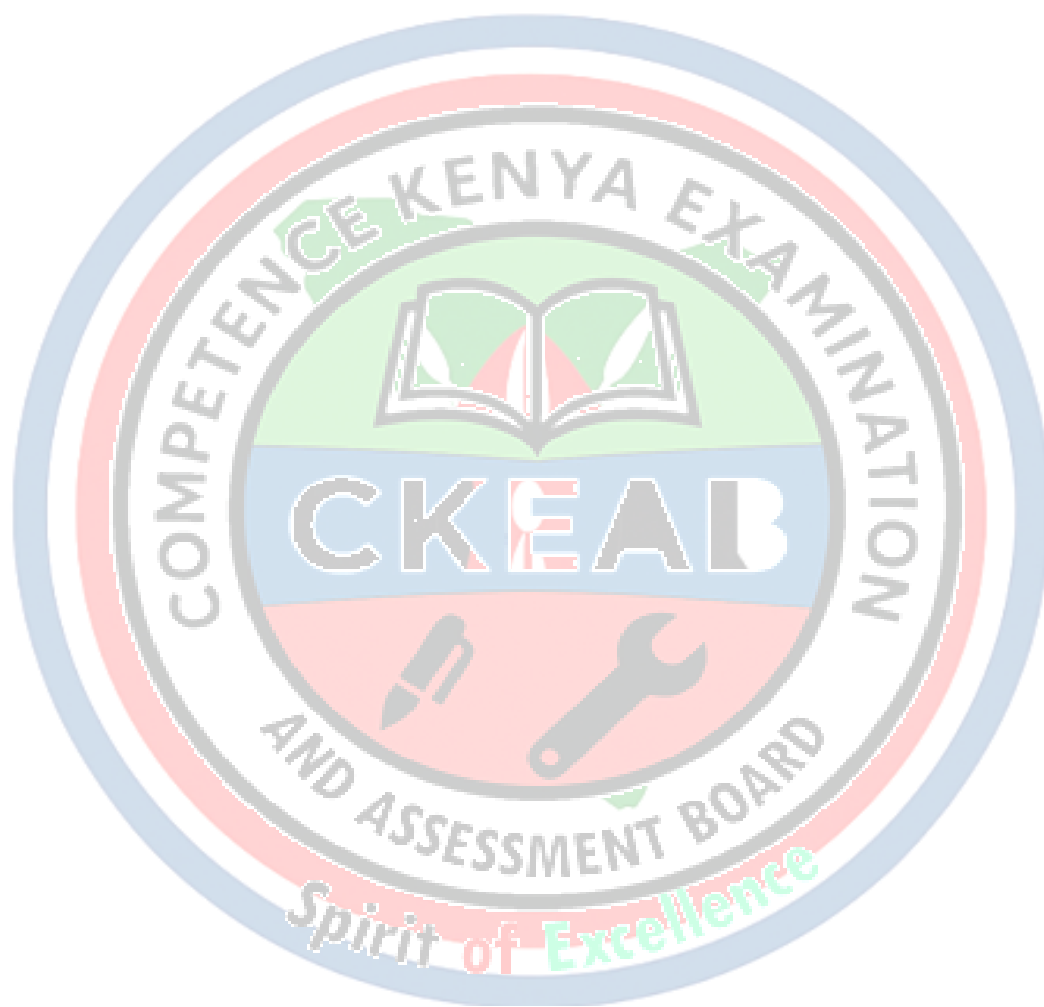
ii. \_\_\_\_\_



49. Explain two ways entrepreneurship contributes to enterprise success. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



### SUBSTRAND 3.4: MARKETING AGRICULTURAL PRODUCE

1. Define the term marketing of agricultural produce. (2 marks)

---

---

2. State two reasons why agricultural produce should be prepared for marketing. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

3. Explain two steps in sorting agricultural produce before sale. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

4. Describe two methods of grading agricultural produce. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

5. State two ways packaging adds value to agricultural produce. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

6. Explain two ways branding helps in marketing produce. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

7. Describe two methods of labeling agricultural produce. (4 marks)

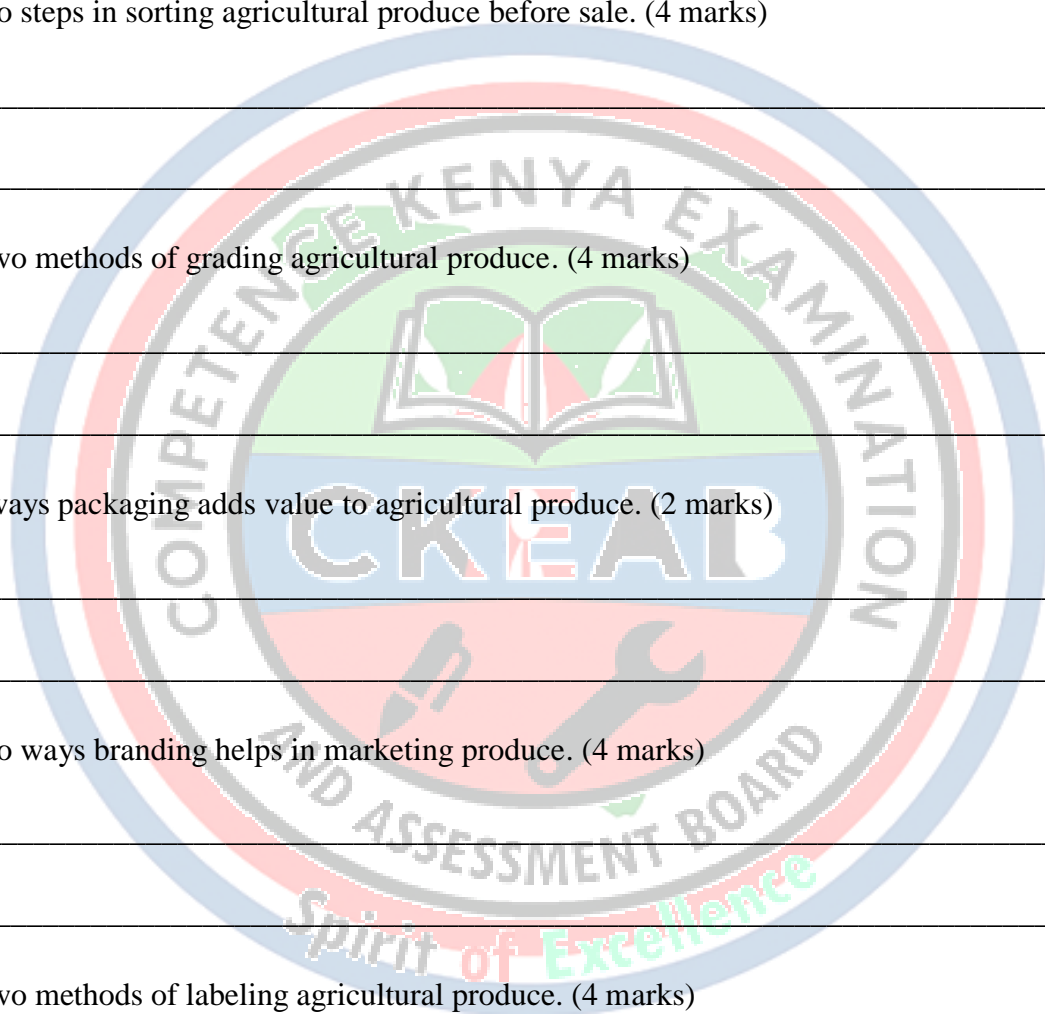
i. \_\_\_\_\_

ii. \_\_\_\_\_

8. State two benefits of weighing produce before sale. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



9. Explain two ways to maintain quality during preparation for marketing. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

10. State two steps in cleaning produce before marketing. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

11. Explain two ways display affects sales of agricultural produce. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. State two types of packaging materials suitable for fruits and vegetables. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

13. Explain two reasons for using uniform packaging sizes. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

14. Describe two ways to prevent damage of produce during preparation for sale. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

15. Explain two benefits of proper preparation of agricultural produce for marketing. (4 marks)

i. \_\_\_\_\_

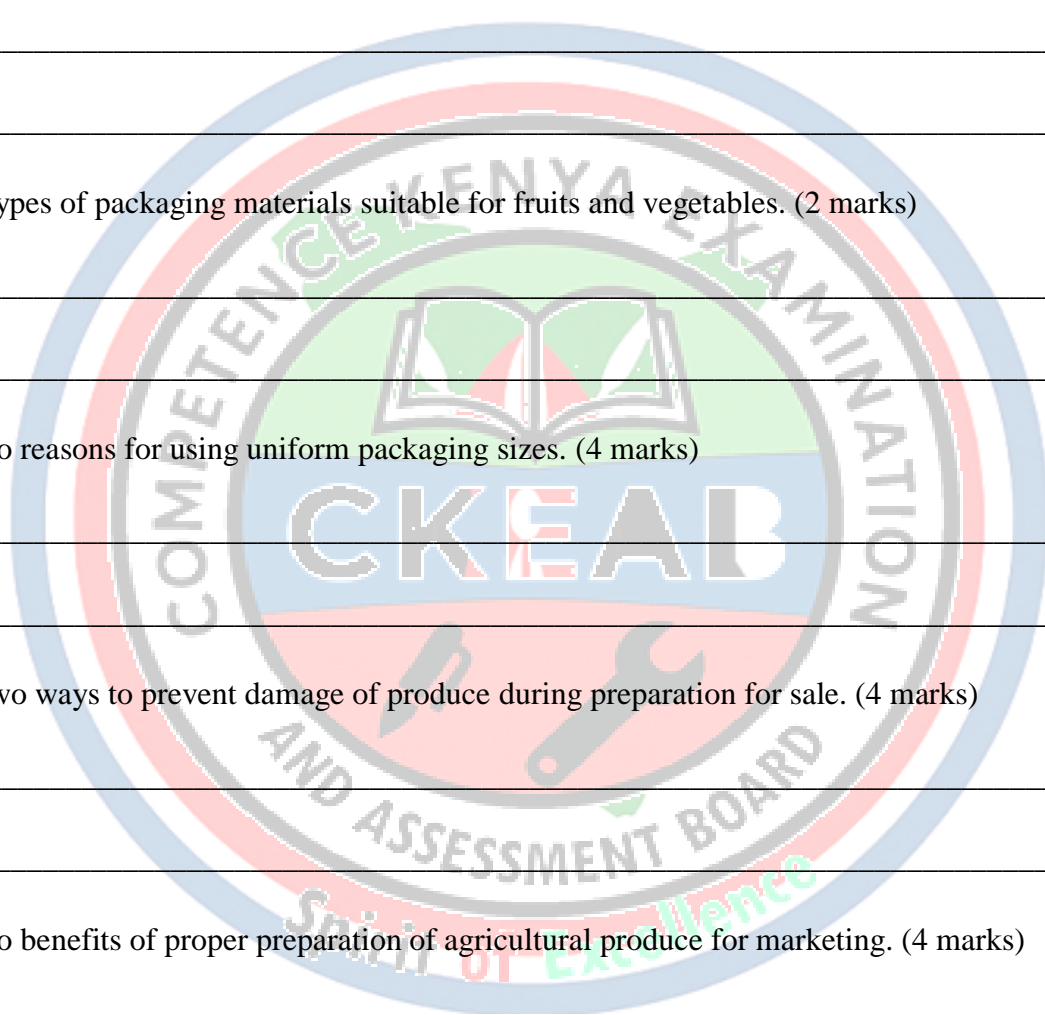
ii. \_\_\_\_\_

16. Explain how to sort fruits for market sale. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



iv. \_\_\_\_\_

17. Demonstrate how to grade cereals into quality classes. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

18. Demonstrate weighing procedures for selected crops. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

19. Demonstrate packaging of tubers for sale. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

20. Demonstrate labeling of processed products. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

21. Suggest two ways to store produce before taking it to market. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. Explain two ways to avoid spoilage during transport to market. (4 marks)

i. \_\_\_\_\_

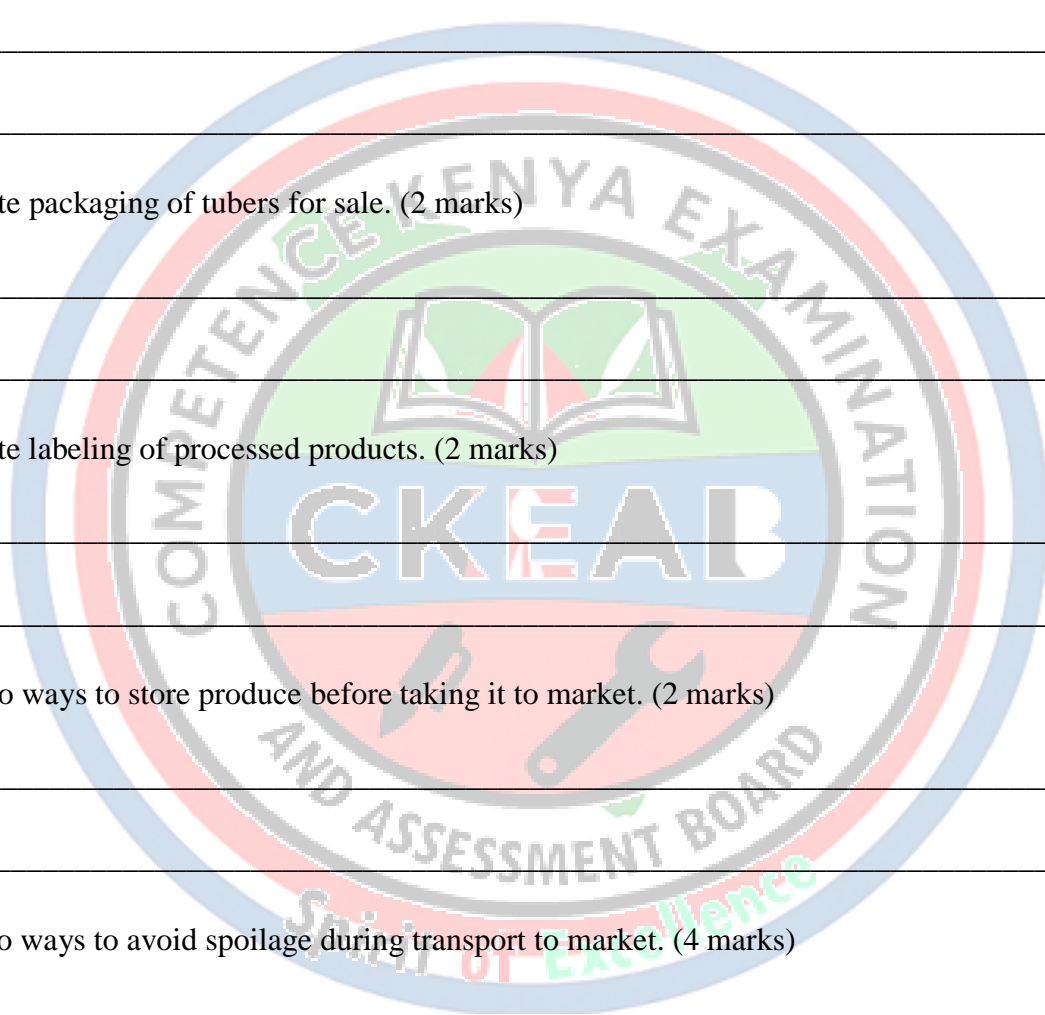
ii. \_\_\_\_\_

23. State two tasks done when displaying produce in a market. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



24. Explain two ways to enhance the appearance of produce for sale. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

25. Describe two ways to prepare animal products for marketing. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

26. Define market outlet in agriculture. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

27. State two physical market outlets for agricultural produce. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

28. State two digital platforms used for marketing produce. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

29. Explain two advantages of selling produce in a physical market. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

30. Explain two advantages of digital marketing for agricultural produce. (4 marks)

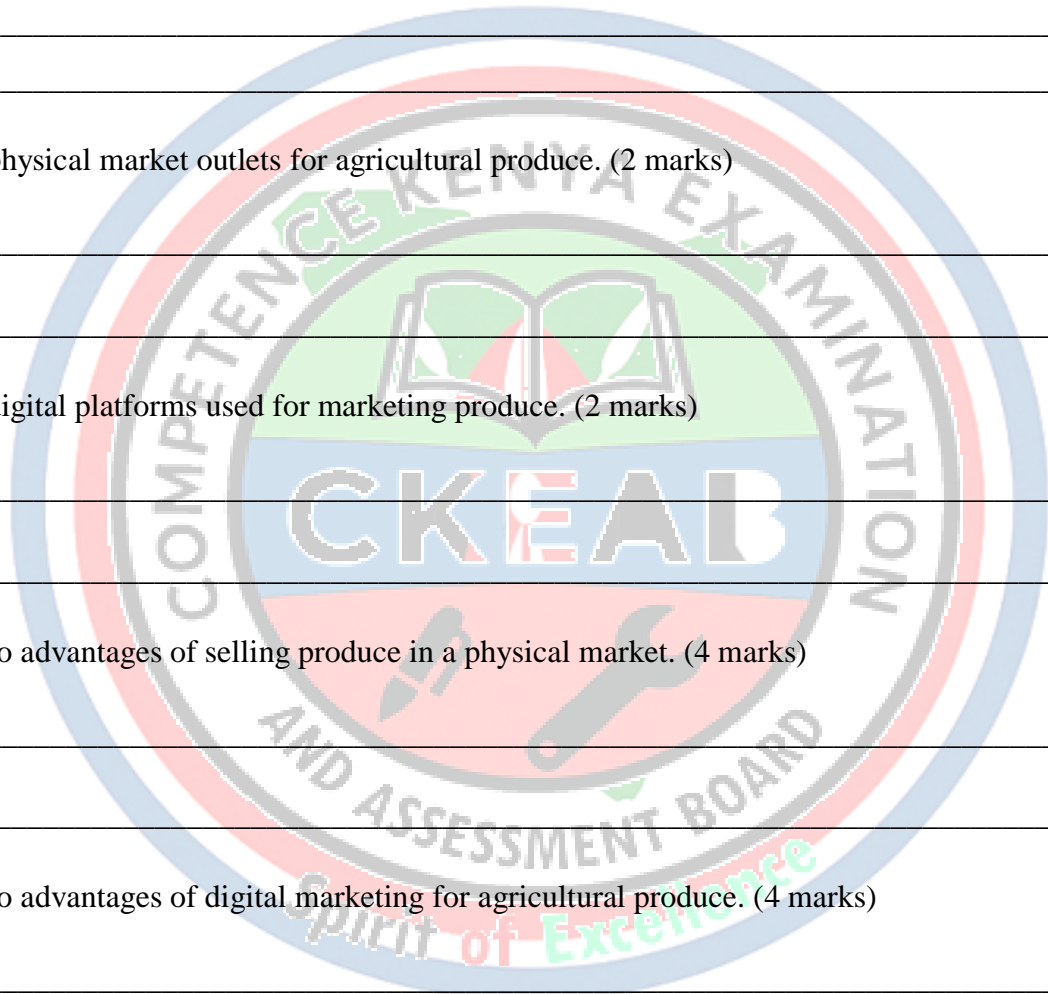
i. \_\_\_\_\_

ii. \_\_\_\_\_

31. Describe two ways market outlet choice affects profits. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



32. State two factors to consider when choosing a market outlet. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

33. Explain two challenges of using physical markets. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. Explain two challenges of digital marketing platforms. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

35. Describe two methods of transporting produce to market safely. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

36. Define marketing expenses. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

37. State two costs incurred in transporting produce to the market. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

38. State two types of taxes or charges levied in markets. (2 marks)

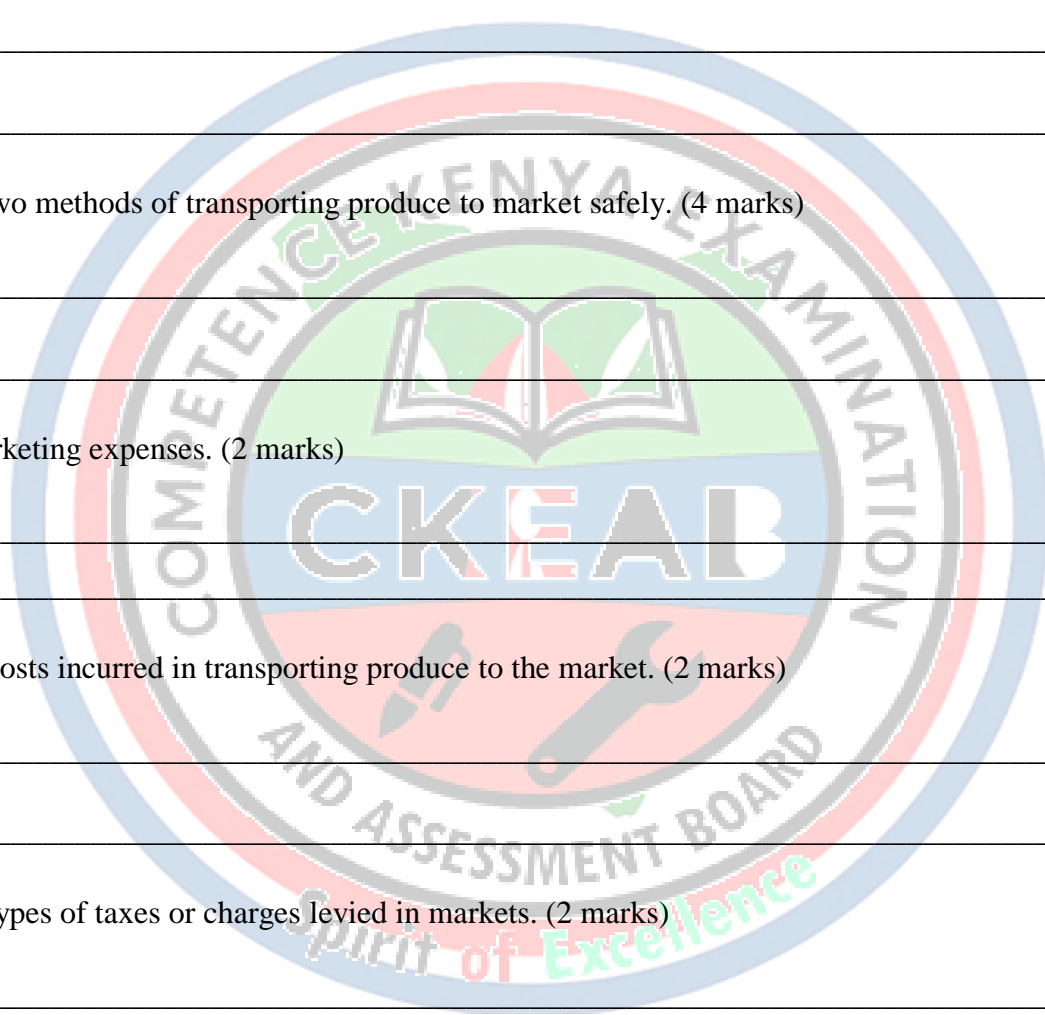
i. \_\_\_\_\_

ii. \_\_\_\_\_

39. Explain two ways advertisement costs affect marketing decisions. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



40. State two expenses related to packaging produce. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

41. Explain two ways to minimize marketing expenses. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

42. State two benefits of evaluating marketing costs. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

43. Describe two ways marketing expenses affect profit margins. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

44. Explain two ways to plan a budget for marketing agricultural produce. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

45. State two advantages of recording marketing expenses. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

46. Explain two reasons why proper weighing improves sales. (4 marks)

i. \_\_\_\_\_

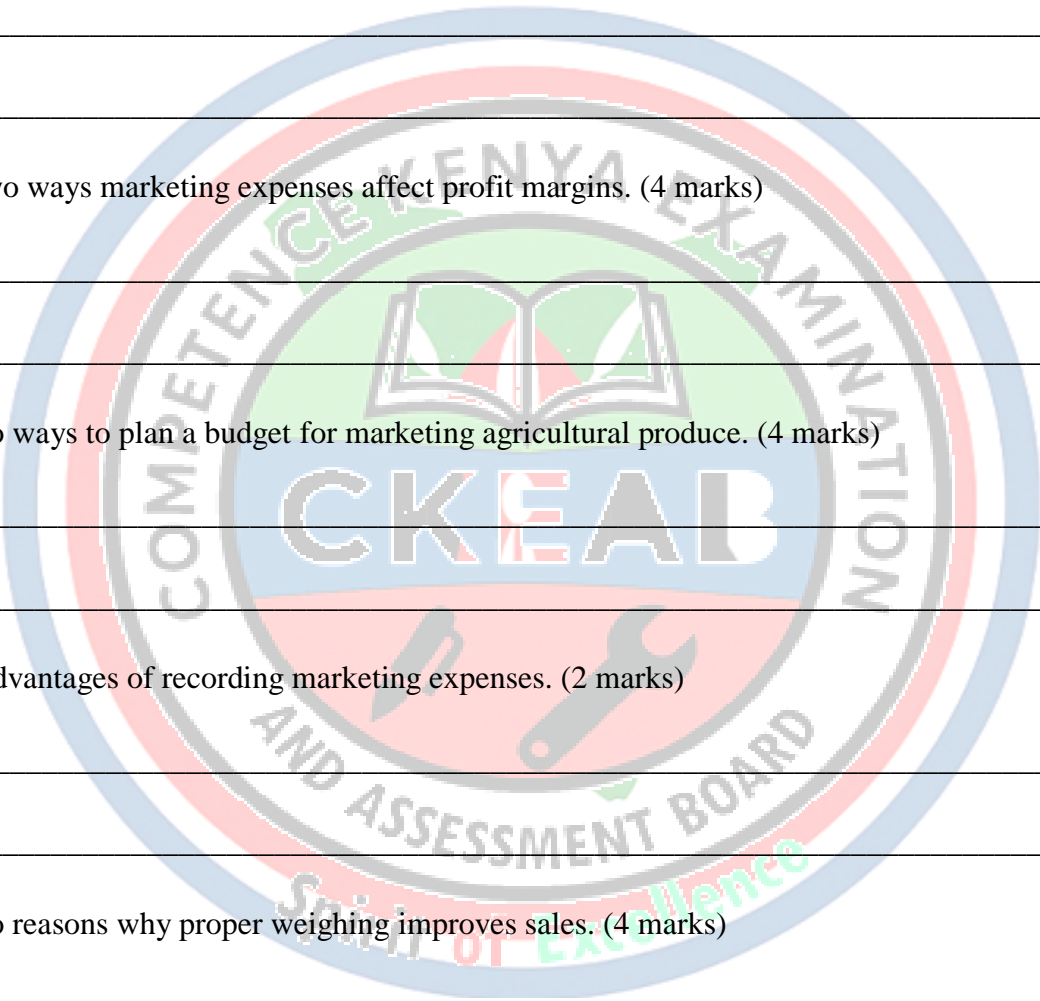
ii. \_\_\_\_\_

47. Explain two ways sorting and grading affects market price. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



48. Describe two benefits of attractive packaging and labeling. (4 marks)

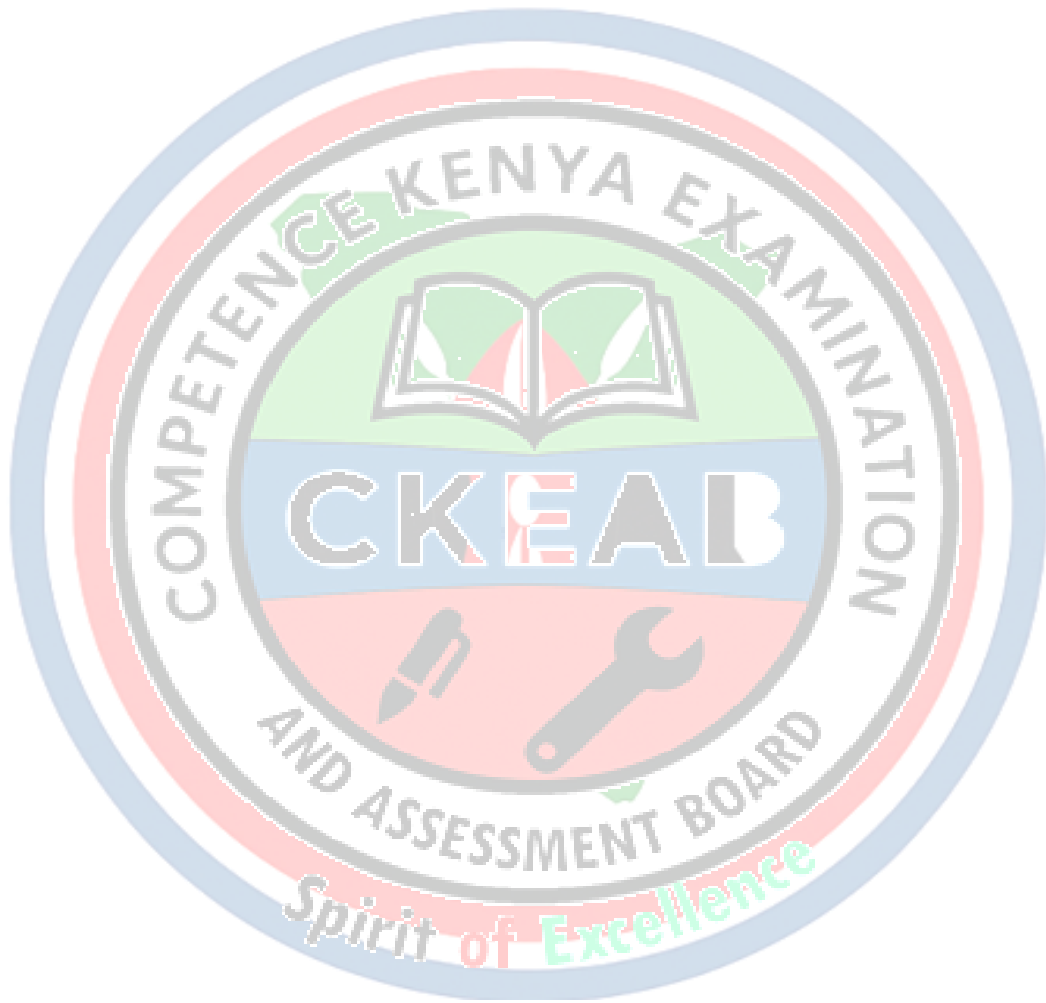
i. \_\_\_\_\_

ii. \_\_\_\_\_

49. Explain two ways prepared produce reduces post-harvest losses. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



### SUBSTRAND 3.5: COMPOSTING TECHNIQUES

1. Define composting. (2 marks)

.....  
.....

2. State two purposes of composting in agriculture. (2 marks)

i. ....  
ii. ....

3. Explain two differences between conventional and innovative composting methods. (4 marks)

i. ....  
ii. ....  
iii. ....  
iv. ....

4. Describe two materials suitable for composting. (4 marks)

i. ....  
ii. ....

5. State two advantages of using compost manure over chemical fertilizers. (2 marks)

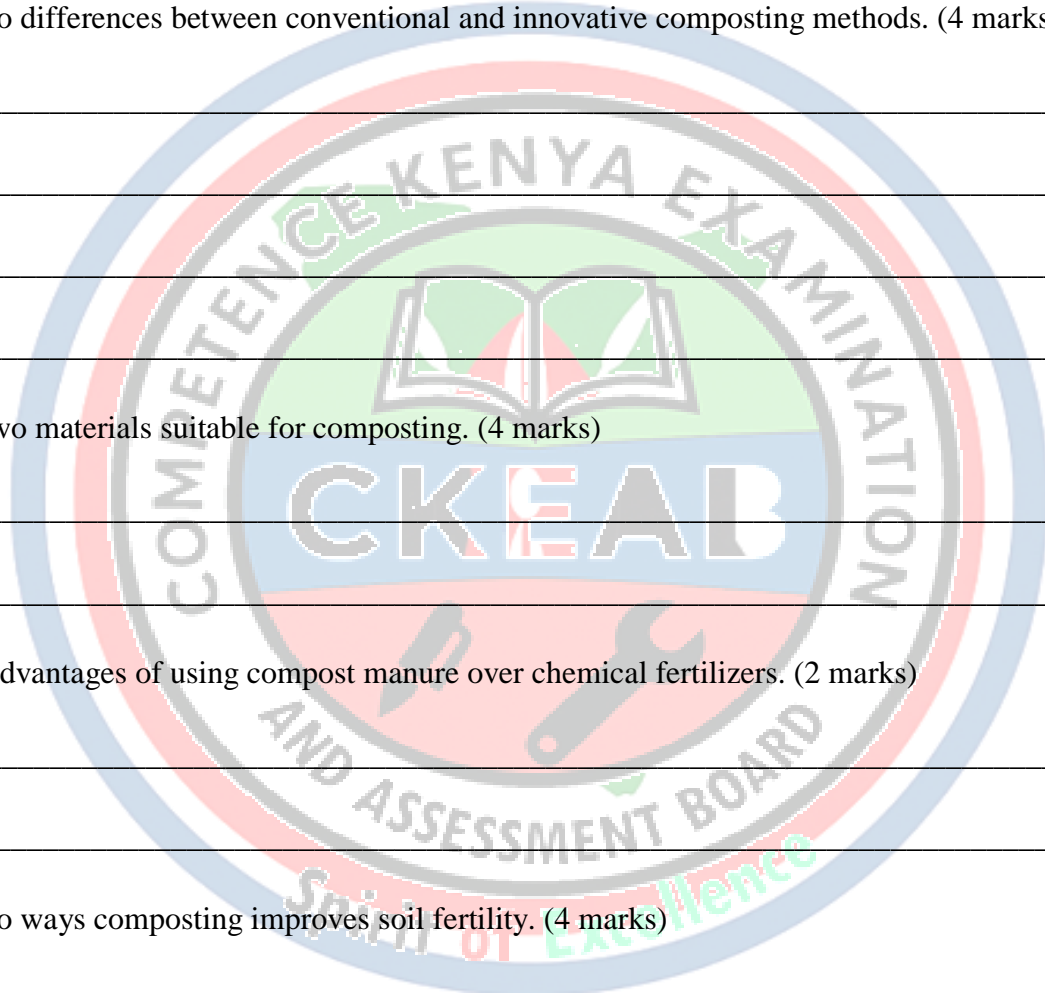
i. ....  
ii. ....

6. Explain two ways composting improves soil fertility. (4 marks)

i. ....  
ii. ....

7. Describe two factors that determine choice of composting method. (4 marks)

i. ....  
ii. ....



8. Explain two reasons for layering materials during composting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

9. Describe two signs of mature compost. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

10. State two conventional composting methods. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

11. Describe two innovative composting methods. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

12. Explain two advantages of innovative composting methods over conventional methods. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

13. State two examples of containerized composting materials. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

14. Explain two ways vermicomposting improves compost quality. (4 marks)

i. \_\_\_\_\_

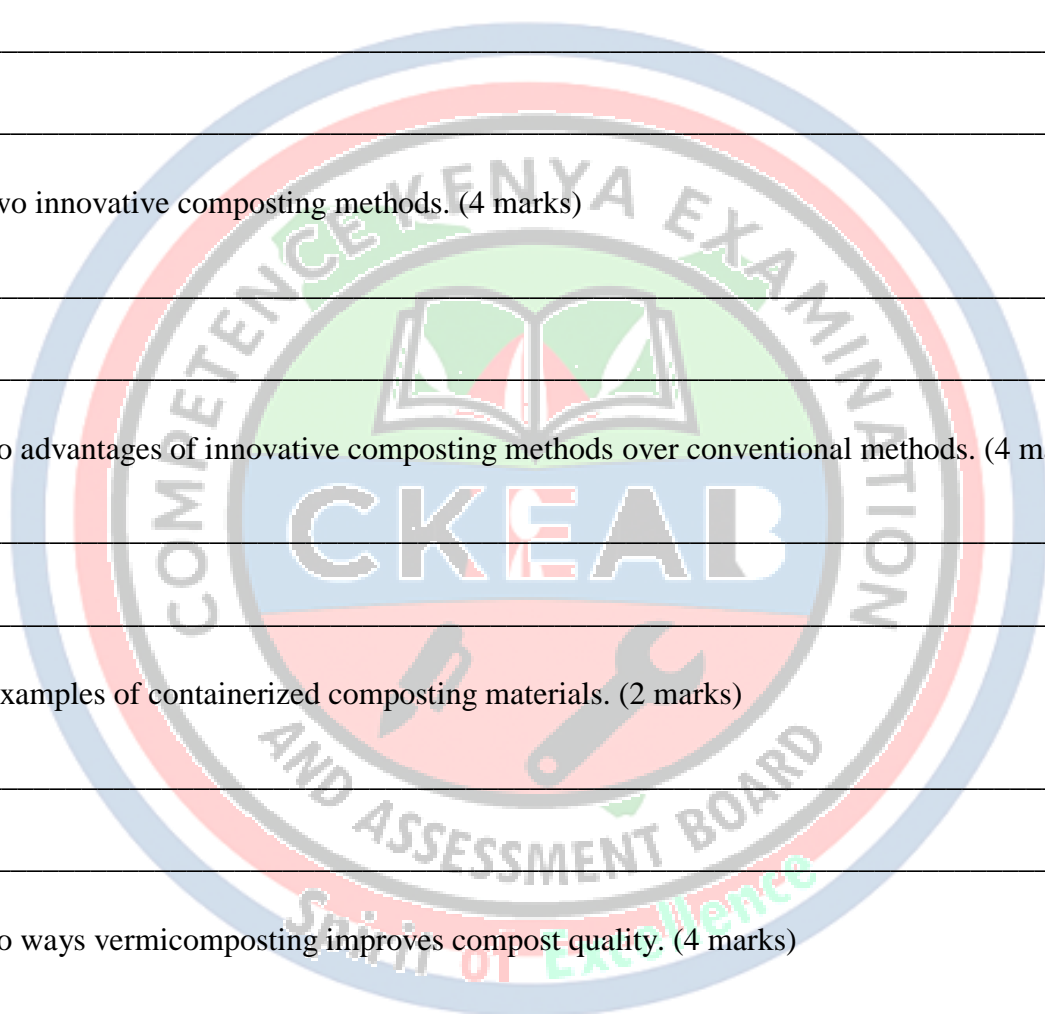
ii. \_\_\_\_\_

15. Describe two environmental benefits of composting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_



## B. FACTORS AFFECTING COMPOST QUALITY

16. State two factors that influence quality of compost manure. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

17. Explain how type of raw materials affects compost quality. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

18. Describe two ways water content influences composting process. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

19. Explain two effects of aeration on compost quality. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

20. State two effects of temperature on composting process. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

21. Explain two effects of pH on compost quality. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. Describe two ways to avoid contamination of compost. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

23. State two methods of improving compost quality. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

24. Explain two roles of microorganisms in composting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

25. Describe two ways improper storage affects compost quality. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

26. Define pit composting. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_

27. Define heap composting. (2 marks)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

28. Describe four steps in pit composting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

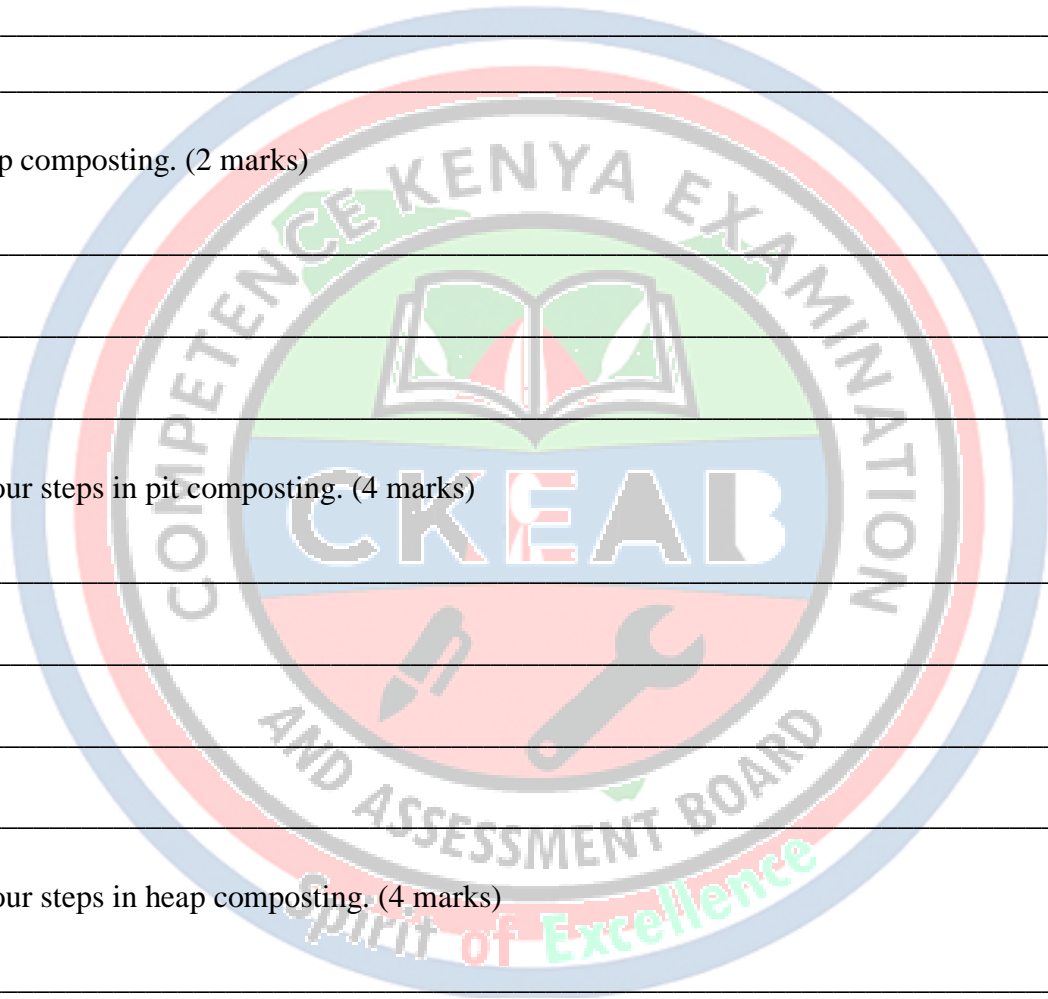
29. Describe four steps in heap composting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_



30. Explain two ways to maintain moisture in conventional compost. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

31. State two types of materials layered in conventional compost. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

32. Explain two reasons for turning compost regularly. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

33. Describe two ways to speed up decomposition in conventional composting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

34. Explain two reasons why pit composting is suitable for large farms. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

35. State two disadvantages of conventional composting methods. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

**D. INNOVATIVE COMPOSTING**

36. Define vermicomposting. (2 marks)

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37. Describe two steps in vermicomposting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

38. State two benefits of vermicomposting. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

39. Define containerized composting. (2 marks)

\_\_\_\_\_

\_\_\_\_\_

40. Describe two steps in containerized composting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

41. Explain two ways containerized composting conserves space. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

42. State two materials suitable for vermicomposting. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

43. Describe two ways to monitor worm health in vermicomposting. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

44. Explain two reasons why innovative composting is suitable for urban farms. (4 marks)

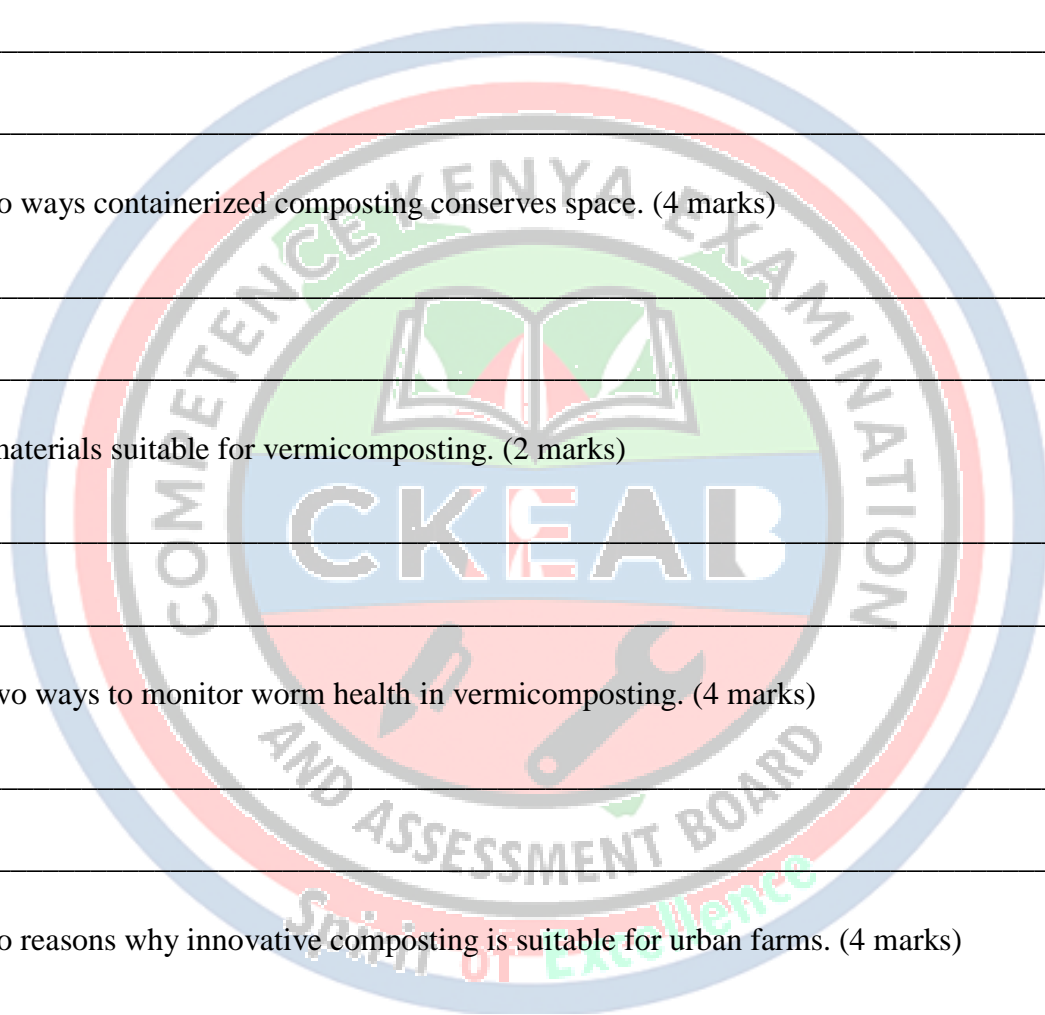
i. \_\_\_\_\_

ii. \_\_\_\_\_

45. State two advantages of using innovative composting over conventional composting. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



46. Explain two ways compost improves soil structure. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

47. Describe two benefits of compost in increasing crop yield. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

48. Explain two ways compost reduces dependence on chemical fertilizers. (4 marks)

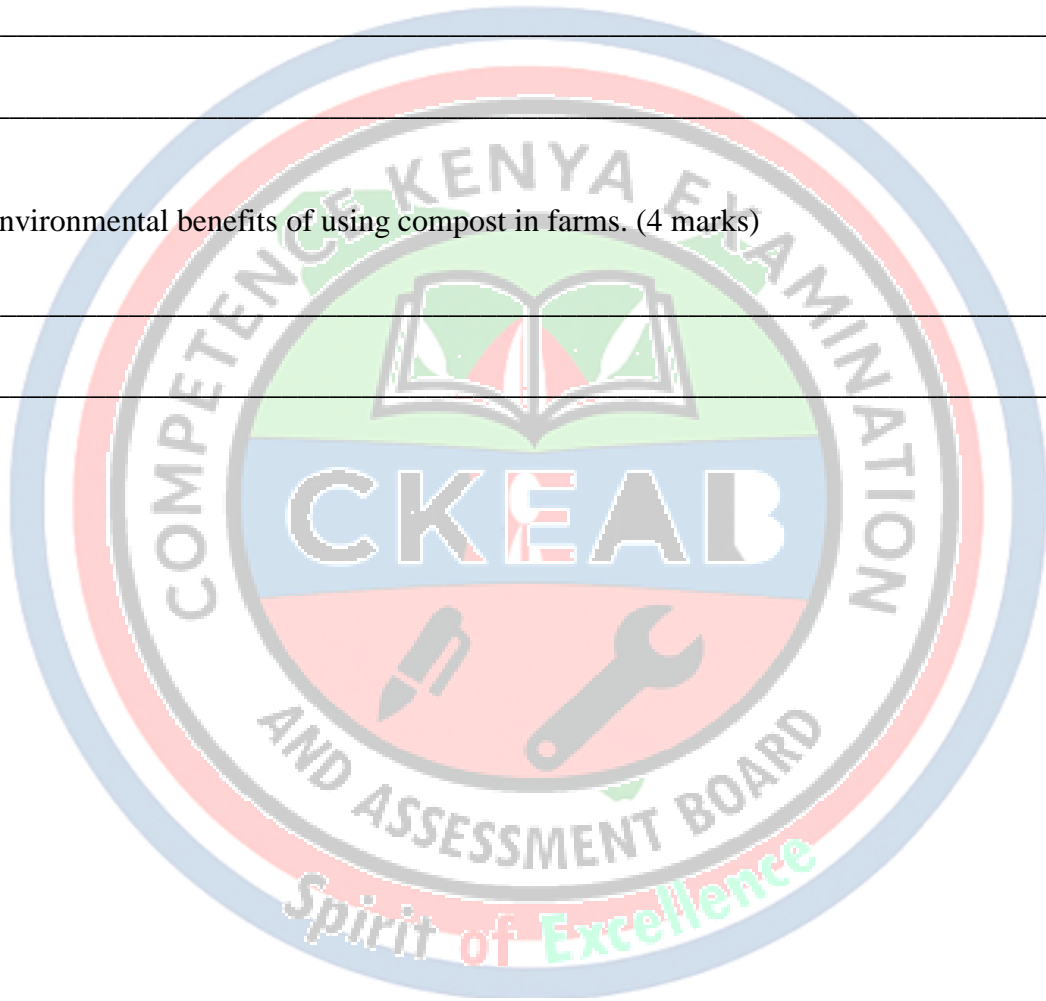
i. \_\_\_\_\_

ii. \_\_\_\_\_

49. State two environmental benefits of using compost in farms. (4 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_



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