LARI DISTRICT PRE – K.C.S.E
Kenya certificate of Secondary Education
Agriculture paper 1

INSTRUCTIONS

• Write your name and index number in the spaces provided above.
• Sign and write the date of examination in the space provided above.
• Answer all the questions in sections A, B and any two questions from section C.
• Answers must be written in the spaces provided in this booklet.

FOR EXAMINER’S USE ONLY

<table>
<thead>
<tr>
<th>Sections</th>
<th>Questions</th>
<th>Maximum Score</th>
<th>Candidate’s score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1 – 16</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>17 – 20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>21 – 23</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>TOTAL SCORE</td>
<td></td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>
SECTION A (30 MARKS)

1. List down two branches of Agriculture. (1mk)
   (i). ____________________________________________________________
   (ii). __________________________________________________________

2. State two reasons for land preparation. (1mk)
   (i). ____________________________________________________________
   (ii). __________________________________________________________

3. Give two plant parts used in vegetative propagation. (1mk)
   (i). ____________________________________________________________
   (ii). __________________________________________________________

4. List two methods of planning (1mk)
   (i). ____________________________________________________________
   (ii). __________________________________________________________

5. Give four ways in which soil profile influences crop production (2mks)
   (i). ____________________________________________________________
   (ii). ____________________________________________________________
   (iii). ____________________________________________________________
   (iv). ____________________________________________________________

6. List four ways in which soil mineral matter affects agriculture. (2mks)
   (i). ____________________________________________________________
   (ii). ____________________________________________________________
   (iii). ____________________________________________________________
   (iv). ____________________________________________________________

7. State four conditions necessary for successful grafting (2mks)
   (i). ____________________________________________________________
   (ii). ____________________________________________________________
   (iii). ____________________________________________________________
   (iv). ____________________________________________________________
8. List six post-harvest practices done on crops. (3mks)
   (i). 
   (ii). 
   (iii). 
   (iv). 

9. How are the following conditions prevented in carrot production (3mks)
   (a) Cracking
   (b) Forking
   (c) Greening

10. State four precautions that should be taken when harvesting tea. (2mks)
    (i).
    (ii).
    (iii).
    (iv).

11. List three disadvantages of drip irrigation. (1½mks)
    (i).
    (ii).
    (iii).

12. State five ways of maintaining soil fertility. (2½mks)
    (i).
    (ii).
    (iii).
    (iv).
    (v).

13. State four characteristics of nitrogenous fertilizers. (2mks)
    (i).
    (ii).
    (iii).
    (iv).
14. List four micro-catchment systems. (2mks)

(i). ____________________________________________________________

(ii). __________________________________________________________

(iii). __________________________________________________________

(iv). __________________________________________________________

15. State four adaptations that make weeds cope with various adverse conditions in order to survive. (2mks)

(i). ___________________________________________________________

(ii). __________________________________________________________

(iii). __________________________________________________________

(iv). __________________________________________________________

16. List four ways which are used to control stalk borers in maize. (2mks)

(i). ___________________________________________________________

(ii). __________________________________________________________

(iii). __________________________________________________________

(iv). __________________________________________________________

**SECTION B (20 MARKS)**

17. The following table gives the monthly demand and supply schedule of potatoes in all secondary schools in Kenya. Use it to answer the questions that follow.

<table>
<thead>
<tr>
<th>Price per Kg</th>
<th>Demand in million of Kgs</th>
<th>Supply in millions of Kgs</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>23</td>
<td>59</td>
</tr>
<tr>
<td>9</td>
<td>30</td>
<td>57</td>
</tr>
<tr>
<td>8</td>
<td>36</td>
<td>54</td>
</tr>
<tr>
<td>7</td>
<td>41</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>5</td>
<td>48</td>
<td>39</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>51</td>
<td>25</td>
</tr>
</tbody>
</table>

(a) Draw the graph of demand against supply. (2mks)
(b) What is the equilibrium price?  

(½mk)
(c) State the effects of a government imposing a maximum price of:

(i) Kshs. 5 per kg  

(ii) Kshs. 7 per kg  

(d) If the government guaranteed a potato supply at a price of shs. 7 per kg, what quantity would it have to purchase to maintain this price?  

(e) State one factor that influences price of a good or service.  

18. The diagram below shows a method of bringing tea into bearing. Study it carefully and use it to answer the questions that follow:

(i) Identify the method shown in the diagram.  

(ii) Why is it necessary to prune a young tea plant as illustrated in the diagram above?
(iii) Outline the procedure followed when using the pruning method shown. (3mks)
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

19. The following diagram shows a method of compost preparation

![Diagram of compost pits and field]

(a) Identify the method. (1mk)
________________________________________________________________________________________

(b) Give four factors that should be considered when siting the compost pit. (2mks)
(i). ___________________________________________________________________________________
(ii). __________________________________________________________________________________
(iii). __________________________________________________________________________________
(iv). __________________________________________________________________________________

(c) State two factors that determine the time the manure would be ready for use in the field. (2mks)
(i). __________________________________________________________________________________
(ii). __________________________________________________________________________________

20. The diagram below shows a field crop pest. Study the diagram and answer the question that follows.

![Diagram of a field crop pest]
(a) Identify the pest.  
__________________________________________________________________________________________
__________________________________________________________________________________________

(b) Outline two harmful effects of the pest.  
(i). ____________________________________________________________  
(ii). ____________________________________________________________

(c) State two methods which are used to control the pest.  
(i). ____________________________________________________________
(ii). ____________________________________________________________

SECTION C (40 MARKS) 

Answer any two questions

21. (a) Describe five Agricultural support services available to farmers.  
(b) Discuss the importance of Agroforestry.  
(c) Discuss disadvantages of herding.  

22. (a) Discuss the influences of soil structure on crop production.  
(b) Outline five measures taken to prevent water pollution.  
(c) Outline cultural pest control

23. (a) Discuss factors to consider when selecting implement for primary cultivation.  
(b) What information is contained in a cash receipt?  
(c) Outline factors affecting rooting of cuttings.