

### SECTION A (30 marks)

Answer **all** the questions in this section in the spaces provided.

- 1 State **four** ways of draining swampy land for vegetable production. (2 marks)  
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- 2 State **four** factors that determine the quality of farm yard manure. (2 marks)  
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- 3 Give **four** reasons why land fragmentation is common in Kenya. (2 marks)  
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- 4 Name **four** types of soil erosion that occur on steep slopes. (2 marks)  
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.....
- 5 Give **two** examples of each of the following crop pests: (2 marks)  
  - (a) birds



(b) rodents .....

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6 State **four** symptoms of viral diseases in crop production. (2 marks)

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7 Give **four** characteristics of black jack (*Bidens pilosa*) that make it more competitive than beans. (2 marks)

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8 Give **four** reasons why tea farming is important to Kenya's economy. (2 marks)

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9 Name **four** factors of production in sugarcane farming. (2 marks)

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10 State **four** pieces of information recorded in a master roll. (2 marks)

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11 State **four** ways in which soil pH affects crop production in Kenya.

(2 marks)

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12 State **four** sites a farmer can establish agroforestry trees on the farm.

(2 marks)

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13 Give **four** advantages of timely planting in finger millet production.

(2 marks)

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14 Give **four** sources that provide knowledge and skills on farming to farmers in Kenya.

(2 marks)

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15 Give **four** advantages a farmer with a title deed has over the one who does not have.

(2 marks)

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# SECTION B (20 marks)

Answer **all** the questions in this section in the spaces provided.

The following picture shows a field pest of cotton.



(a) Identify the pest.

(1 mark)

(b) Classify the pest based on the mode of feeding.

(1 mark)

(c) State two damages caused by the pest.

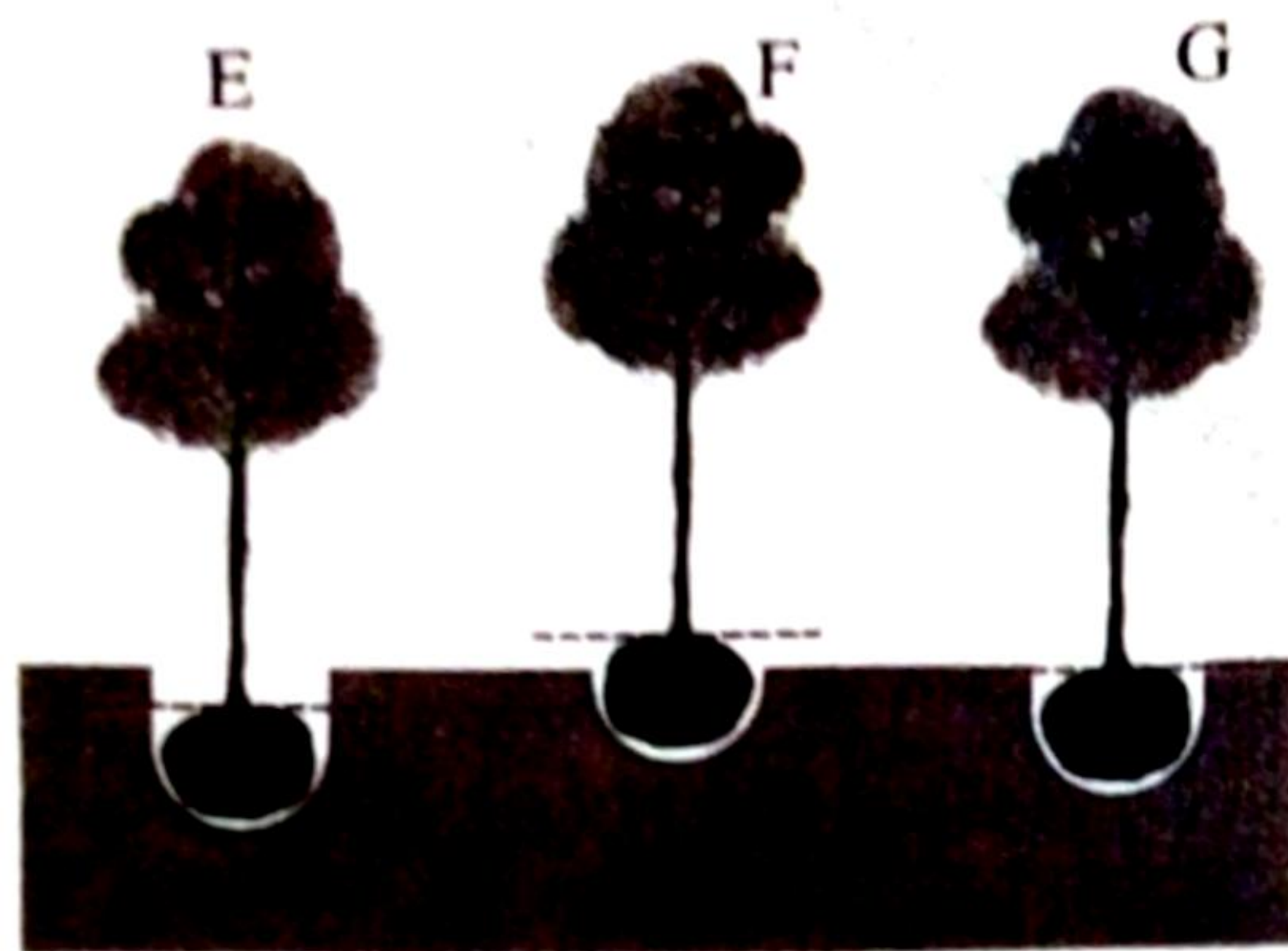
(2 marks)

(d) Give one control measure for the pest.

(1 mark)



- 17 The following diagram shows how agroforestry tree seedlings were transplanted.



- (a) (i) Identify the tree seedling that was **correctly** transplanted. (1 mark)

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- (ii) Give a reason for the answer in (a)(i). (1 mark)

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- (b) Give **three** management practices that were carried out immediately after transplanting the seedlings. (3 marks)

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- 18 A farmer planted coffee seedlings on a 0.5 hectares of land at a spacing of 2.75 m by 2.75 m. The crop is to be top dressed with Calcium Ammonium Nitrate (CAN) fertilizer (25%N) at the rate of 100 kgN per hectare.

Calculate the:

- (a) plant population; (2 marks)

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(b) quantity of CAN fertilizer the farmer requires;

(1 mark)

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(c) cost of the fertilizer required if the subsidized price of a 50 kg bag of CAN is KSh. 2,500.

(2 marks)

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19 The following diagram shows some weeds.



(a) Identify the weed labelled:

**J** ..... (1 mark)

**K** ..... (1 mark)

(b) State **two** characteristics that make the weed labelled **J** more competitive than crops. (2 marks)

.....

.....

(c) Give **one** harmful effect of the weed labelled **H** during harvesting of wheat. (1 mark)



## SECTION C ( 40 marks)

*Answer any **two** questions from this section in the spaces provided after question 22.*

**20** Describe onion production under the following sub-headings:

- (a) nursery establishment;
- (b) field management practices.

(10 marks)

(10 marks)

**21** (a) Describe the production of grain maize under the following sub-headings:

- (i) land preparation;
- (ii) planting;
- (iii) field management practices;
- (iv) harvesting.

(3 marks)

(4 marks)

(5 marks)

(4 marks)

(b) Describe the utilization of napier grass as a fodder crop.

(4 marks)

**22** (a) Explain the importance of **three** layers of the soil profile in crop production.

(6 marks)

(b) Describe any **five** physical measures farmers use to control soil erosion.

(5 marks)

(c) Give **five** roles of a farm manager in agricultural business enterprise.

(5 marks)

(d) A poultry farmer bought two bags of layers mash on 3<sup>rd</sup> March 2023 and another three bags of layers mash on 17<sup>th</sup> March 2023 at a price of KShs 3,500 per bag. On 20<sup>th</sup> May 2023, the farmer sold 30 trays of eggs and another 20 trays of eggs on 28<sup>th</sup> May 2023 at a price of KSh 400.00 per tray.

Enter the above transactions in the ledger account using the format below.

(4 marks)

DR				CR			
Date	Particulars	Folio	Amount	Date	Particulars	Folio	Amount