

## 4.8 AGRICULTURE (443)

### 4.8.1 Agriculture Paper 1 (443/1)

#### SECTION A (30 marks)

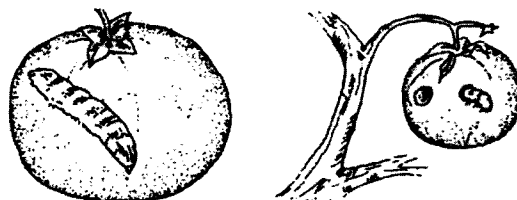
*Answer all the questions in this section in the spaces provided.*

1. Name **four** aspects of rainfall that affect agriculture. (2 marks)
2. State **four** factors that determine the depth of cultivation. (2 marks)
3. State **four** factors that influence the quality of farmyard manure. (2 marks)
4. State **two** factors that determine national income. (1 mark)
5. State **four** causes of land fragmentation. (2 marks)
6. Name **two** types of labour records. (1 mark)
7. State **four** ways in which crop pests are classified. (2 marks)
8. What is the minimum number of people required to form a co-operative society in Kenya? (½ mark)
9. Give **two** examples of fixed costs in maize production. (1 mark)
10. What is meant by the term production function? (1 mark)
11. State **three** characteristics of good trees for agroforestry. (1½ marks)
12. Name **two** varieties of sorghum grown in Kenya. (1 mark)
13. State **four** reasons why agriculture is important to Kenya's economy. (2 marks)
14. Give **two** reasons why the use of fire is discouraged in land clearing. (1 mark)
15. State **four** ways in which mulching conserves water. (2 marks)
16. State **four** uses of farm records. (2 marks)
17. State **four** characteristics of shifting cultivation. (2 marks)
18. State the law of supply as used in agricultural marketing. (1 mark)
19. State **four** ways in which trees improve soil productivity. (2 marks)
20. What is meant by the term integrated pest management? (1 mark)

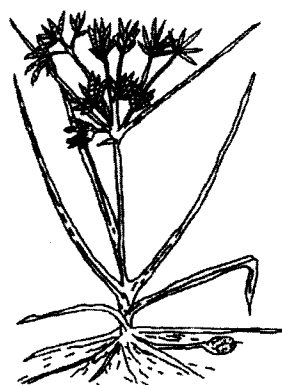
**SECTION B (20 marks)**

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

21. The diagram below illustrates a tomato fruit infested by a field pest.

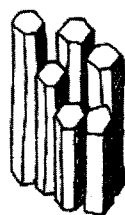


- (a) Identify the pest. (1 mark)
- (b) State **two** ways in which the pest is economically important. (2 marks)
- (c) State **two** cultural ways of controlling the pest. (2 marks)
22. The diagram below shows a weed.



- (a) Identify the weed. (1 mark)
- (b) Using features on the diagram, give **two** reasons why it is difficult to eradicate the above weed. (2 marks)
- (c) State **two** ways in which the weed is economically important. (2 marks)

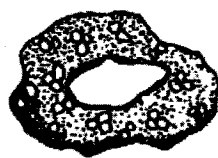
23. The diagrams below illustrate soil structures.



M



N



P



Q

(a) Identify the soil structure labelled M, N and P.

M ..... (1 mark)

N ..... (1 mark)

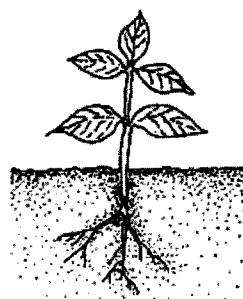
P ..... (1 mark)

(b) Name the type of soil where each of the structures labelled N and Q is found.

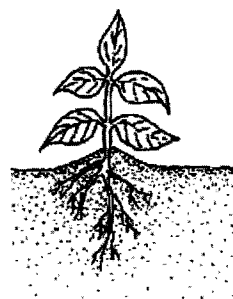
N ..... (1 mark)

Q ..... (1 mark)

24. The diagram below shows an illustration of a crop field practice.



Before practice



After practice

(a) Identify the field practice illustrated above. (1 mark)

(b) Name **two** crops which require the practice illustrated. (2 marks)

(c) Give **two** reasons for carrying out the practice on one of the crops you have named in (b) above. (2 marks)

**SECTION C (40 marks)**

*Answer any two questions from this section in the spaces provided after question 27.*

25. (a) Explain **seven** factors that should be considered when selecting seeds for planting. (7 marks)
- (b) State **four** benefits of adequate and reliable rainfall in vegetable crop production. (4 marks)
- (c) State **four** pieces of information contained in an invoice. (4 marks)
- (d) State **five** roles of calcium in crop production. (5 marks)
26. (a) Describe how sugar cane is harvested. (5 marks)
- (b) Explain **four** factors that determine the nutrient content of hay. (4 marks)
- (c) State **seven** roles of a farm manager. (7 marks)
- (d) Describe **four** methods used to reclaim a swampy land for agricultural production. (4 marks)
27. (a) Describe the production of carrots under the following subheadings:
- (i) land preparation (3 marks)
- (ii) planting (4 marks)
- (b) Describe **six** ways in which grass cover helps in soil and water conservation. (6 marks)
- (c) Explain **seven** nursery management practices. (7 marks)