

KCSE MOCKS

AGRICULTURE PAPER 1

Consists 3 KCSE Mock set Exams.
(Class of KCSE March 2021)

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PRE-MOCK 1

443/1

AGRICULTURE

PAPER 1

2 HOURS

NAME-----INDEX NO.-----

INSTRUCTIONS TO CANDIDATES.

Write your name and index number in the spaces provided above.

This paper consists of 3 sections A, B and C . Answer all the questions in section A and B in the spaces provided.

Select any TWO questions in section C.

ALL answers should be written in spaces provided.

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1-19	30	
B	20 -22	20	
C	23-25	40	
TOTAL		90	

1. State **four** reasons of planting sweet potatoes on ridges.(2mks)

2. Differentiate between rouging and field hygiene as used in crop production.(1mk)

3. Calculate the amount of N in 670kg of a compound fertilizer 20:15:10. (2mks)

4. State **four** natural factors that discourage soil erosion. (2mks)

5. Give **two** examples of working capital in bean production.(1mk)

6.a) differentiate between a delivery note and purchase order documents.(1mk)

7.a) state **four** factors that are considered when siting a composite pit.(2mks)

b) Write down three pieces of information that should be written on the envelope bearing the composite sample being taken to the national laboratories of Kenya. (1.5mks)

8. Give **two** forms in which credit is offered to farmers.(1mk)

9. Why should a farmer understand the lifecycle of parasites?(1mk)

10. Give **four** diseases which attack tomatoes. (2mks)

11. Give **four** factors that affect the selectivity and effectiveness of herbicides.(2mks)

12. What is pricking out? (1mk)

13. State **two** physical characteristics used in classifying soil. (1mk)

14. Give **three** reasons why the million acre scheme was started.(1.5mks)

15. Name **four** micro catchments aimed at conserving soil water around crops (2mks)

16. State **three** importances of sub-soiling (1 1/2 marks)

17. Name **three** tools a farmer can use to dig a virgin land (1 1/2marks)

18. Give two forms in which credit is offered to farmers.(1mk)

19. Give **four** roles of phosphorus in crops.(2mks)

SECTION B (20 MARKS)

20. Study diagram below and answer questions that follow.



(i) Name the farming practice illustrated above.(1mark)

(ii) Give the procedure followed to carry out the practice you have named in (i) above (4marks)

(iii) state the importance of carrying out the farming practice named above. (1 mark)

21. The diagram below illustrates a method of soil conservation. Study it and answer questions that follow.



(i) Name the method of soil control measure. (1 mark)

(ii) in what kind of topography is the above control measure carried out?(1 mark)

(iii)state **four** other **biological soil** control measures apart from the one named in (i) above.(2marks)

22. A Farmer has a piece of land on which he grows beans . His farm record on began production for nine years is shown below.

YEAR	FERTILIZER APPLIED (100KG BAGS)	TOTAL OUTPUT OF BEANS (90KG BAGS)
2011	0	6
2012	2	12
2013	4	30
2014	6	44
2015	8	54
2016	10	62
2017	12	68
2018	14	68
2019	16	66

a) Using an appropriate scale draw a graph to show the relationship between inputs and outputs.(5mks)

b) Calculate the farmers marginal product for the year 2013.(1mk)

c) From the data given , what rate of fertilizer application would the farmer choose if he wanted to grow maize in 2020? (1mk)

d) Give an explanation for your choice above.

e) Calculate the average product for the year 2015.(2mks)

SECTION C (40 MARKS) (SELECT ANY TWO QUESTION)

23. a) Describe the advantages of land consolidation in agriculture production (7 marks)

[illegible]

(b) Discuss **five** factors that will influence mass wasting or solifluction. (5 marks)

[illegible]

(c) Discuss **four** physical agents of weathering (8 marks)

24. (a) Discuss **five** methods of harvesting agro forestry trees. (10 marks)

(b) Explain how old agro forestry with good root characteristics trees can be grafted (5marks)

(c) Discuss **five** benefits of weed to the farmers (5 marks)

25. (a) Discuss **three** aspects of rainfall that a farmer should consider when deciding on what crop to grow in an area (6marks)

iii) of what use the profit and loss account to the farmer? (1mk

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MOCK 1

NAME.....ADM NO.....CLASS.....

DATE.....SIGN.....

443/1

PAPER 1

TIME: 2 HOURS

KCSE MOCK 1

AGRICULTURE

PAPER ONE

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Write your name, admission number and class
2. This paper contains **three** sections
3. Answer all question in section **A** and **B**
4. In section **C** answer any two questions
5. Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing
6. This paper has 15 printed page
7. Candidates must answer all the questions in English

For examiner's use only

Section	Questions	Maximum score	Candidate score
A	1 -18	30	
B	19 -22	20	
C		20	
		20	
Total score		90	

SECTION A(30MARKS)

Answer **ALL** questions in this section

1) Name a chemical used to achieve the following during water treatment.

(a)Coagulation of solid particles (½mark)

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(b)Softening of water (½mark)

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(c)Killing pathogens (½mark)

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2) State **two** causes of forking in carrots (1mark)

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3) Name **four** books of account kept by a farmer (2 mark)

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4) Give the element whose deficiency in plants is characterized by the following

(a) Interveinal chlorosis of the leaves(½ mark)

(b Blossom end rot in tomatoes(1/2mark)

(c) Scorched edges of a leaf (1/2 mark)

5) Give **two** roles of agriculture in industrial growth. (1 mark)

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6) Difference between olericulture and pomoculture(1 mark)

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7 a) Give **two** disadvantages of hydram pumps(1 mark)

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(b) State **two** methods of harvesting Maize (1 mark)

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8) a) What is Agro forestry. (1mark)

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b) State **four** ways in which Agro forestry is important. (2marks)

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9) Give **four** farming practices that may help in achieving minimum tillage. (2 marks)

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10) Define the term “Economic Injury Level” of a crop. (1 mark)

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11) State **two** conditions when opportunity costs are zero (1 mark)

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12) State **four** factors that influence solifluction(2 marks)

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13) Give **four** conditions that necessitate clearing of land. (2 marks)

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14) Give **four** reasons for keeping health records

(2 marks)

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15) Name any **two** diseases that affect bean production in the field.

(1 mark)

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16) State **four** benefits of crop rotation (2 marks)

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17) State **four** management practices in a vegetable nursery

(2 marks)

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18) Give **four** methods of land reform practiced in Kenya

(2mks)

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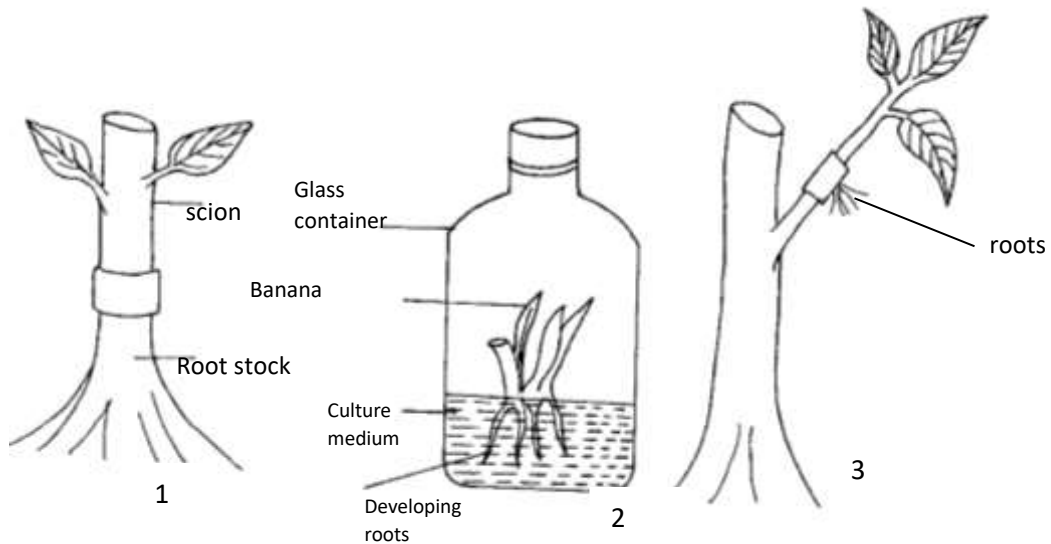
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SECTION B (20 MARKS)

Answer ALL the questions in this section in the spaces provided.

19. Study the methods of crop propagation illustrated below and answer the questions that follow



- a) Identify the methods of crop propagation illustrated above.

1..... (½ mark)

2 (½ mark)

3..... (½ mark)

- b) Give **one** condition under which method (1) above is carried out. (½ mark)

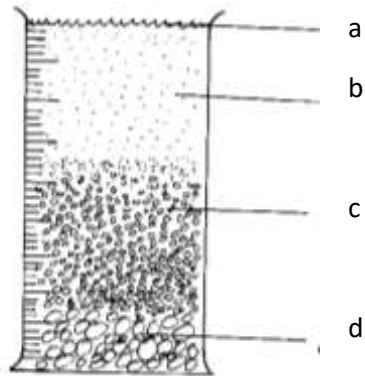
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- c) State **two** disadvantages of using stem cuttings for planting. (2marks)

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20.(a) Form two student put some soil sample in a measuring cylinder, added some water and sodium carbonate and then covered the cylinder with the hand and shook the cylinder for about two minutes. He left the cylinder on the bench for one hour. The result was as shown below.



(i). Name the layers marked a,b,cand d. (4x ½ =2 mark)

a)

b)

c).....

d).....

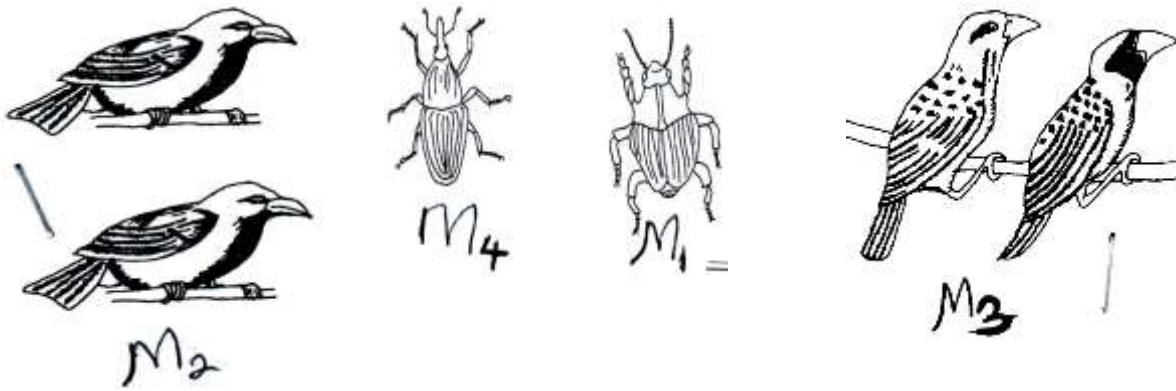
(ii) What was the function of sodium carbonate in this experiment? (1mark)

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(iii) What was the aim of this experiment? (1mark)

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21.The diagrams below illustrate both field and storage pests



a) Identify the pests in the illustration. (4marks)

M₁.....

M₂.....

M₃:

M₄:

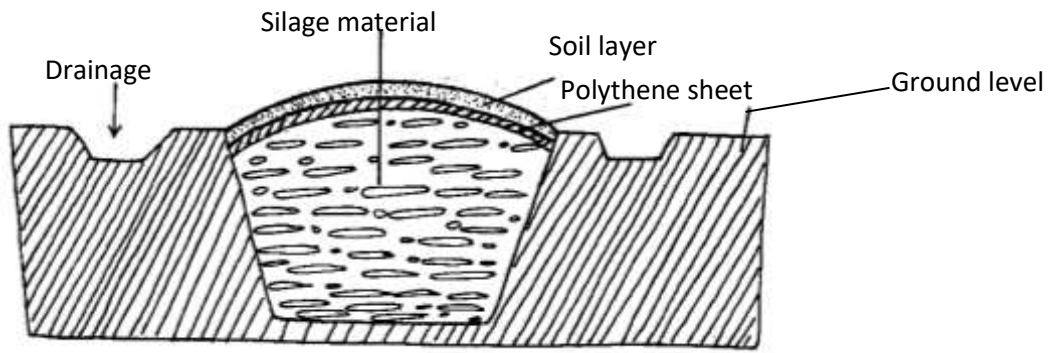
b) State **two** ways by which pest labelled M₂ causes loss in cereal crops. (1marks)

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c) State **two** methods which are used to control the pest labeled M₂. (2marks)

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22.Study the diagram on silage making shown below and answer the questions that follow.



- a) Identify the silage preparation method shown above. (1mark)

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- b) Give **two** precautions taken when ensiling to ensure high quality silage. (2marks)

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- c) State **two** advantages of this method of forage conservation over other methods. (2marks)

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SECTION C (40 marks)

Answer **TWO** questions from this section in the spaces provided

- 23.a) State and explain **five** agricultural services offered to farmers. (10marks)

b) Give ways in which labour efficiency can be increased in the farm (5marks)

c) State **five** the functions of co-operatives. (5marks)

24.a) Give one reason in each case why it is difficult to control the following weeds.

i) Oxalis

ii) Nut grass

iii) Couch grass (3marks)

b) State **two** main factors which contributes to competitive ability of weeds. (2marks)

c) State **five** safety measures that a farmer must consider to prevent danger to other people and environment when using herbicides. (5marks)

d) Describe any **five** cultural methods of controlling weeds. (10marks)

25. a) The table gives information on the supply of potatoes in a local market.

Price /bag in Kshs. 1000	Quantity Demanded (in bags)	Quantity supplied (in bags)
1	20	2
2	15	8
3	12	12
4	10	16
5	9	19

i) using a suitable scale and on the same axis, draw and label supply and demand curves using the data given. (8marks)

ii) From the curves drawn, what is the price per bag when 15 bags of potatoes were supplied? (1mark)

iii) How many bags of potatoes were supplied at Equilibrium price. (1mark)

b) Outline the harvesting of coffee under following subheadings

i) Stage of harvesting (2marks)

ii) Procedure of harvesting (5marks)

iii) Precautions when harvesting (3marks)

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[illegible]

[illegible]

[illegible][illegible]

This image shows a full page of a handwriting practice worksheet. It consists of multiple rows of horizontal dashed lines spaced evenly down the page, providing a guide for letter height and placement. The background is plain white, and there are no margins or additional markings.

POST MOCK 1

NAME..... ADM.NO..... CLASS/STREAM..... SCHOOL.....

SIGNATURE..... DATE

443/1
AGRICULTURE
PAPER 1
Time: 2 HOURS

KCSE POST MOCK 1

INSTRUCTION TO CANDIDATES

- *This paper consists of **THREE** sections: **A**, **B** and **C**.*
- *Answer **ALL** questions in section **A**.and **B***
- ***ANY** Two questions from section **C**.*

SECTION	MARKS	CAND. SCORE
A	30	
B	20	
C	40	
TOTAL SCORE	90	

SECTION A (30MKS)

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

1. Give **two** characteristics of plantation farming. (1mk)

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2. Name **two** chemical processes of weathering. (1mk)

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3. State **two** advantages of organic farming. (1mk)

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4. Outline **two** effects of soil organisms which benefit plant growth. (1mk)

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5. Give **two** ways in which organic mulch help to conserve water in the soil. (1mk)

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6. Give **two** types of labour records. (1mk)

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7. Outline **four** ways in which land consolidation helps to improve farm management. (2mks)

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8. State **four** importance of raising seedlings in a nursery bed. (2mks)

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9. Give **four** ways of controlling weeds in a field of maize. (2mks)

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10. State **three** reasons for top dressing pasture. (1½mks)

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11. Give **four** reasons for training crops as a field practice . (2mks)

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12. State **three** activities the farmer carries out on a store before storing grains. (1½mks)

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13. Give **four** desirable characteristics of certified seeds. (2mks)

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14. (a) Outline **two** characteristics of nitrogenous fertilizers. (1mk)

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(b) Give the forms in which the following elements are available to plants: (1mk)

(i) Phosphorous:

(ii) Potassium:

15. Give **four** factors that influence the choice of tools and equipment used in Primary cultivation. (2mks)

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16. State **four** factors that contribute to competitive ability of weeds. (2mks)

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17. Define the following terms as used in crop production.

(a) Trellising (1mk)

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(b) Stooking (1mk)

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18. Give **two** advantages of strip grazing (1mk)

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19. State **four** advantages of mixed pasture. (2mks)

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SECTION B. (20 MARKS)

Answer ALL questions in this section in the spaces provided

20. Study the diagram below and answer the questions that follow. The illustrations represent a method of crop propagation.



(a) Name the crops (s) propagated by illustrations:

(1mrk)

.....

.....

(b) Give **three** factors that promote the rooting of illustration A.

(3mrks)

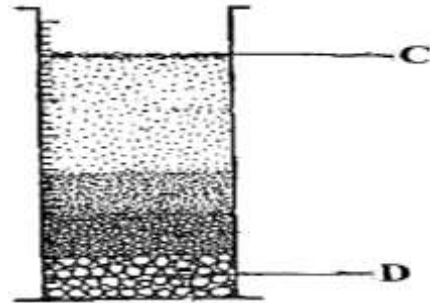
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21. The diagram below illustrates an experiment using garden soil. Study it carefully and answer the question that follow.



- (a) What was the aim of the experiment? (1mrk)

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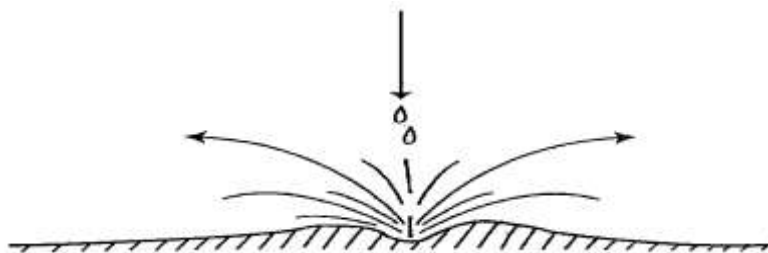
- (b) Name the parts labeled **C** and **D**. (2mrks)

C.....
 D.....

- (c) Name the property of soil being investigated. (1mrk)

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22. The illustration below shows a type of soil erosion. Study it carefully and answer the questions that follow.



- (a) Identify the type of erosion illustrated. (1mrk)

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- (b) Give **two** soil factors that influence the rate of soil erosion. (2mrks)

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- (c) Name **one** agent of soil erosion. (1mrk)

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23. The diagram below illustrate a method of irrigation carried out on the farm



- (i) Identify the type of irrigation shown above. (1mk)

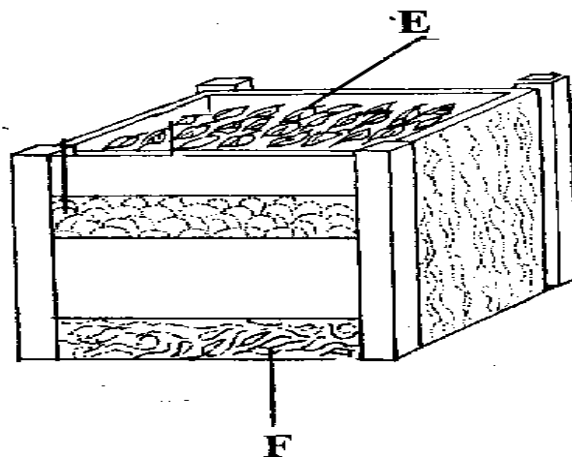
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- (ii) Name **two** advantages of the above method. (2mks)

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24. The diagram below represent a method of manure preparation. Study it carefully and answer the questions that follow.



- (a) Identify the type of manure being prepared. (1mrk)

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- (b) Name the parts labeled **E** and **F**. (1mrk) .

E.....

F.....

- (c) Give **three** disadvantages of manures. (3mrks)

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SECTION C (40MARKS)

Answer any TWO question from the section in the spaces provided

25. (a) Give six precautions observed in pruning mature tea

(6 mks)

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(b) Describe the procedure followed when collecting a soil sample from the field for testing in the laboratory

(6 mks)

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(c) Outline four advantages of intercropping crops

(4 mks)

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(d) State four factors considered before selecting a farm enterprise.

(4 mks)

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26. Describe the production of tomatoes under the following sub-headings:

i) Ecological requirements of tomato plants

(5mks)

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ii) Land preparations

(4mks)

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iii) Transplanting

(7mks)

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iv) Disease control

(4mks)

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27. a) State five factors that influence soil productivity. (5mks)

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- b) State five qualities of mother plant used during grafting. (5mks)

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c) Give two types of mulching materials.

(2mks)

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d) State four agricultural practices which pollute water.

(4mks)

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e) Describe precautions followed when harvesting coffee.

(4mks)

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