Instructions:

• Write your Name and Index Number in spaces provided above

• This paper consists of three sections A, B and C

• Answer all questions in section A, and B and any other two questions in section C in the spaces provided in this booklet
SECTION A (30 MARKS)

Instructions: Answer ALL the questions in this section in the spaces provided

1. State two reasons for discouraging the use of fire in seedbed preparation (1 mark)

_________________________________________________________________________________
_________________________________________________________________________________

2. State four information contained in a land title deed (2 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

3. List four factors that influence the depth of planting. (2 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

4. Differentiate between oversowing and undersowing. (1 mark)

_________________________________________________________________________________

5. Define the following terms as used in agricultural economics
   a) Gross National Products (GNP) (1 mark)

_________________________________________________________________________________

   b) National income (1 mark)

_________________________________________________________________________________

6. List four ways of harvesting water in the farm (2 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

7. State two factors that would determine the amount of fertilizer to be top dressed to a crop in the field. (1 mark)

_________________________________________________________________________________

8. Highlight four importance of farm accounts. (2 marks)

_________________________________________________________________________________
9. State two disadvantages of tissue culture. (1 mark)

_________________________________________________________________________________
_________________________________________________________________________________

10. State four objectives of land reforms in Kenya. (2 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

11. List two proper storage practices used in pest control. (1 mark)

_________________________________________________________________________________

a) Give any four factors which determine the number of operations done in a field before it is ready for sowing seeds. (2 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

b) State four cultural practices that can be used to control maize streak disease. (2 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

13. State the differences between
i) A nursery bed and a seedbed (2 marks)
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

ii) Macronutrient and micronutrient (2 marks)
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
14. Name any two diseases that affect bean production in the field (1 mark)

_________________________________________________________________________________

_________________________________________________________________________________

15. State four practices that should be carried out to maintain grass pastures. (2 marks)

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

16. What is increasing returns in a production function (½ mark)

_________________________________________________________________________________

17. State three roles of trees in soil and water conservation. (1 ½ marks)

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

SECTION B. 20 MARKS

Answer ALL the questions in the spaces provided

18. The illustration below shows an experiment to find out the percentage of total water content of soil. Use it to answer the questions that follow.

   a) Name the parts labelled (2 marks)

   A
   B
   C
   D

   Tripod stand
   Bunsen burner

   a) Name the parts labelled (2 marks)

   A
   B
   C
   D
b) Explain the procedure followed (4 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

19. Below is a diagram that illustrates one of the field practices carried out on some crops. Study the diagram and answer the questions that follow.

![Diagram of crop plant with labels N and M]

a) Identify the practice illustrated above. (½ mark)

_________________________________________________________________________________

b) Name the materials used in N and M and their uses. (2 marks)

Name N________________________________________
Uses:_________________________________________

Name M_______________________________________
Uses:________________________________________

c) State four problems faced by a farmer who does not carry out the practice above. (4 marks)

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

20. Below is a diagram of a terrace. Study it and answer the questions that follow.
a) Identify the type of terrace illustrated. (½ mark)

b) Name the part labelled F. (1 mark)

c) Apart from the above named state any other three types of terraces. (3 marks)

21. Give three conditions for successful re-seeding in pasture management (3 marks)

SECTION C (40 MARKS)
Answer ANY TWO questions from this section in the spaces provided after question 24

22. a) Describe coffee harvesting under the following sub headings.
    i) Stage of harvesting. (2 marks)
    ii) Procedure of harvesting. (7 marks)
    iii) Precautions to be observed while harvesting coffee. (3 marks)
    b) Explain the cultural methods of soil erosion control. (8 marks)

23 a) Describe the procedure of silage making. (10 marks)
    b) Give four reasons why green manure is not commonly used. (4 marks)
    c) State six advantages of land consolidation. (6 marks)

24 a) Explain the different physical methods used in crop pest control. (16 marks)
    b) Name four disadvantages that farmers experience when they use synthetic type of mulches. (4 marks)