KCSE MOCKS AGRICULTURE

SET 2

FOR MARKING SCHEMES

CALL/WHATSAPP 0705525657

(MOCK TRIALS 1-15)

A COMPILATION OF AGRICULTURE MOCKS IDEAL IN KCSE REVISION PURPOSES

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KCSE MOCK 1

PAPER I

TIME 2 HOURS

SECTION A (30MKS)

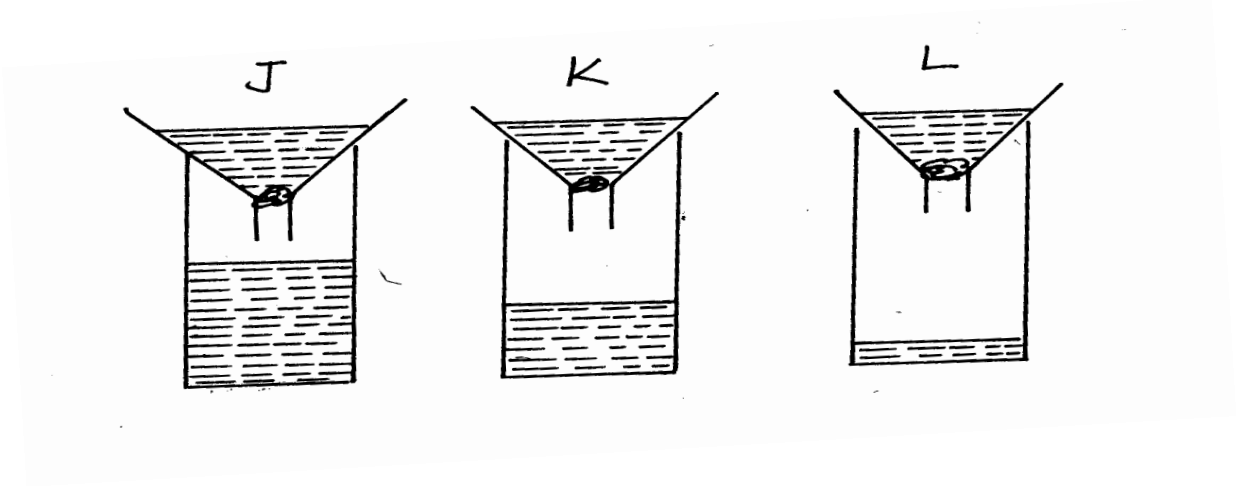
1. What is nomadic pastoralism as a method of farming? ($^1/_2$)
2. State two reasons why it is necessary to cultivate land before planting (1mk)
3. Give two reasons why leguminous plants are prefered for green manure (1mk)
4. State two methods of increasing soil PH (1mk)
5. State two effects of pests in crop production (1mk)
6. Give two forms in which nappier grass may be used to feed livestock (1mk)
7. List three signs shown by crops when nitrogen is deficient in the soil (1mk)
8. State four factors that determine the choice of an irrigation system to use in a farm (2mks)
9. Give four advantages of using zero grazing system (2mks)
10. State four factors considered in selection of planting materials (2mks)
11. State four factors that determine the quality of grass hay (2mks)
12. Give four roles of trees in soil and water conservation (2mks)
13. State the importance of each of the following in a farm (1mk)
    a) Strip cup
    b) Ball pen hammer
14. State two cultural weed control measures in maize plantation (1mk)
15. Give four factors that determine the method of fertilizer application (2mks)
16. Give four ways of harvesting water in the farm (2mks)
17. State four advantages of crop rotation practice in a farm (2mks)
18. State four factors that affects the efficiency of psetcides (2mks)
19. Explain two ways monocropping leads to soil infertility (2mks)
20. Name four farming practices farmers can use to achieve minimum tillage (2mks)

SECTION B (20 MKS)

21. A) A farmer in Kabondo was advised to apply 80 kg of nitrogen to his maize plantation during top dressing. The fertilizer available was calcium ammonium nitrate (20% N) .Calculate the amount of this fertilizer in kilograms the farmer should purchase (2mks)
    B. At what stage should the farmer top dress his maize crop
    C. State three applications practices the farmer should consider to maximize the use of the fertilizer by the crop for top dressing (3mks)

22. The diagram below illustration an investigation on property of soil using samples labeled J,K and L

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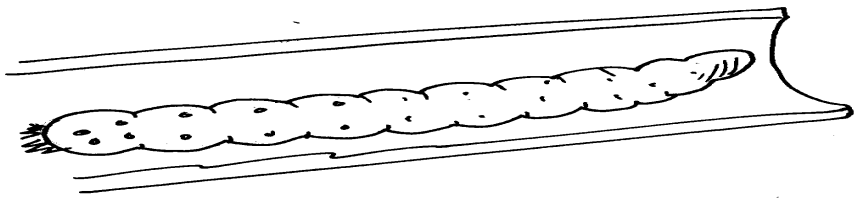
a.) If the level of water drained into the test tubes were observed after two hours, name the property of soil being investigated (1mk)

b.) What is the relationship between this property of soil and the size of soil particles (1mk)

c.) Which soil sample will be suitable for growing paddy rice ? (1mk)

d.) Name the type of soil labeled J L (2mks)

23.



The diagram above shows a pest in production of cereal crops ,use it to answer the question below.

a. Identify the pest
b. Give two damages caused by the pest indentified in (a) above
c. Give two control measures of the pest above (1mk)
d. Give four reasons why pest control practices should be effectively implemented in a farm. (2mks)

SECTION C

24. A. Explain six cultural methods of controlling crop diseases (12mks)

B. Describe the effects of land fragmentation and subdivision (8mks)

25. a. Explain how five factors leads to loss of soil fertility (10mks)

b. Explain five ways by which farmers minimizes grain loses in stores (10mks)

26. a. Explain three reasons for pruning coffee (3mks)

b. Discuss the production of kales under the following sub headings (12mks)

- Transplanting
- Weed control
- Pests and diseases

c. State five factors that would influence soil erosion (5mks)

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KCSE MOCK 1

PAPER 2

TIME 2 HOURS

SECTION A (30MKS)

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

1 State four ways of controlling tsetse flies. (2mks)
2 Name four breeds of dairy goats. (2mks)
3 Give four characteristics of a good vaccine. (2mks)
4 State four advantages of outbreeding in livestock production. (2mks)
5 Give four factors that affect the quality of honey. (2mks
6 Outline three functions of calcium in the body of a dairy cow. (1 ½ mks)
7 List four cattle diseases caused by virus. (2mks)
8 State the function of each of the following.
(a) Plumb bob (mk)
(b) Drenching gun (½ mk)
(c) Garden trowel (½ mk)
(d) Pipe wrench (½ mk)
9 State two reasons for seasoning timber before use. (1mk)
10 State four reasons for culling a breeding boar. (2mks)
11 State four uses of lubrication system in a tractor. (2mks)
12 Give four observations on the behavior of chicks which would indicate that the temperature in the brooder is too high. (2mks)
13 State four ways of stimulating milk let – down in a dairy cow. (2mks)
14 State four measures that should be taken to control brucellosis in cattle. (2mks)
15 Give four conditions that would encourage hens to eat eggs in poultry production. (2mks)
16 State four advantages of a hedge fence in a farm. (2mks

SECTION B (20 Marks)

Answer all questions in the spaces provided

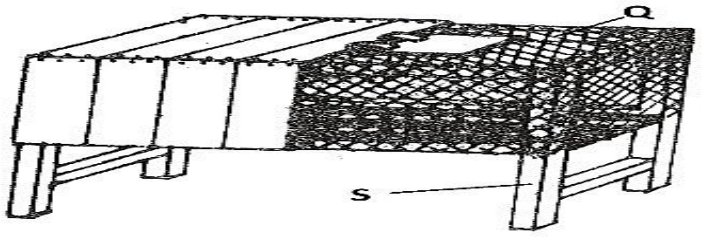
17 Study the diagram below and answer questions the questions that follow.



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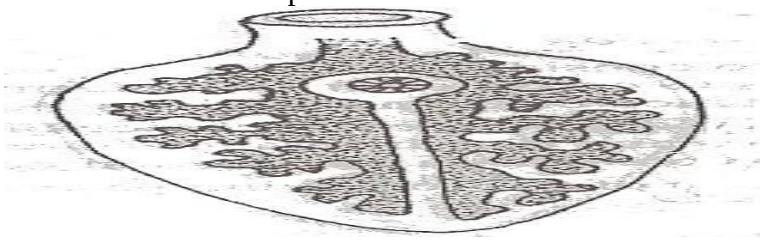
(a) Identify the implement illustrated in the diagram. (1mk)
(b) What is the method of power transmission for operating implements? (1mk)
(c) State the use of the implement. (1mk)
(d) Give two maintenance practices for implement **A**. (2mks)

18 Below is a diagram of a rabbit hutch. Use the diagram to answer the questions that follow.



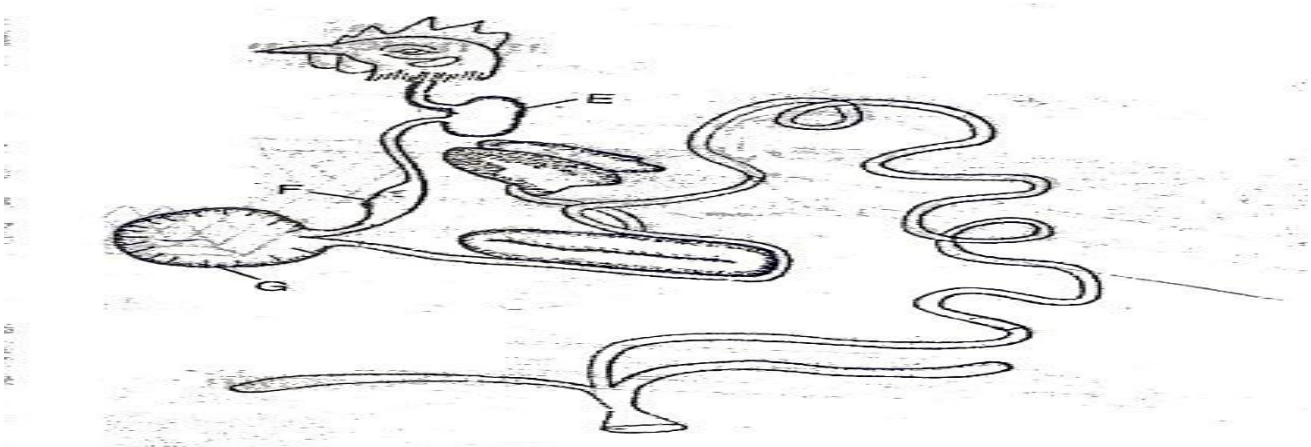
(a) How should the materials used for constructing parts Q and S be treated to last long?
(b) Name the appropriate tools that should be used to cut the materials for constructing parts **Q**.
(c) Give two reasons for raising the rabbit hutch above the ground level. (1mk)

19 Below is an illustration of an internal parasite in livestock



(a) Identify the parasite. (1mk)
(b) Name one final host for the parasite. (1mk)
(c) Name the intermediate host for the parasite. (1mk)
(d) State two control measures of the parasite. (2mks)

20 The illustration below represents the digestive system of poultry. Study the illustration carefully and answe questions that follow.



(a) Name the parts labeled **E , F** and **G**.
(b) State two ways in which the part labeled **G** is adapted to its function. (2mks)

SECTION C (40 Marks)

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Answer any two questions from this section in the spaces provided.

21 (a) Name the strokes in a four stroke cycle engine and describe how each operates. (12mks)

(b) Describe four physical characteristics that a poultry farmer would use to identify poor layers from a flock of hens. (8mks)

22 (a) Describe the disease milk fever under the following sub headings:

(i) Animals affected (2mks)

(ii) Symptoms (5mks)

(iii) Control measures (3mks)

b) Describe five calf management practices carried out immediately after parturition. (5mks)

c) Outline five qualities of eggs for marketing. (5mks)

23 (a) State and explain five harmful effects of parasites in livestock. (10mks)

b) Describe any five parts and functions of a Zero grazing unit. (10mks)

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KCSE MOCK 2

PAPER 1

TIME 2 HOURS

PAPER I
TIME 2 HOURS SECTION
SECTION A (30MKS)

Answer all questions from this section

1. What do the following terms mean? (1 ½ mks)
   a) Gross domestic product (G.D.P)
   b) Gross national income (GNI)
   c) Per capita income
2. a) What does the term opportunity cost in farming mean? (1mk)
   b) State two situations when opportunity cost is nil or zero (2mks)
3. List four advantages of individual owner tenure system (2mks
4. State two ways to show how check dams reduce soils erosion (1mks)
5. Identify four soil constituents. (2mk)
6. Mention four ways of classifying herbicides (2mks)
7. (a) List two ways of controlling smut disease in the field. (1mk)

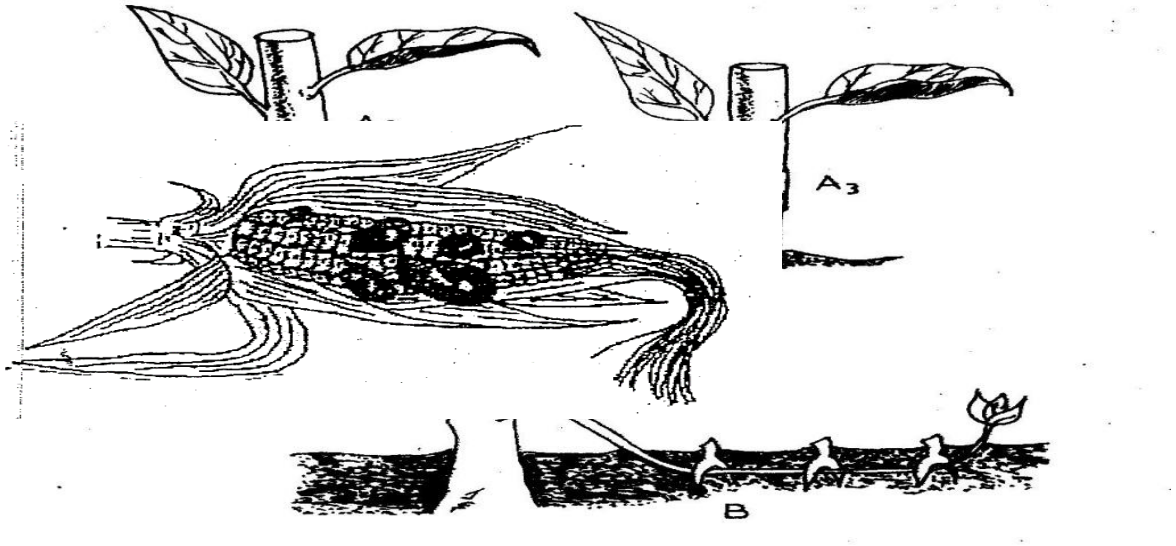
   (b) Name any two pests that attack bean pods in the field (1mk
8. What four factors should a farmer consider for effective control of pests in the field (2mks
9. Mr. Wotsula Applied 150kg N.P.K 25:20:15 to his one hectare of groundnuts in his Kakamega farm. Calculate how many kilograms of each of the fertilizer element he applied. (3mks)
10. State five marketing functions (2 ½mks)
11. State five functions of cooperative societies (2½ mks)
12. List three characteristics of green manure crops (1 ½ mks)
13. Name three types of water pumps to be used on the farm. (1 ½ mks)
14. Name four species of trees commonly used in agroforestry (2mks)
15. List four factors that determine the competitive ability of weeds (2 mks)

SECTION B: (20 MARKS)

Answer all questions in this section

16. The diagrams labeled A_1, A_2, A_3, and B below illustrate materials and methods of vegetative propagation. Study them and answer the questions that follow.

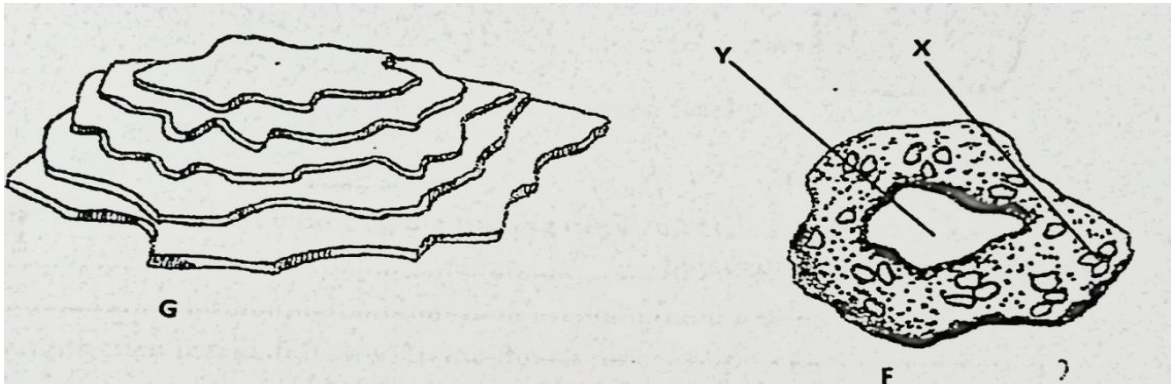
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(a) Name the parts labeled A_1, and A_2 (2 mks)

(b) Name the methods of propagation illustrated in diagrams A_3 and B (2 mks)

17. The diagram below illustrates some soil structures. Study it and answer the questions that follow.

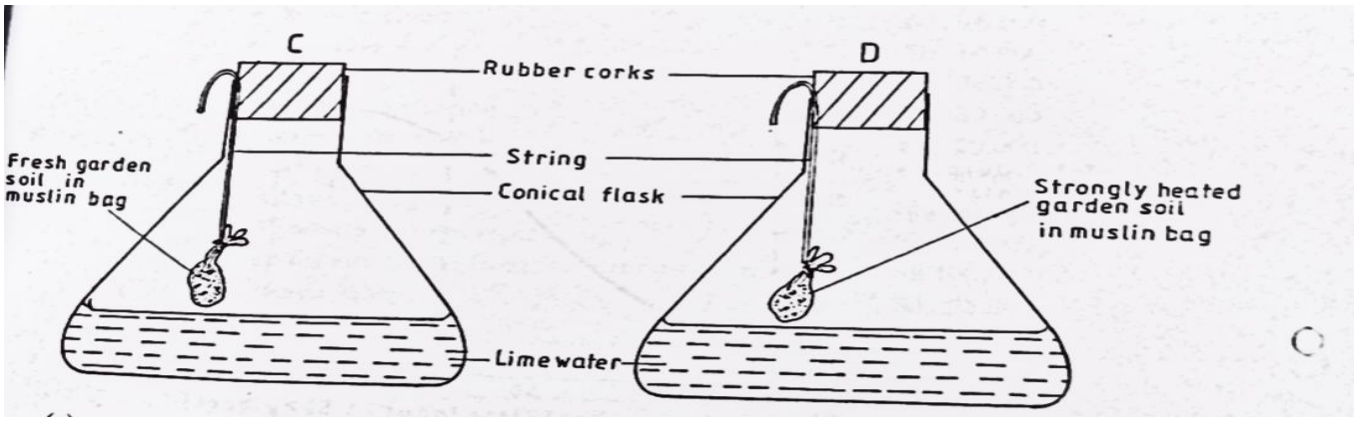


a) Identify the soil structures F and G (2mks)
b) Name the parts labeled X and Y in diagram F (1mk)
c) Sate two ways through which structure G influences crop production (2mks)

18. Below is an illustration of a maize cob attacked by smut disease. Study it carefully and answer the questions that follow:

a) Beside what is visible on the maize cob, state two other symptoms of the disease (2mks)
b) State three control measures of the above disease. (3mks)

19. The diagram below shows a set up used to study an aspect of soil. The set up was left undisturbed for five hours. Study it and answer the questions that follow.



a) What was the aim of the experiment? (1mk)
b) State one observation that was made in each of the flasks labelled C and D (2mks)
c) Give a reason for your answer in (b) above (2mks)
d) Apart from the aspect under the study above, state any other soil component that could be studied (1mk)

SECTION C: (40 MARKS)

Answer any TWO questions from this section

20. The following table shows an illustration of production of maize (in tons) using various levels of inputs.

Units of variable i (Man hours)	Total output of m (Tons)	Marginal Pro	Average produ
0	0		
1	6		
2	18		

3	33		
4	40		
5	45		
6	48		
7	48		
8	40		

a) Work out the marginal product and average product and fill in the table (9mks)
b) On the same graph paper, plot the graph showing total output, marginal product and average product against variable input (8mks)
c) On the graph draw lines to show the following zones (3mks)

i) Increasing return production function
ii) Decreasing return Production function
iii) Diminishing return production function

21(a) Outline five benefits of trees and shrubs to the economic wellbeing of Kenyans (5mks)
b) Explain 7 ways on how farmers overcome risks and uncertainties in a farming business (7mks)
c) Explain the factors that influence the type of irrigation to be used in a farm (8 mks)
22 (a) State the principles involved in planning a crop rotation programme.(6mks)
(b) Discuss the production of maize under the following subheadingsMaize
I Seedbed preparation (2mks)
ii) Planting (2mks)
iii) Weed control (2mks)
iv) Field management practices (2mks)
v) Pests control (2mks)
vi) Disease control (2mks)
vii) Harvesting (2mks)

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KCSE MOCK 2

PAPER 2

TIME 2 HOURS

SECTION A [30 MARKS]

Answer All The Questions in The Spaces Provided.

1. Name **four** exotic beef cattle breeds most reared in Kenya. [2 marks]
   (i) ……
   (ii) ……
   (iii) ……..
   (iv). ……
2. If a sow was successfully served on 27th September 2019, state the date she is likely to have furrowed. [1mark]
   (i) ……
   (ii) ……
3. Give **two** importance of docking in rams. [1 mark]
   (i) ……
   (ii) ……
4. Mention **four** causes of stress in a flock of Birds (2 marks)
   (i) ……
   (ii) ……
   (iii) ……..
   (iv). ……
5. Name **two** nutritional disease of cattle. [1 marks]
   (i) ……
   (ii) ……
6. State **four** methods of preserving fish. [2 marks]

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(i) ……

(ii) ……

(iii) ……

(iv). ……

7. State **four** disadvantages of free range system of poultry rearing. (2 marks)

(i) ……

(ii) ……

(iii) ……

(iv). ……

8. State **four** advantages of a Kenya top bar hive. [2 marks]

(i) ……

(ii) ……

(iii) ……

(iv). ……

9. Name **two** diseases that affect female animals only. [1 mark]

(i) ……

(ii) ……

10. Name **four** tick borne diseases [2 marks]

(i) ……

(ii) ……

(iii) ……

(iv). ……

11. State **four** ways of vaccinating livestock. [2 marks]

(i) ……

(ii) ……

(iii) ……

(iv). ……

12. Name **three** notifiable livestock diseases in Kenya. [1 ½ marks]

(i) ……

(ii) ……

(iii) ……

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13. State **four** ways of identifying livestock. [2 marks]

(i) ……

(ii) ……

(iii) ……

(iv). ……

14. List **four** safety precautions taken into consideration when using with farm tools.[2 marks]

(i) ……

(ii) ……

(iii) ……

(iv). ……

15. State **three** causes of piglet mortality. [1 ½ mark]

(i) ……

(ii) ……

(iii) ……

16. Give **four** characteristics of roughages feeds. (2 marks)

(i) ……

(ii) ……

(iii) ……

(iv). ……

17. Give **four** reasons why camels are suited to living in arid areas. (2 marks)

(i) ……

(ii) ……

(iii) ……

(iv). ……

18. Name the parental breeds of the dorper. (1 mark)

(i) ……

SECTION B [20 MARKS]

Answer all questions in this section in the spaces provided.

19. A poultry farmer has maize containing 8% DCP and Soya beans containing 43% DCP. If the farmer wants to make 100kg of a feed, using the person's method calculate the proportions in which the two ingredients would have to be mixed to make a feedstuff containing 15% DCP. (Show your working).
(5 marks)

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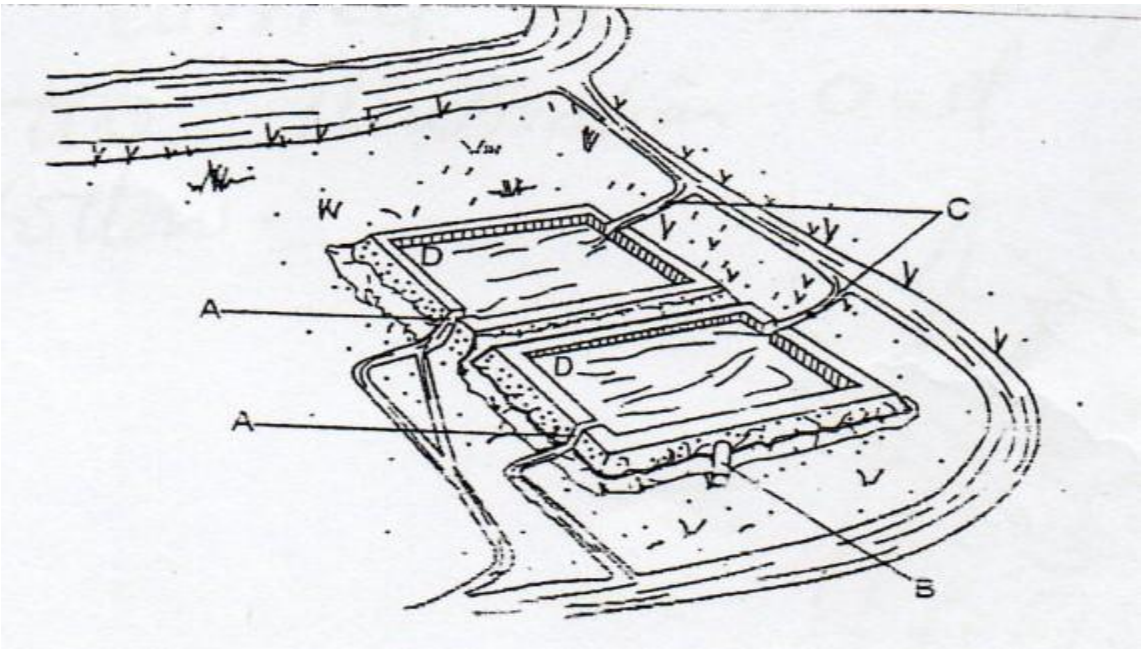
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20. Below is an illustration of a fish pond. Study it carefully and then answer the following questions.



21. a). Give the reason why part D is usually deeper than the rest of the pond. (1 mark)

_____

_____

_____

(b). Name the part labelled A, B and C. (1 ½ mark)

A

B

C

(c). State **three** maintenance practices that should be carried out on the fish pond. (1 ½ mark)

(i) ……

(ii) ……

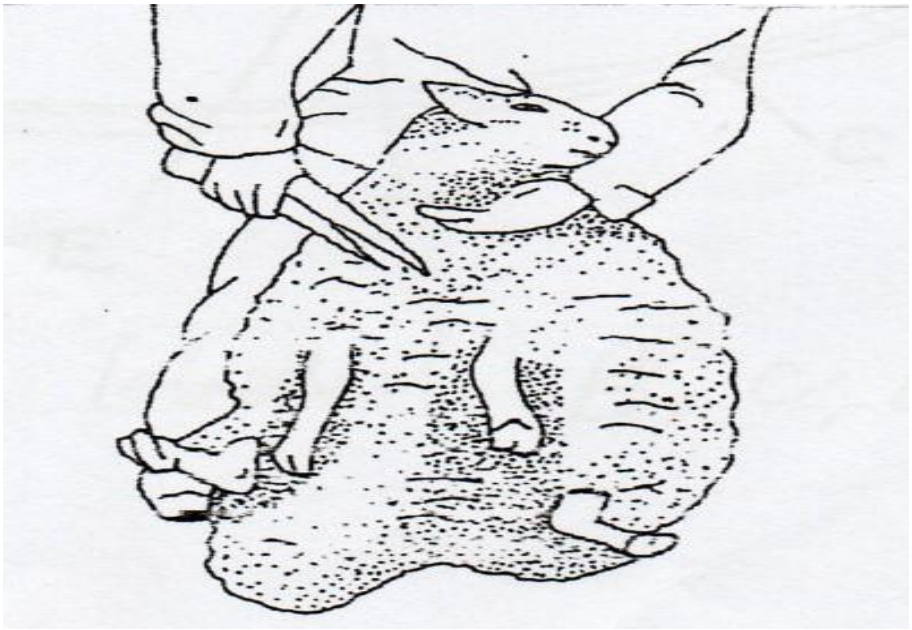
(iii) ……

(d). Give **two** reason why a fence should be constructed around the fish pond. (1 marks)

(i) ……

(ii) ……

22. The following illustration represent a certain practice carried out in sheep management. Study the illustration and answer the questions that follow.



(a). Identify the practice. (1 mark)

_____

_____(b). Name the tool being used in carrying out the practice. (1 mark)

_____(c). State two precautions that should be take when carrying out this practice. (2 marks)

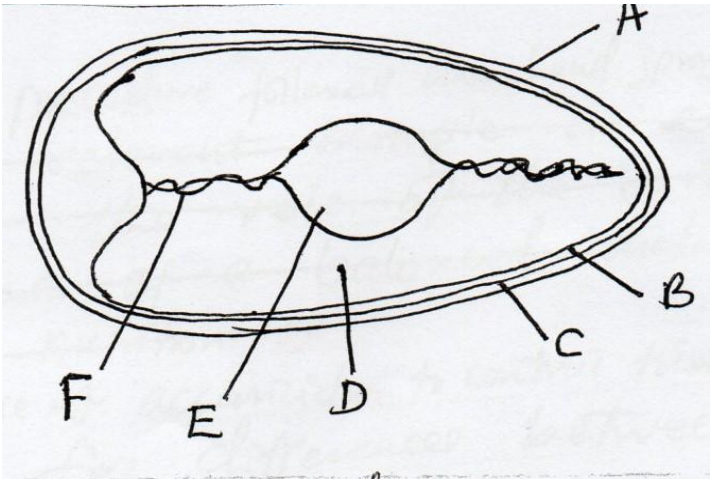
(i) ……

(ii) ……

(d). Name a breed of sheep reared for wool production. (1 mark)

(i) ……

22. The following is diagram of an egg. Study it carefully and answer the questions that follow.



(a). Name the part labelled B,C,D and F. (2 marks)

B

C

D

F

(b). State **two** qualities of the part labelled A that should be considered when selecting egg for incubation. (2 marks)

(i) ……

(ii) ……

(c). What is the function of the part labelled E in a fertilized egg? (1 mark)

_____

_____

SECTION C. (40 MARKS)

Answer any two questions in this section in space provided at the back..

24. (a). Describe the feeding of bees under bee keeping. (5 marks)

(b). Describe the management practices that a farmer should carry out to improve milk production in a low yielding herd of dairy cattle. (15 marks)

25. (a). Outline the procedure followed when hand spraying cattle to ensure effective use of accaricide to control ticks. (10 marks) (b). Outline five differences between exotic cattle breeds and indigenous cattle breed. (5 marks)

(c). Outline five qualities of a good grain store. (5 mark)

26. (a). Describe the role of the various components of a balanced diet in livestock nutrition.

(10 marks)

(b). Give five reasons of keeping livestock healthy. (5 marks)

_____

_____

_____

_____

_____

_____

(c). Outline five predisposing factors of mastitis in lactating cows. (5 marks)

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KCSE MOCK 3

PAPER 1

TIME 2 HOURS

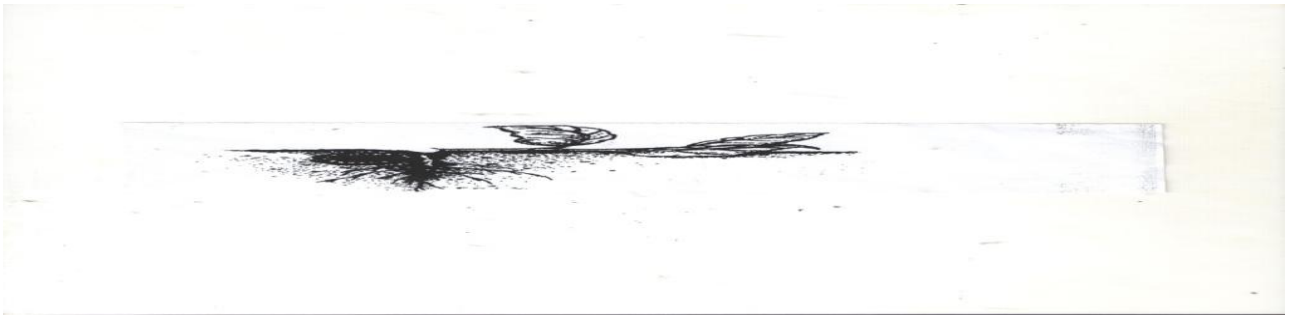
SECTION A (30 MRKS)

1.Differentiate between olericulture and pomoculture as used in crop production .(1mrk)
2.Give four method of farming (2mrks)
3.Give two examples for each of the following types of cost incurred in broiler production .
a) Variable cost (2 marks)
b) fixed cost (2 marks)
4.Give **four** advantages of crop rotation .(2mrk)
5.State **four** factors that that should be considered when classifying crop pest (2mrks)
6. a) Name four pieces of information contained in a land title deed (2mks
b) Name **two** forms of collective land tenure system. (1mk
7. List **four** post – harvest practices that are carried out in maize production (2mks
8. What is opportunity cost? (1/2 mk)
9.Outline **four** ways of improving lab our productivity (2mks
10. State **four** factors that can affect the efficiency of pesticides (2mks
11 List **four** sites on which agro forestry trees can be established on a farm. (2mks
12.Give **four** advantages of using seeds over vegetative materials. (2 mks)
13.State **four** features that should be considered when choosing water pipes for use on the farm. (2 mks)

14.Give **three** reasons why primary cultivation should be done early before the onset of the rains(1 ½)
15. Give **four** suitable characteristics of plants used as green manure. (2mks

SECTION B: (20 marks)
Answer all the questions in the section in the spaces provided.

16. The diagram below shows a pest and the damaged crop study it and answer the questions that follow.



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a) Identify the pest illustrated above (1mk

b) Explain **two** ways of controlling the pest (2mks

c) State **two** ways in which the pest economically important. (2mks)

17. a) Distinguish between straight and compound fertilizers. (1mk

b) A farmer applied 200kg of C A N (20%N) per hectare maize crop. Calculate the amount of Nitrogen applied on his 5 hectare crop. Show your working (4mks

18The diagram below shows a maize cob attacked by a certain disease. Study it and then answer the following questions.



a) Identify the disease (1 Mk)

……

……

b) Name **two** causal organism of the disease. (1 Mk)

……

……

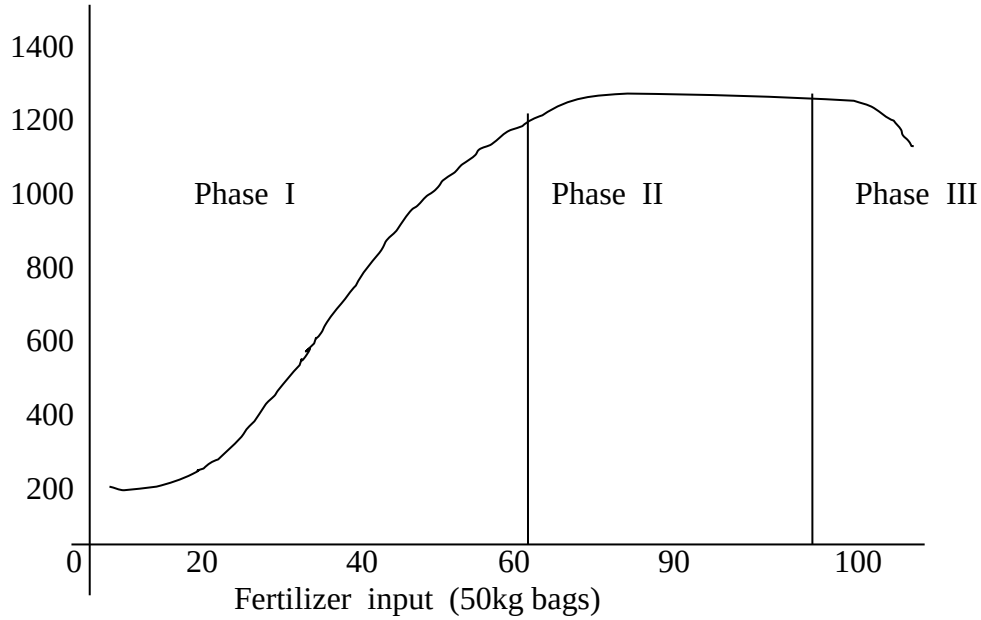
c) State **three** cultural methods of controlling the disease. (3 Mks)

……

……

……

19. Below is a graphical representation of a law in agricultural economics. Study the graph carefully and answer the questions that follow.



a) State the law illustrated by the graph (2mk

b) Explain how each additional unit of fertilizer input relates to the total output of maize in **phases II and III .(** 2 mks

Phase II

Phase III (1mk

c) State the importance of the law identified in (I) above to the maize farmer (1mk

SECTION C (40MARKS)

Answer any two questions in this section in the spaces provided

20a) Explain **five** factors that should be considered in farm planning. (10 Mks)

b) Describe transplanting of tomatoes seedling. (10 Mks)

21Describe paddy rice production under the following sub-headings.

i) Land preparation (2 Mks)

ii) Water control (2 Mks)

iii) Fertilizer application (2 Mks)

iv) Weed control (2 Mks)

b) Explain how each of the properties of rainfall and light influence crop production.

i) Rainfall (8 Mks)

ii) Light

c) Explain **four** factors that should be considered when sitting a vegetable nursery. (4mks)

22a) Describe **six** advantages of rotational grazing (6mrks)

b)Explain **eigh**t ways in which soil fertility can be maintained (8mrks)

c) Explain **six** reasons for pruning coffee.(6mrks)

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KCSE MOCK 3

PAPER 2

TIME 2 HOURS

SECTION A

ANSWER ALL THE QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED

1. Name **two** dairy goat breeds found in Kenya. (1 Mk)
   ……
   ……
   ……

2. Outline **four** reasons for maintaining farm tools and equipment in good condition. (2 Mks)
   ……
   ……
   ……
   ……
   ……

3. Outline **two** predisposing factors of foot rot. (1 Mk)
   ……
   ……

4. Name **two** rules that should be observed when milking. (1 Mks)
   ……
   ……
   ……
   ……

5. Outline **two** duties of a worker bee in a colony of bees. (1 Mks)
   ……
   ……
   ……
   ……

6. Study the table below fill in the blanks to show the term used to refer to parturition and young ones of the following animals. (2 Mks)

Type of anim	Act of parturition	Term to refer to the young one
Cattle	Calving	Calf
Goats	……	……..
pig	……	……..

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7. State **four** harmful effects of ticks. (2 Mks)
……
……
……
……
8. State **four** desirable factors to consider when siting a fish pond. (2 Mks)
……
……
……
……
9. Name the most appropriate tools used in the following operations
a) Removing metal chippings in file (1mrk)
.....
.....
b) Cutting wood along grains (1mrk)
.....
.....
c) Branding (1mrks)
.....
.....
10. State **four** characteristic of Boran cattle (2mrks)
.....
.....
.....
.....
11. Name **three** methods of out breeding in livestock production ((1 ½ marks)
.....
.....
.....
.....
12 .What do you understand by the following terms as used I animal production .

a) Caponisation (1mrk)
.....
.....
b) Bullock (1mrk)
.....
.....
c. Epistasis(1mrk)
.....
.....
13State **four** control measures of a liver fluke in livestock. (2 marks)

FOR MARKING SCHEMES CALL/TEXT/WHATSAPP 0705525657

.....
.....
.....
.....
.....
.....

14What is "dry cow therapy" in dairy cattle management?

(1/2 mark)

.....
.....

15State **four** causes of stress in poultry. (2 marks)

16.Distinguish between mothering ability and prolificacy as used in livestock breeding.(1mks)

.....
.....
.....
.....

17 Name **two** sources of protein for livestock nutrition. (2 marks)

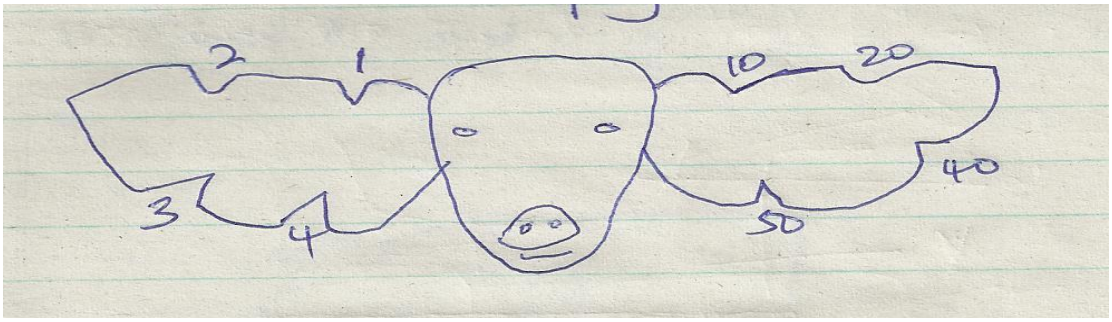
.....
.....
.....
.....

18State **four** signs of parturition shown by a in calf cow. (2 marks)

.....
.....
.....
.....

SECTION B (20 mks)
ANSWER ALL THE QUESTIONS IN THIS SECTION

19The diagram below shows a certain practice carried out on pig



a) Identify the practice illustrated above (1mrk)
.....
.....

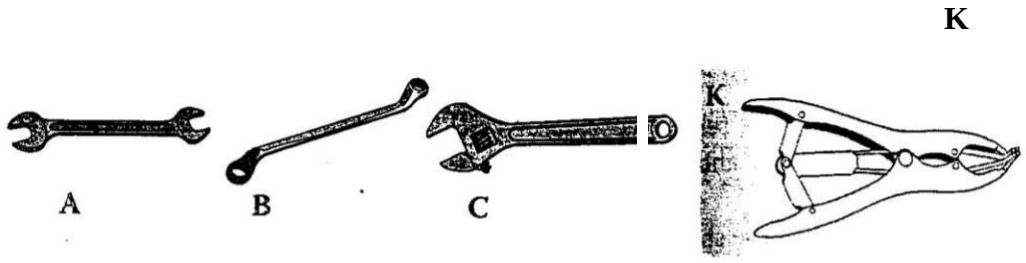
b) Draw another illustration depicting pig number 37(1mrk)

c) Name the tool used to carry out the practice illustrated above (1mrk)
.....
.....

d) State two other method of identifying piglet (2mrks)

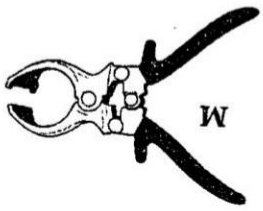
i)……
……..
ii)……

20. The diagrams below show some farm tools. study them and answer the question that follow.



a) Name the tools.

(2 marks)



Tools : (2mks)

……..
B

……..
C

……..
W

……..

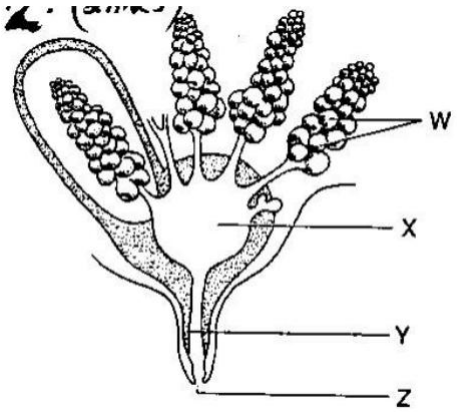
b) State the functional differences between tools K and W. (1 mark)

……
c) What advantage does C have over A and B? (1 mark)

……
……
……..

d) State **one** common maintenance practice carried out in tool C and W. (1 mark)
.....
.....
.....
.....

21a) The diagram below shows a structure of the udder of a cow. Name the part labeled W, X, Y and Z.(2 marks)



W

……

X

……....

Y

……

Z

……

b) What is milk let down (1 mrk)

.....

.....

c) Name **two** hormones that control milk let down in dairy cow. (2 mrk)

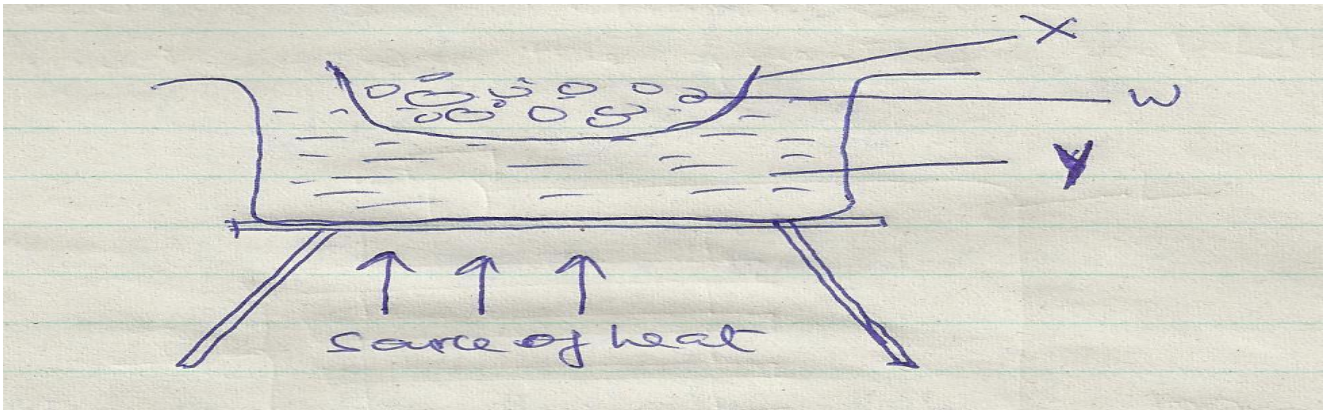
.....

.....

.....

.....

22. Below is an illustration of a method of extracting honey from combs .Study the diagram and answer the question that follow .



d) Identify the above method of extracting honey (1mrk)

.....

.....

e) Give a reason why container x should not be heated directly (1mrk
.....
.....

f) Name the parts labeled w and y(2mrks)
W……
Y……

g) Besides the above method ,State one other method of extracting honey (1mrk)

SECTION C (40 MKS)
ANSWER ANY TWO QUESTIONS IN THIS SECTION

23(a) State **five** reasons why bees swarm. (5 marks)
b) Describe **five** maintenance practices carried out on a tractor battery. (5 marks)
c) Explain **five** factors considered when culling livestock. (5 Mks)
d. Explain **five** mechanical methods of controlling ticks.(5 mks)
24a) Describe the process of egg formation in chicken up to the point of laying. (10 Mks)
b) State the differences between four stroke cycle and two stroke cycle engine. (5 Mks)
c) Describe the process of digestion in rumen. (5 Mks)
25. a) Describe trypanosomiasis disease under the following sub-headings.
i) Causal organism (1 Mk)
ii) Animal attacked (1 Mk)
iii) **Five** symptoms of attacked animals (5 Mks)
iv) **Three** control measures (3 Mks)
b) Control **five** control measures for cannibalism (5 Mks)
(c) Explain **five** parts of a piggery unit (10mrks)

FOR MARKING SCHEMES CALL/TEXT/WHATSAPP 0705525657

KCSE MOCK 4

PAPER 1

TIME 2 HOURS

AGRICULTURE PAPER I
TIME 2 HOURS

SECTION A (30MKS)
Answer all the questions from this section in the spaces provided.

1. Give **two** characteristics of plantation farming. (1mk)
2. Name **two** chemical processes of weathering. (1mk)
3. State **two** advantages of organic farming. (1mk)
4. Outline **two** effects of soil organisms which benefit plant growth. (1mk)
5. Give **two** ways in which organic mulch help to conserve water in the soil. (1mk)
6. Give **two** types of labour records. (1mk)
7. Outline **four** ways in which land consolidation helps to improve farm management. (2mks)
8. State **four** importance of raising seedlings in a nursery bed. (2mks)
9. Give **four** ways of controlling weeds in a field of maize. (2mks)
10. State **three** reasons for top dressing pasture. ($1\frac{1}{2}$)
11. Give **four** reasons for training crops as a field practice . (2mks)
12. State **three** activities the farmer carries out on a store before storing grains. ($1\frac{1}{2}$mks)
13. Give **four** desirable characteristics of certified seeds. (2mks)
14. (a) Outline **two** characteristics of nitrogenous fertilizers. (1mk)

    (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)
16. State **four** factors that contribute to competitive ability of weeds. (2mks)
17. Define the following terms as used in crop production.
    (a) Trelishing (1mk)
    (b) Stooking (1mk)
18. Give **two** advantages of strip grazing (1mk)
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

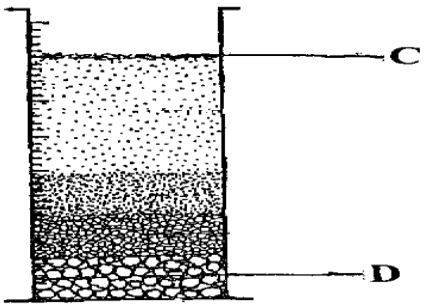
20. Study the diagram below and answer the questions that follow. The illustrations represent a method of crop propagatio



(a)Name the crops (s) propagated by illustrations: (1mrk)

(b)Give **three** factors that promote the rooting of illustration **A.** (3mrks)

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



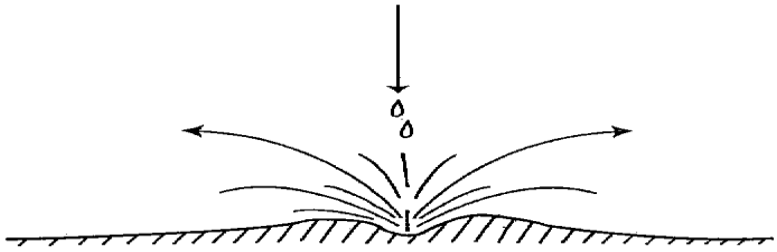
(a)What was the aim of the experiment? (1mrk)

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

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

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

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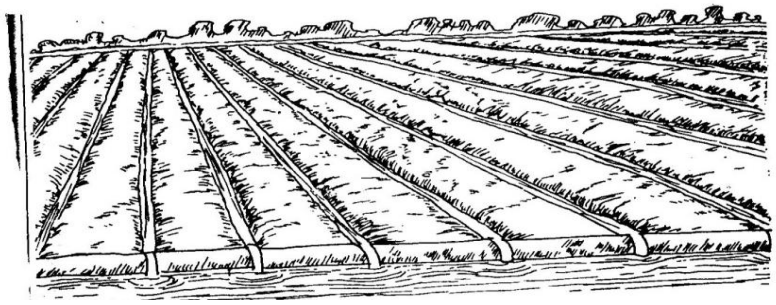


(a)Identify the type of erosion illustrated. (1mrk)

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

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

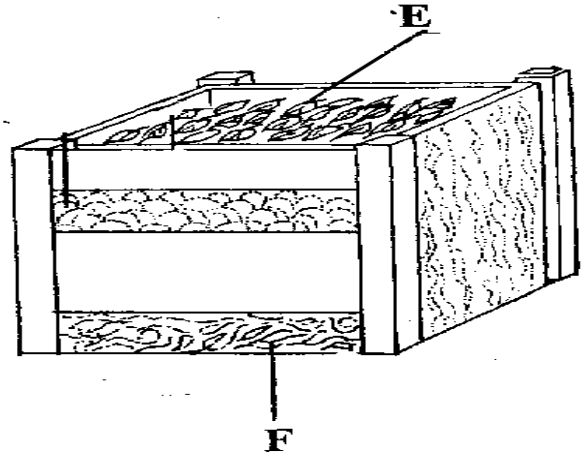
23. The diagram below illustrate a method of irrigation carried out on the farm



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

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

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)

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

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

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)

(b) Describe the procedure followed when collecting a soil sample form the field for testing in the laboratory (6 mks)

(c) Outline four advantages of intercropping crops (4 mks)

(d) State four factors considered before selecting a farm enterprise. (4 mks)

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

i) Ecological requirements of tomato plants (5mks)

ii) Land preparations (4mks)
iii) Transplanting (7mks)
iv) Disease control (4mks)

27. a) State five factors that influence soil productivity. (5mks)
b) State five qualities of mother plant used during grafting. (5mks)
c) Give two types of mulching materials. (2mks)
d) State four agricultural practices which pollute water. (4mks)
e) Describe precautions followed when harvesting coffee. (4mk

KCSE MOCK 4

PAPER 2

TIME 2 HOURS

SECTION A

Answer all questions in this section in the spaces provided.

1. Name the camel breed with two humps. (1 mark)

……

2. List four disadvantages of animal drawn implements. (2 marks)

……

……

……

3. Name the vectors for each of the following livestock diseases. (2 marks)

a) East coast fever……
b) Rift valley fever……...
c) Trypanosomiasis…….
d) Nairobi sheep disease……...

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4. Give four factors considered when selecting a site for fish pond. (2 marks)
……
……
……
……

5.List four implements that can be connected to the power take off shaft (PTO) of a Tractor.
(2 marks)
……
……

6.State two methods of increasing the depth of penetration of a disc harrow. (2 marks)
……
……

7. (a) Name the tools used in (2 marks)
(i) Cutting curves on thin wood……
(ii)Measuring the inner diameter of a circular object/surface……..
(iii)Cutting thin sheets of metal……
(iv)Tightening wires during fencing…….

b) State two care and maintenance practices of masonry tools and equipment. (1 mark)
……
……

8. State four pre-disposing factors of mastitis disease in cattle. (2 marks)
……
……
……
……

9. Outline four factors which would be considered when culling layers. (2 marks)
……
……
……
……

10. Give three reasons for choosing corrugated iron sheets in roofing of farm stores instead of tiles. (3 marks)
……
……
……

11. What is the purpose of fixing a ring around nostrils of a bull. (1 mark)
……
……

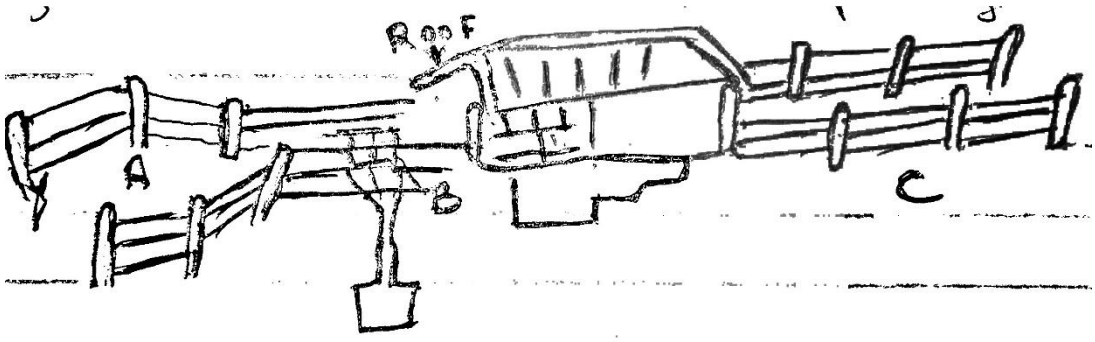
12. State one use of each of the following parts found in a tractor.
(a) Carburetor…… (1 mark)
(b) Spark plug …… (1 mark)

13. Name the mineral whose deficiency symptom is Grass tetany in livestock. (½ mark)
……

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14. Give three post-milking activities in dairy cattle. (1½ marks)
……...
……..
……
15. Name two livestock diseases controlled by the same vaccine and name the (1½ marks) Vaccine
……..
(i) …….
(ii) …….
16. State the role of the following hormones in livestock production. (2 marks)
Prolactin…….
Oxytocin ……
17. Name one parasite of bees. (½ mark)
……

SECTION B (20 Marks)
Answer all the questions from this section.
18.Diagram below show a plunge dip.

a) 

b) State one use of parts A, B and C (3marks)
A……
B……
C……
c) State two precautions a farmer should take on dip to ensure effective dipping (2marks)
(i)……
……..
ii)……
……
(d). State two uses of the roof of the dip (2marks)
(i)……
……
(ii)……
……
b) State three disadvantages of a plunge dip (3marks)
……
……
……
……
……

19a) i) Identify the tools below (1mark)

X ……..
Y …….

ii) State the use of tools x and y (2marks)

X
……
……

Y
……
……

iii) Explain two maintenance practices carried on tool X (2marks)

i)……
……

ii)……
……

b) Name the tools used in conjunction of following tools (2marks)

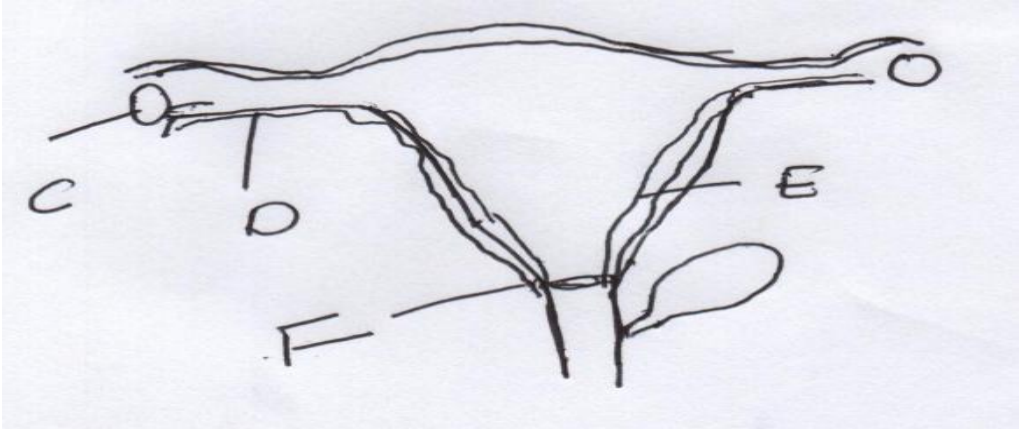
i. Trocar
……

ii. Hypodermic needle
……

iii. Wood chisel
……

iv. Star headed screw
……

20a) Diagram below show reproductive system of a female cow



i. Name the part marked (1mark)

D ……
F ……

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ii. State the function of parts marked (1mark)

C ……

E ……

b) At what stage should a gilt be mated? (½mark)

SECTION C (40 Marks)

Answer any two questions in this section in the spaces provided after each question.

21.(a)Describe five pre-disposing factor of livestock diseases. (5marks)

(c) Describe six mechanical methods of controlling ticks (6 marks)

(c)Describe the factors that affect milk composition of a cow (9 marks)

22.(a)(i) Explain five advantages of animal power. (5marks)

(ii)Describe three operational differences between disc plough and mouldboard plough. (6 marks)

(b)Describe the use of various materials in construction of a Kenya to hive (4 marks)

(c) Outline the care and maintenance of a tractor water cooling system. (5marks)

23.(a)(i) State four physiological body processes considered when assessing on animal health. (4marks)

(ii)Explain nine factors considered when selecting a breeding stock. (9marks)

(b)Describe Brucellosis disease in Cattle under the following sub-headings.

(i)the cause of the disease (1mark)

……

(ii)Symptoms of the disease (4marks)

(iii)Control measures (2marks

KCSE MOCK 5

PAPER 1

TIME 2 HOURS

SECTION A (30MARKS)

Answer ALL the question in this section in the spaces provided

1. Give **one** reasons why agriculture is regarded as a science (1mk)
2. List **four** methods of farming (2mks)
3. Differentiate between soil structure and soil texture (1mk)
4. State **four** reasons for draining a water logged land (2mks)
5. State **two** effects of siltation in dams and reservoirs (1mk)
6. Give **three benefits** of under sowing in pasture production (1mk)
7. Give **four** reasons for growing crops under optimum temperature condition (2mks)
8. Name **one** vegetative material used to propagate each of the following crops(2mks)

(a) Bananas

(b) Pineaples

(c) Irish Potatoes

(d)Pyrethrum

9. List four advantages of the title deed to a farmer (2mks)
10. What is meant by the following terms in crop as production?

(a) Crop rotation (1mk) (b

Mulching (1mk)

11. Give **two** factors than can increase seed rate in crop production (2mks)

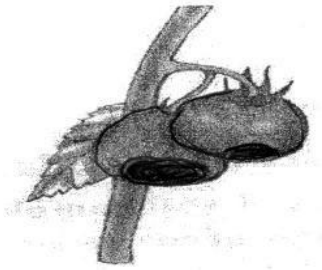
FOR MARKING SCHEMES CALL/TEXT/WHATSAPP 0705525657

12. State **three** functions of Nitrogen in crops (1½ mks
13. State **four** ways of improving labour productivity on the farm (2mks)
14. State **four** advantages of applying lime as a measure of improving soil condition(2mks)
15. List **three** sources of organic matter in the soil (1½ mks
16. List **four** post-harvest practices that are carried out in maize production(2mks)
17. Give **three** factors affecting selectivity and effectiveness of herbicides(1½ mk)
18. What is meant by the term preference and choice as used in agriculture economics(1mk)

SECTION B (20 MKS)

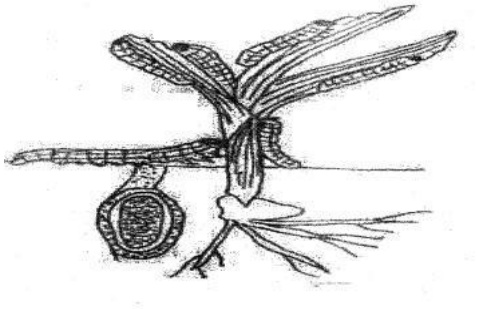
Answer all questions in this section in the spaces provided

19. The diagram below shows a physiological condition of tomatoes . Use it to answer the following questions.



(a) Identify the condition (1mk) (b Give
three causes of the condition identified in (a) above (3mks)

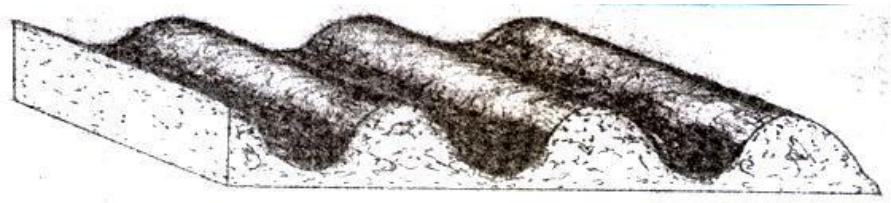
20. The diagram drawn below shows pests that attack crops in the field. Use it to answer the questions that follows.



(a) Identify the pest (1m)
(b) Classify the above pest depending on the feeding habit (1m k)
(c) List **three** effects of the pest above in crop production (3m k)

FOR MARKING SCHEMES CALL/TEXT/WHATSAPP 0705525657

21. The diagram below illustrates a final seedbed after a tertiary operation done during land preparation.
Study it carefully and answer the questions that follow



(a) Name the tertiary operation carried out on the seedbed (1mk) (b
Describe how the tertiary operation named in (a) above is carried out (2mks) (
Give **two** advantages of planting crops on the final seedbed illustrated above (2mks)
22. The table below shows the population and gross domestic products of countries A and B

Country	Gross Domestic Produce (Million Kshs)	Population (Million)
A	1800	36
B	1200	15

(a) Calculate the per capita income for each country. Show your working (3m s)
(b) Which of the **two** countries is more developed economically (1m k) (c)
Give a reason for your answer in (b) above (1mk) (d) How
can agriculture increase the gross domestic product of a country (1mk)

SECTION C (40 MARKS)
Answer any TWO questions from this section in the spaces provided after question 25
23. (a) Discuss production of beans (*Phaseolus Vulgaris*) under the following sub-headings
(i) Selection and preparation of planting materials (3m s) (ii)
Planting (3mk) (iii)
Disease control (2m s) (b)
Outline four factors that determine the depth of planting maize seeds (4m s) (c)
Outline the advantages of a mixed grass legume pasture over pure grass (8mks)
24. (a) Explain the factors that contributes to competitive ability of weeds (mks)
(b) State **five** factors that determine the choice of irrigation to use in the farm (5m s) (c)
Outline **five** characteristics of fertile soil (5m s) (d)
Name **three** types of soil water? (3mks
25. (a) Describe **five** characteristics of Nitrogenous fertilizers (5mks) (
Discuss the guidelines that should be followed when planning a crop rotation programme (10mks)
(c) Explain the importance of a nursery in crop propagation (5m s

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KCSE MOCK 5

PAPER 2

TIME: 2 HOURS

SECTION A (30 MARKS)

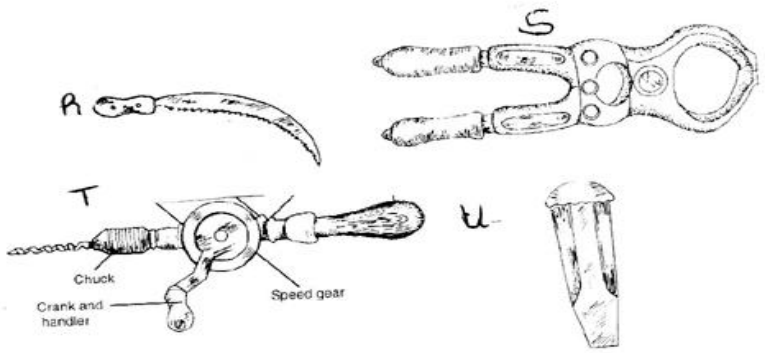
Answer ALL questions in this section in the space provided

1. Name a goat breed kept for hair production (½ mks)
2. State **four** predisposing factors to livestock diseases (2mks)
3. Outline **four** factors that determine the amount of water required by an animal (2mks)
4. State the role of each of the following parts of the males reproductive system
   (a) Testes (1mk)
   (b) Epididymis (1mk)
   (c) Penis (1mk)
5. Differentiate between crutching and ringing in sheep management (2mks)
6. Define the term dry cow therapy in cattle production (2mks)
7. Outline **four** features of a good egg for incubation (2mks)
8. Mention f o u r causes of egg eating in a flock of layers (2mks)
9. Highlight four factors to consider when choosing construction material (2mks)
10. Name four **major** groups of livestock diseases according to causes (2mks)
    (b) State **three** symptoms of Anthrax disease in cattle (1½ mk)
11. State the distinguishing colour of the following livestock breeds
    (i) Duroc jersey pig (½ mk)
    (ii) Saanen goat breed (½ mk)
    (iii) Dorper sheep breed (½ mk)
    (iv) Light Sussex poultry breed (½ mk)
12. Outline **two** criterial for classifying tractor engines(1mk)
13. Mention **four** advantages of embryo transplant in cattle breeding (2mks)
14. State **four** effects of internal parasites on livestock (2mks)
15. Name a tool equipment to perform each of the following farm operation
    (a) Driving and removing nails from wood (½ mk)
    (b) Cutting thin sheet of metal (½ mk)
    (c) Checking right angles during construction of a wall (½ mk)
    (d) Smoothening curved surfaces in wood (½ mk)

SECTION B (20mks)

Answer all the questions in this section

16. Study the diagrams below then answer the questions that follow

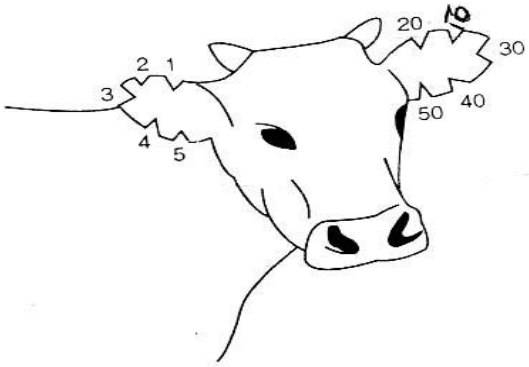


(a) Identify each of the farm tool/equipment illustrated above (2 marks)

(b) State the use of tool equipment labeled R and U (2marks)
(c) Give **two** maintenance practices of tool labeled S (2mks)

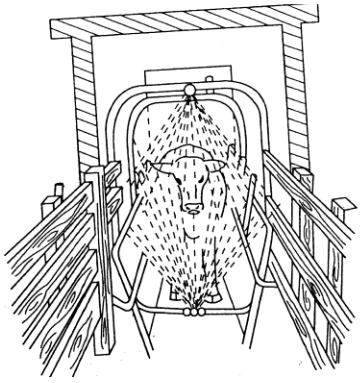
17. Using pearson"s square method , compute a 300 kg calf rearing ration containing 18% DCP using maize meal (8% DCP) and
soya bean meal (35 % DCP (show your working) (5 mks

18. Study the illustration below then answer the questions that follow (1mk)



(a) Identify the method of identification illustrated by the diagram above (1mk)
(b) State the identification number of the above animal (1mk)
(c) Using the above diagram, draw animals to represent the following identification numbers
(i) 65
(ii) 24 (1mk)

19. The illustration below represents a farm structure used in the control of external parasites in livestock



a) Identify the structure (1mk)
b) State **two** advantages of using the above farm structure (2mk)
c) Other than the structure shown above , name two other farm structures that can be used for carrying out similar operation as the one shown above (2mk)

SECTION C (40 MARKS)

Answer Two questions in this section in the spaces provided after question 22

20. (a) Explain the advantage of artificial insemination as a method of service in livestock (7mk)
(b) Give **five** importance of keeping livestock healthy(5mks)

(c) Describe the short term tractor service(8mks)

21. (a) Discuss the factors that affect milk composition(10mks) (b) State **five** control measures of tapeworms (5mks) (c) Describe the characteristics of indigenous cattle breeds . (5mks)

22. (a) Mention **four** precaution when handling farm tools and equipment (1mk)
(b) Describe the uses of fences in the farm(8mks)
(c) Name two harmones that influence milk let down(2mks)
(c) Describe the control , measure of mastitis in cattle

production(6mk

KCSE MOCK 6

PAPER 1

TIME: 2 HOURS

SECTION A (30 MARKS)

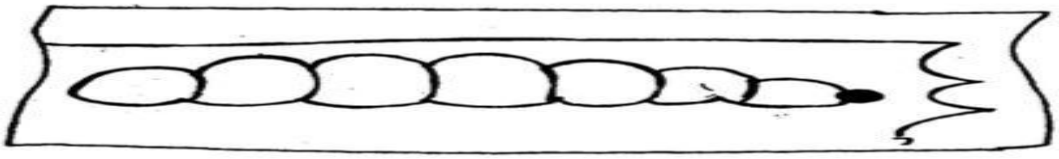
Answer all questions in this section.

1 List **two** aspects of light that influence agriculture. (1mk)
2 State **two** reasons why land settlement schemes were established in Kenya. (1mk)
3 Define the following terms as used in crop production. (2mk)
a) Pomology
b) Olericulture
4 Outline **two** methods used by farmers to harden – off seedlings in the nursery. (1mk)
5 State **four** circumstances that could make shifting cultivation practicable in an area. (2mks)
6 State **two** biotic factors that are useful in agricultural production. (1mk)
7 State **four** advantages of overhead irrigation. (2mks)
8 Give **four** signs that could enable you to identify a compost manure that is ready for use. (2mks)
9 State **four** agricultural services available to a crop farmer. (2mks)
10 State **two** factors that must be considered when constructing a cut-off drains. (1mks)
11 Give **four** methods of harvesting water in the farm. (2mks)
12 Give any **two** factors that should be considered before deciding to use chemical method of pest control. (1mk)
13 a) What is biological weed control? (1mk)
b) State **two** advantages of biological weed control. (1mk)
14 State **two** farming practices that can be carried out to increase the amount of moisture harnessed by crops. (1mk)
15 Give **two** ways in which agriculture contributes to industrial development in Kenya. (1mk)
16 State any **three** characteristics of trees used in agro forestry. (1 ½ mks)
17 State what is meant by "trap crop" as used in crop pest control. (1mk)
18 Outline **two** factors that could determine the amount of fertilizer to be top dressed to a crop in the field. (1mk)
19 State **two** factors that determine the scale of agricultural production. (1mk)
20 State **four** benefits of budgeting to a farm manager. (2mks)
21 Give **three** reasons for practicing minimum tillage. (1 ½ mks)

SECTION B (20 MARKS)

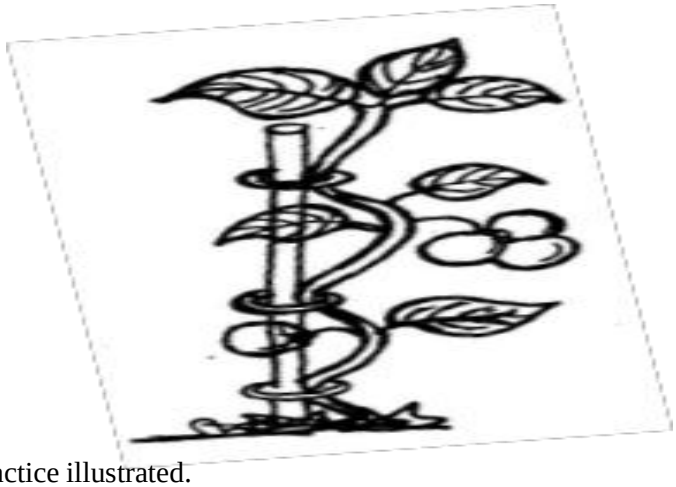
Answer all questions in this section.

22 The diagram below shows a maize stalk infested by a certain pest. Observe it and answer the questions that follow.



a) Identify the pest in the diagram above. (1mk)
b) Give **two** damages caused by the pests identified in (a) above. (2mks)
c) Other than maize name **two** other crops attacked by the pest (a) above. (1mk)
d) Give **two** cultural measures for the pest (a) above. (1mk)

23 Below is a diagram of a tomato plant.



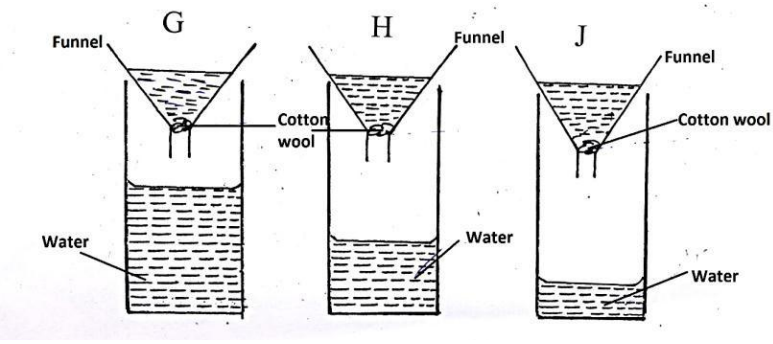
i) Identify the practice illustrated. (1mk)

ii) Describe the procedure followed in spraying the crops with a fungicide in power form, water and a knapsack sprayer. (2mks)

iii) Name **one** fungal disease that can be controlled in the crop using the procedure above. (1mk)

iv) State **two** safety measures that should be taken while spraying the crops with fungicides. (2mks)

24 The diagram below shows an experiment set up using soil types G , H and J.Observations were made after 24 hours. Study the diagram and answer the questions that follows

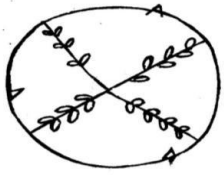


a) What is the experiment above designed to study.

b) Name the three soil type. G,H,J (1

c) Explain how the farmer can improve the soil type G. (1

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



a) Identify the method in the diagram above. (1mk)

b) Why is it necessary to prune a young tea plant as illustrated in the diagram above. (1mk)

c) Outline the procedure followed when using the pruning method shown above. (3mks)

SECTION C (40 MARKS)

Answer any two questions from this section.

26 a) Explain **five** factors that influence soil productivity. (10mks)

b) Outline **five** factors that a farmer would consider before deciding on the type of irrigation in crop production. (5mks)

c) Describe the qualities of the mother plant that should be considered when selecting vegetative material for planting. (5mks)

27 a) Explain cultural measures used in the control of weeds in a field of cereal crop. (10mks)

b) Explain **six** factors that can influence a well designed crop rotational program. (6mks)

c) Give four reasons why timely ploughing of the seedbed is important in crop production. (4mks)

28 a) A farmer has 30 hectares of arable land,20 hectares of which is planted with maize and 10hectares wi grass hay. He wishes to replace 10hectares of maize with Irish potatoes next year. The fertilizer rate will have to b increased from 2 bags per hectare for maize to 4 bags per hectare for potatoes. As a result of the change extra 40 me days of actual labour per hectare will be necessary at the rate of Kshs.100 per man a day. The average yield per hecta of maize is 35bags and for potatoes 120bags.The price paid is Kshs.1, 000 per bag of maize and Kshs.600 per bag potatoes. Maize seeds cost
.750 per hectare and potatoes cost Kshs.800 per hectare. Fertilizer costs are 650 per hectare.
Draw up a partial budget and advice the farmer accordingly. (10mks)

b) Discuss maize production under the following sub-headings

i) Ecological conditions. (3mks)

ii) Field preparation. (3mks)

iii) Planting and field management. (4mks

KCSE MOCK 6

PAPER 2

TIME: 2 HOURS

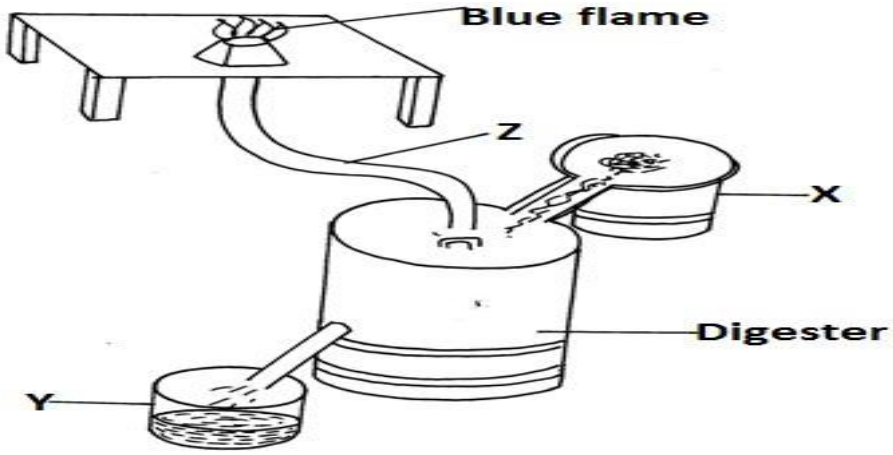
SECTION A (30 MARKS)
Answer all questions

1 State **four** factors that influence the quality of bricks. (2mks)
2 Give **four** functions of vitamins in livestock production. (2mks)
3 Give **two** characteristics of a good creep feed. (1mk)
4 State **two** limitations of wood fuel as a source of firm power. (1mk)
5 Mention **four** ways in which power is transmitted from the engine of a tractor. (1mk)
6 Give **four** pre-disposing factors of scours in calves. (2mks)
7 What is the functional difference between cold chisel and wood chisel. (2mks)
8 State **three** characteristics of goats that make them adaptable to arid – areas of Kenya. (1 ½ mks)
9 Give **two** signs that would indicate that a cow has died of cowthrax. (1mks)
10 List **two** tools you would require when smoothening concrete walls during plastering. (1mk)
11 List **four** farm structures that would assist in control of livestock parasites. (2mks)
12 State **three** desirable characteristics to be considered when a heifer for a milk production. (3mks)
13 Distinguish between interbreeding and out crossing in livestock production. (3mks)
14 a) Mention **four** reasons why bees swarm. (2mks)
b) State **two** methods to stock bee hives. (1mk)
15 State **four** reasons for castrating a male cattle. (2mks)
16 Give **two** reasons for steaming up in dairy cattle manangement. (1mk)
17 Give **three** reasons why honey harvesting should be discouraged at night. (1 ½ mks)

SECTION B (20 MARKS)

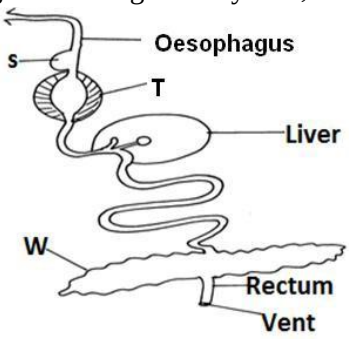
Answer all questions.

18 The diagram below is a biogus digester.



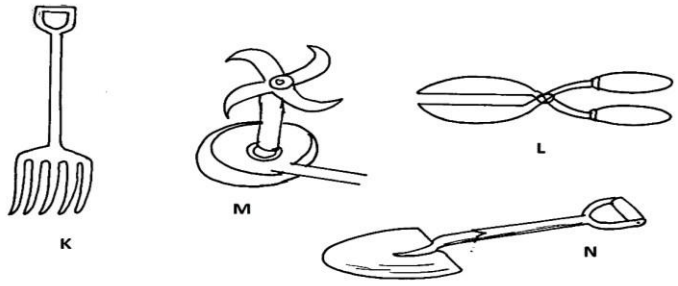
a) Name the parts labeled X and Z. (2mks)
b) Name **two** inputs periodically channeled through X. (2mks)
c) Name the use to which material Y is put. (1mk)
d) Name **two** uses of biogas on the farm. (1mk)

19 Below is the diagram of a digestive system, use it to answer the question that follows.



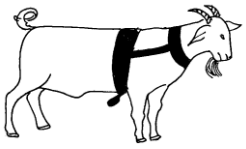
i) Which farm animal has a digestive system similar to the above system. (1mk) ii) Name the parts labeled S, T and W. (3mks)
iii) Explain the work of the parts S and T. (2mks

20 Study the diagrams below and answer the questions that follow.



a) Identify the tools K, L, M and N. (2mk)
b) Give the use of K and L. (2mk)

21 The diagram below illustrates a breeding management practice.



a) Identify the practice.
b) Outline **three** reasons for carrying out this practice.
c) Give three causes of infertility in farm animals.

SECTION C (40 MARKS)

Answer any two questions from this section on the space provided

22 a) Describe the factors to be considered before siting a cattle dip. (4mks)
b) Name any **six** essential parts of a spray race and describe their functions. (6mk)
c) Describe **five** disadvantages of using a spray race. (5mk)
d) Give **five** advantages of Kenya Top Bee Hive. (5mk)

23 a) Describe hand milking in a dairy cow. (12mks)
b) Explain the practices observed in a clean milk production. (8mk)

24 Discuss the management of layers from day old up to point of laying in a deep litter system. (20mks)

KCSE MOCK 7
PAPER 1

TIME: 2 HOURS

1. List three types of vegetables (1½mks)
2. State four ways through which pests affect Agriculture (2 mks)
3. Name four methods of controlling smuts disease in maize (2mks)
4. State four types of micro-catchments used in soil and water conservation (2mks)
5. Outline the importance of keeping breeding records in dairy farming
6. Give a reason for each of the following practices during compost making (2mk)

(i) Adding soil
(ii) Adding farm yard manure
(iii) Adding ash
(iv) Adding calcium ammonium nitrate

7. Define the following terms as used in pasture establishment

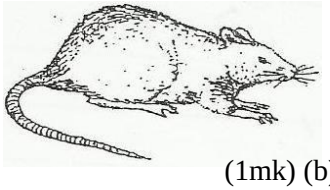
(i) Nurse crop
(ii) Over sowing

8. Outline utilization of Napier grass as a forage crop (2mks)
9. Give practices done to achieve single stem capped system pruning in coffee production
10. State two reasons for cutting back in pyrethrum production (1mk)
11. Give four harmful effects of weds in crop production (2mks)
12. State **three** advantages of shifting cultivation
13. Give **five** benefits of top –dressing in the management of grass pasture
14. Outline how you would prepare a store for grain storage
15. State four ways in which land reform can be implemented in Kenya
16. (a) Give two reasons for sub soiling (1mk)
    (b) Give two reasons for leveling as a tertiary operation in land preparation (1mk)

SECTION B (20 MARKS)

Answer All the questions in this Section in the spaces provided

17. The illustration below shows a farm pest. Study it carefully and answer the questions that follow



(a) Identify the pest (1mk) (b) Classify the pest (1mk) (c) Give four effects of pest (4mks) (d) Give two physical methods of controlling the pest

18. (a) Outline how you would mix a fungicide on the farm to spray on tomato crop (4mk)
    (b) Give four precautions you would take when spraying the fungicide (4mk)
19. Outline how you would prepare a rooting mixture in tea production (2mks)

SECTION C 40 MARKS

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

20. (a) Describe transplanting of tomatoes (10 mks)
    (b) Give ten reasons for keeping farm records (10mks)
21. (a) Explain six factors that should be considered when selecting seeds for planting (2mk)
    (b) Describe how you would prepare seeds collect to establish Agroforestry in the school (5mk)
    (c) Give three reasons for chiting in potato production (3mk)
22. Describe bean production under the following sub headings (6mk)

(a) Selection and preparation of materials

(b) Planting (4mk)
(c) Weed control (3mk)
(d) Field management and harvesting (7mk)

KCSE MOCK 7
PAPER 2

1. Name four dairy breeds of goats. [2marks]
2. Give four characteristics of clean and high quality milk. [2marks]
3. Name two classes of livestock feedstuff. [1mark]
4. Give three systems of out breeding. [1.5marks]
5. Give the pathogens that cause the following livestock diseases.

[a] Anthrax[0.5marks] [b] Gumboro[0.5marks]

6. State two reasons for hoof trimming in livestock. [1mark]
7. Give four symptoms of Newcastle disease. [2marks]
8. State four management activities done to piglets immediately after parturition [2marks]
9. Give four pre disposing factors of mastitis in dairy cows. [2marks]
10. State four routine management practices carried out on a replacement stock that is a heifer. [2marks]
11. Outline two control measures of roundworms. [1mark]
12. Give two maintenance practices carried out on a barbed wire fence. [1mark]
13. [a] Name a pig breed that is purely black with a long back and drooping ears . [0.5mark]

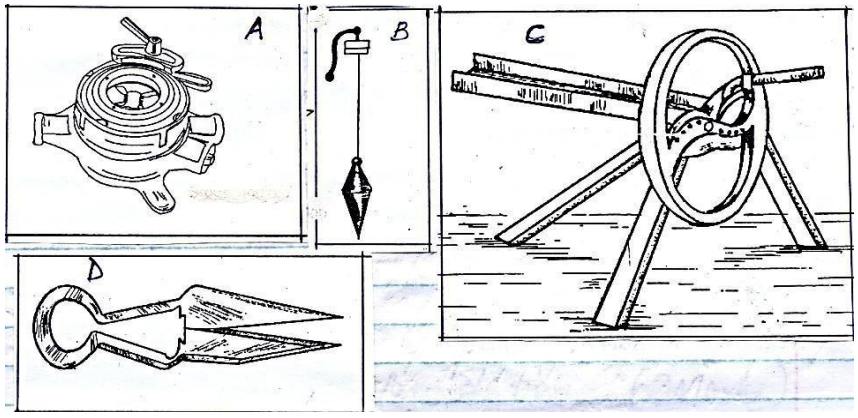
[b] Name four materials collected by bees. [2marks]

14. State four mechanical methods of controlling ticks. [2marks]
15. Give two roles of ovaries in a cows reproductive system . [1mark]
16. State four reasons that make keeping of rabbits popular. [2marks]
17. Give two roles of a bee drone. [1 mark]
18. State four management practices carried out in a deep litter system of poultry keeping. [2marks]
19. Name two functions of a clutch in the tractors transmission system. [1mark]

SECTION B [20MARKS]

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

20. The diagrams below represent some farm tools and equipment .Study them and answer the questions that follow

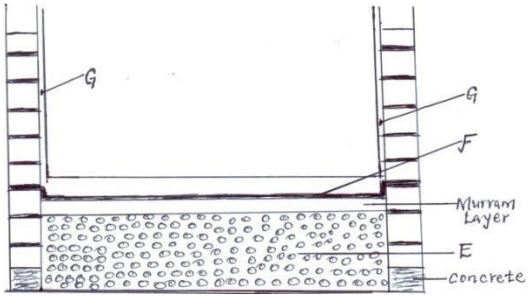


[a] Identify the tools labeled A and B (2 marks)

[b] State one use of each of the tools labeled C and D

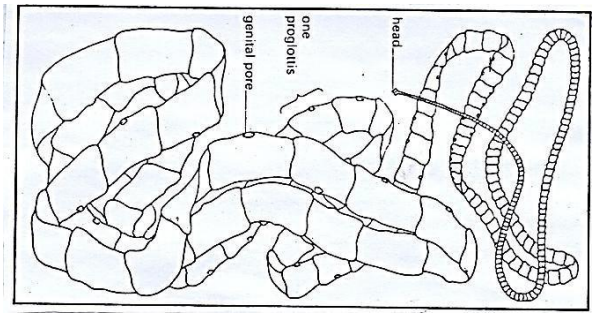
[c] Explain one maintenance practice carried out on tool D. [1mk.]

21.The diagram below represents a foundation of a farm structure .Study it and answer questions that follow .



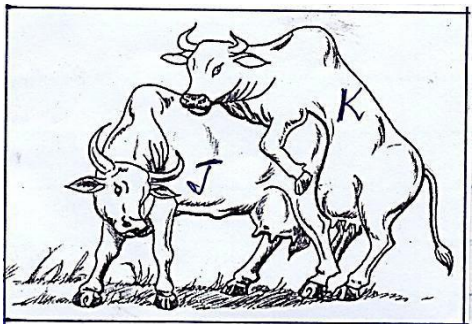
[a] Identify the parts labeled E and F .
[b] State two uses of part labeled F in a foundation structure . [2mks.]
[c] What ingredients are used to complete part G . [1mk.]

22. The diagram below illustrates an internal parasite of livestock .



[a] Identify the parasite above . [1mk.] [
Name two common species of the parasite illustrated above. [2mks.]
[c] Give two control measures of the above parasite. [2mks.]

23. Study the diagram below and answer questions that follow .



[a] Which of the above cows shows the signs of heat ? [1mk.] [
Give one reason to confirm your answer in [a] above.
[c] State two benefits of natural mating system. [2mks.]
d] Name a disease that is easily spread by this method of mating. [1mk.]

SECTION C [40MARKS]

Answer any two questions from this section in the spaces provided.

24. [a] Describe six signs of farrowing in a sow . [6mks]
[b] Explain six benefits of the Kenya top bar hive . [6mks]
[c] Explain eight factors considered when siting farm structures. [8mks]

25. [a] Describe rinderpest disease under the following sub headings .
Animals affected. [2marks]
Causal organism. [1 mark
Symptoms of attack. [5 marks
Control measures. [2 marks
[b] Describe the digestion of food in poultry from the beak to the duodenum . [5marks]
[c] Explain five uses of solar energy in a farm . [5marks]

26. [a] Describe the working of a two stroke cycle engine . [10mks.]
[b] Explain five factors considered when siting a fish pond. [5mks.]
[c] Explain five reasons for swarming of bees. [5mks.]

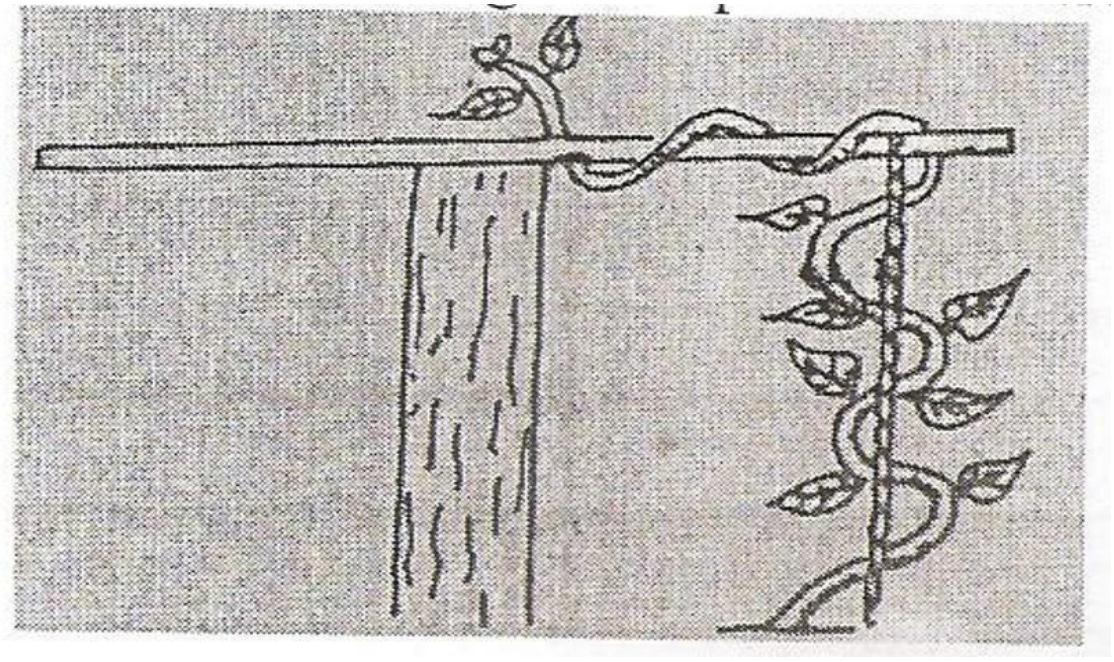
KCSE MOCK 8

PAPER 1

SECTION A (30 MARKS)
Answer ALL the questions in the spaces provided.

1. Give **two** ways in which good communication has contributed positively towards Agricultural grow (1 mark)
2. State **four** factors that causes most farmers to adopt small scale farming in Kenya. (2 marks)
3. State **four** biotic factors that positively influence agriculture. (2 marks)
4. Name **two** positive effects of wind on farming. (1 mark)
5. Give **four** activities involved in land clearing during land preparation. (2 marks)
6. List any **three** leguminous forage crops. (1½ marks)
7. State **three** factors which determine the amount of fertilizer to be applied in the farm. (1½ marks)
8. A farmer was advised to apply 200kg of CAN per hectare while top dressing the maize crop, CAN contains 21% Nitrogen
   calculate the amount of Nitrogen applied per ha (show your working) (2 marks
9. Give **two** features of perennial weeds that make them difficult to control. (1 mark)
10. **Give three** importance of time by planting. (1½ marks)
11. State **four** advantages of establishing seeds in a nursery instead of planting directly into the field (2 marks)
12. Explain the term **'roguing'** as used in crop production. (1 mark)
13. State **four** advantages of practicing mixed farming in Kenya (2 marks)
14. a). What is irrigation?
    b). State **three** conditions under which irrigation is recommended to be used.
    (1 mark) ($1\frac{1}{2}$ ma
15. State **two** methods of increasing soil pH. (2 marks)
16. Outline **four** ways in which amount of Light harnessed by crops can be increased. (2 marks)
17. Name **four** early maturing varieties of cabbages. (2 marks)
18. Distinguish between seed dressing and seed inoculation. (1 mark)

SECTION B (20 MARKS)
Answer **ALL** Questions
19. The diagram below illustrates a field management practice carried out on a fruit crop.



a) Identify the practical illustrated above. (1 mark)
b) Name the most likely crop managed as illustrated in the above. (2 marks)
c) Give **two** reasons for carrying out the practice illustrated above. (2 marks)
d) Name one other method of training crops apart from the one above. (1 mark)

20. Study the diagram **below** carefully and answer the questions that follow.



A



B

(a) Identify the field pest shown in the illustration **A** and **B** above. (2 marks)
(b) State **two** effect the pest expressed in **A** above has on maize plant. (2 marks)

21. Shown below is a layout of a compost heap. Study it carefully and then answer the questions that fo

4
3
2
1
MAIZE STALKS

Ground Level

a) Name the materials in each of the parts labeled 1, 2, 3 and 4. (4 mark)
b) State one role of each of the material in the parts labeled 1 and 3. (2 mark)
c) (i) Give one reason for adding water to a compost heap. (1 mark)
(ii) Give one reason for regularly turning the materials in a compost heap(1 mark)
d) State **two** factors that affect the quantity of compost manure. (2 mark)

SECTION C (40MKS)
Answer any two questions in this section

22. a) State and explain the influence of light aspects in Agriculture. (6 marks
b) Explain **six** cultural methods of controlling crop diseases. (6 mark)
c) Describe the production of tomatoes under the following:-
(i) Transplanting (3 marks)
(ii) Field Management

23. a) State and explain **four** methods of water harvesting. (8 mark)
b) Describe **six** precautions that should be considered while pruning mature tea bushes. (6 mark)
c) Describe **three** methods of breaking seed dormancy. (6 mark)

24. 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

KCSE MOCK 8

PAPER 2

TIME: 2 HOURS

1. State **four** factors that necessitate handling of farm animals. (2 marks)
2. Name a breed of Rabbit which give high quality fur. (1mark)
3. State **four** maintenance practices carried on a wheelbarrow. (2 marks)
4. Give **three** light breeds of poultry. (1½ marks)
5. State **four** predisposing factors of animal diseases. (2 marks)
6. Outline **four** harmful effects of lice in livestock production (2 marks)
7. Distinguish between digestible crude protein (DCP) and total digestible nutrients (DN) as used in livestock nutrition (2
8. Name **four** diseases (disorders) resulting from mineral imbalances in livestock. (2 marks)
9. State **four** reasons why a breeding boar may be culled. (2 marks)
10. Outline **four** drenching drugs commonly found on the Kenyan market that are used for de-worming in livestock production. (2 marks)
11. State **four** maintenance practices carried out on a fish pond. (2 marks)
12. Name the cause organism of the following livestock diseases.
    a) Contagious abortion. (½ mark)
    b) East Coast fever (½ mark)
13. Give **three** examples of notifiable disease in livestock health. (1½ marks)
14. Outline **four** factors considered when sorting and grading eggs for market. (2 marks)
15. State **four** reasons for feeding colostrums to calves immediately after parturition. (2 marks)
16. Give **four** requirements of calf pen in livestock production. (2 marks)
17. Explain **two** reasons why raddling is necessary in sheep management. (1 mark)

SECTION B: (20MARKS)

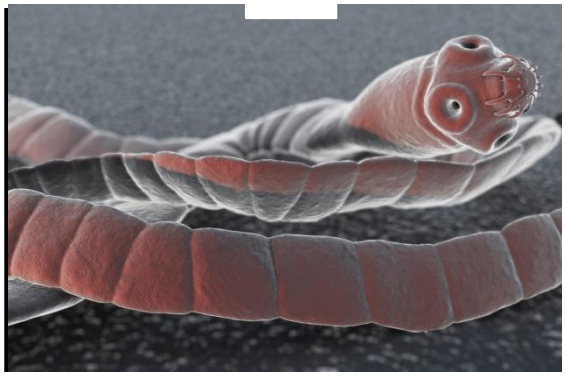
Answer all questions from this section.

18. Study the organisms below and answer the questions that follow.

G



S



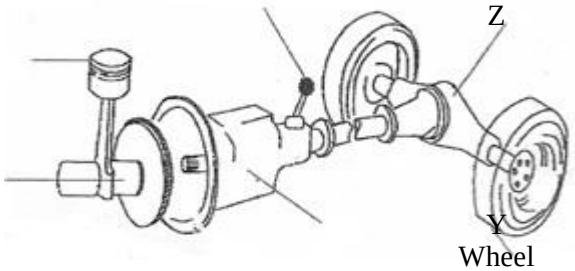
a) Identify the organism G and S(2 marks)
b) State the category to which the organisms belong to. (1 mark)
c) Name the part of organ of the host body where parasites G is found (1 mark)
d) Name the intermediate hosts for each of the parasites G and S.
e) State the **three** adaptations of organism **S** to its mode of life.

19. The diagram below shows part of the power transmission system of a tractor. Study it carefully and answer the questions below.

Gear lever propeller

W

X

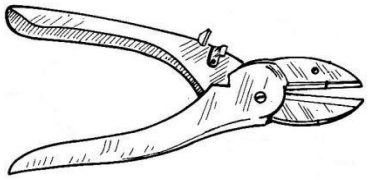


(a) Name the parts labeled **W** and **Y**.

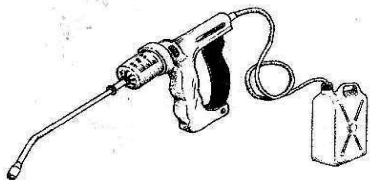
(b) State the functions of the parts **X** and **Z** (

(c) Name **two** ways in which the power is transmitted from the engine. The diagrams (2

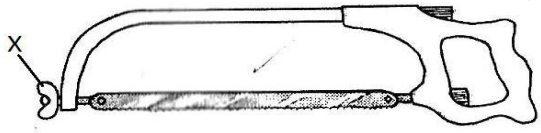
20. represent tools used in the farm.



M



N



P

(a) Identify the tool represented by diagrams **M, N** and **P**. (3 mark)

(b) State the uses of the tools represented by **M** and **N**. (2 mark)

(c) Identify the part labeled **X** in the tool represented by **P**. (1 mar)

SECTION C (40MKS)

Answer any two questions in this section

21. a) Explain any **four** factors considered in siting farm buildings and structures. (8 marks

b) Explain foot rot under the following subheadings

(i) Predisposing factors (5 marks

(ii) Symptoms (3 marks

(iii) Control (4 marks

22. (a) Describe the rearing of lambs from lambing up to weaning time. (10 marks) (b) Explain **five** causes of livestock diseases. (5 marks

(c) State **five** differences between Ruminants and non Ruminants (5 marks

23. (a) Outline **five** advantages of mechanization in the farm. (5 marks

(b) **Compare** between the use of a plunge dip and the use of a spray race. (10 marks)

(c) **Explain five** factors that affect digestibility of food in livestock. (5 mark

KCSE MOCK 9
PAPER 1

TIME: 2 HOURS

SECTION A. 30 MARKS
ANSWER ALL QUESTIONS IN THE SPACE PROVIDED.

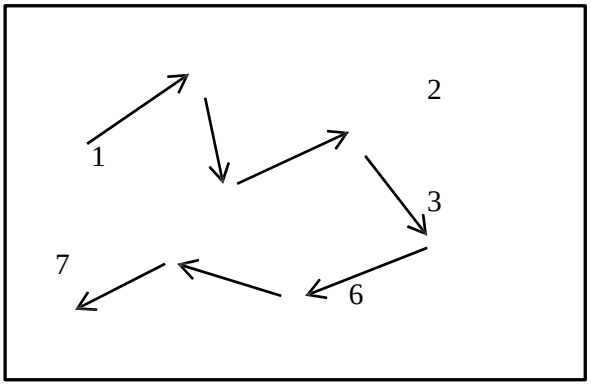
1. State any four conditions that may lead to small scale farming. (2 mks)
2. Give four methods of breaking seed dormancy. (2 mks)
3. Differentiate between soil texture and soil structure
4. Give four reasons for practicing minimum tillage. (2 mks)
5. State four conditions that may cause grain deterioration in the store. (2 mks)
6. Give three sources of soil acidity. ($1\frac{1}{2}$ mks)
7. State four qualities of a parent plant which should be considered when selecting vegetative material for propag tion (2 mks)
8. Give three reasons for grafting old trees in agroforestry tree management. ($1\frac{1}{2}$ mks)
9. Give four negative effects of mass wasting. (2 mks)
10. Name two classes of weeds on the basis of each of the following:
    a) Growth cycle
    b) Plant morphology
11. Name two methods which can be used to detect mineral nutrient deficiency in crops. (1 mk)
12. Distinguish between Gross domestic product (GDP) and Gross National product (GNP) (2 mks)
13. State three causes of blossom end rot in tomatoe. ($1\frac{1}{2}$ mks)
14. Name three types of capital in the farm.
15. A farmer in Nyeri observed the following symptoms of a disease on the leaves and stems of wheat c

(i) Orange-brown pustules on the leaves and stem.
(ii) Rusty coloured dust that stains her clothes in the field.

    a) Identify the disease the wheat crop was suffering from. (1 mk)
    b) Give one effective chemical method of controlling the disease. (1 mk)
    Give any two other methods of control apart from the one you have mentioned above (1 mk)
16. Give four disadvantages of multiple stem pruning. (2 mks)

SECTION B. 50 MARKS
ANSWER ALL THE QUESTIONS IN THE SPACES PROVIDED.

17. The diagram below illustrates a method of collecting soil samples from a field.



a) Identify the method illustrated above. (1 mk) b
Describe four steps that should be followed when collecting soil samples.(2 mks)

c) State two precautions a farmer should take when collecting a representative soil sample from the field for testing.

18. The diagram below illustrates a type of a bird which is a crop pest.



a) Identify the bird shown in the diagram.(1 mk)
b) State two ways in which the bird causes damage to crops.(2 mks)
c) State four control measures of the pest.(2 mks)

19. The following table gives the weekly demand and supply schedule of potatoes.

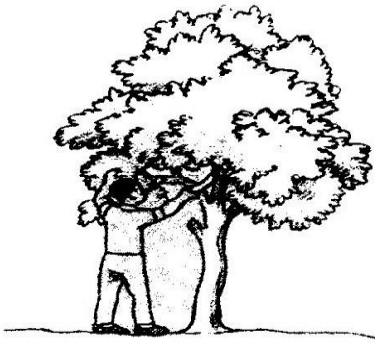
Price per Kg Ksh	Demand in millions of Kgs	Supply in millions of Kgs
10	23	59
9	30	57
8	36	54
7	41	50
6	45	45
5	48	39
4	50	32
3	51	25

Use the table to answer the following questions:
a) What is the equilibrium price? (1 mk)
b) State the effects of a government imposing a maximum price of:
i) Ksh. 5 per bag (1 mk)
ii) Ksh. 7 per bag (1 mk)
If the government guaranteed a potato supply at a price of Ksh. 7 per kg, what quality would it have to purchase to maintain this price? (1 mk)
d) If alternatively the government bought all the potatoes on offer at Ksh. 7 per kg, what price would it have to charge the consumers to dispose of this quantity. (1 mk)

20. The diagrams illustrated A and B are commonly used for harvesting and tree management in agroforestry. Study them and answer questions that follow.



A



B

a) Identify the technique of harvesting and management of tree used in A and B above. (1 mk)
b) Explain what kind of operations are involved in the technique used in the illustration A above. (1 mk)
c) Give one reason for using technique A shown above when harvesting agroforestry trees. (1 mk)
d) Give two reasons for using the harvesting and management technique shown I illustration B above.(2 mks

SECTION C (40 MARKS)
ANSWER ANY TWO QUESTIONS FROM THIS SECTION IN THE SPACES PROVIDED AFTER THE QUESTION.

21. a) Outline the advantages of mulching in crop production using vegetative materials. (5 mks)
b) Discuss any five methods that can be used to harvest the rain water for farming. (5 mks)
c) Discuss measures that should be taken in a mixed farm production in order to minimize pollution. (10 mks

22. Describe the production of cabbage seedlings under the following subheadings:
a) Nursery establishment. (8 mk)
b) Pricking out of seedlings. (6 mk)
c) Management of the seedlings up to transplanting. (6 mks)

23. a) The following information was obtained from Mr. Muoki"s books of farm business. Prepare a profit and loss account for
Mr. Muoki"s farm financial position at the end of the business year 2010. (1) mks)

Sale of milk	20,000
Sale of cabbages	10,000
Sale of eggs	5,000
Wages	5,000
Depreciation of assets	7,000
Opening valuation	10,000
Sale of heifer	15,000
Tools & equipment	15,000
Closing valuation	10,000

iii) Calculate the percentage loss or profit. (2 mks)
b) Describe the factors which may determine the stage and time of harvesting crops in farming. (10 mks

KCSE MOCK 9

PAPER 2

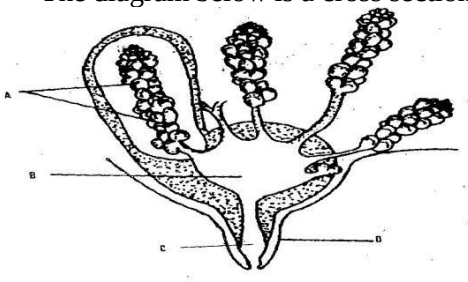
TIME: 2 HOURS

SECTION A (30 MARKS) ***Answer all questions in this section in the spaces provided***

1. What do you understand by the following terms as used in animal production.[3mks]
a) Caponisation
b) Epistasis
c) Kidding
2. List four factors that should be considered when grading eggs for marketing. [2mks]
3. Name four functions of lipids in animals body. [2mks]
4. Outline three methods of out breeding [1 mks]
5. Differentiate between drift and pen lambing [2mks]
6. Name the most appropriate tools used in the following operations [2mks]
a) Removing metals chipping on a file b) Cutting wood along grains
c) Branding
d) Detaching honey combs during honey harvesting
7. Give two reasons for raddling in sheep management. [1mks]
8. Name four livestock diseases caused by viruses. [2mks]
9. Outline four uses of the gear box in a tractor. [2mks]
10. (a) Give two activities which would encourage milk let-down during milking of a cow. [1mks]
(b) Name two hormones which influences milk let –down [2mks]
11. Give two harmful effects of keds infestation on sheep [2mks]
12. Give three ways of transmitting livestock diseases. [1 ½ mks] a) [$1^1/_2$ mks
    a) Give the distinguishing observable characteristics between landrace and large white.
    b) California white and newzealand white breeds. [1mks]
13. State three disadvantages of using steel material in construction of farms building [1 ½ mks]
14. The following is a list of poultry breeds:
    White leghorn
    Light Sussex
    Rhode Island Red
    Ancona
    Categorize them into:
    Light breeds [1 mk]
    Heavy breeds [1 mk]

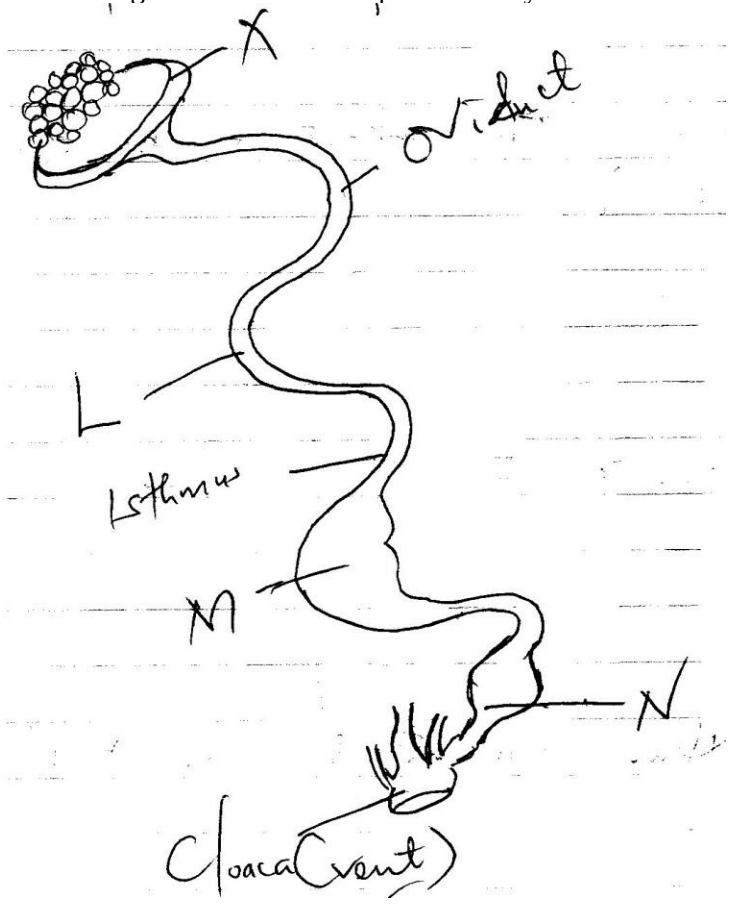
SECTION B 20 mks ***(Answer All The Questions)***

15. The diagram below is a cross section of a cows udder



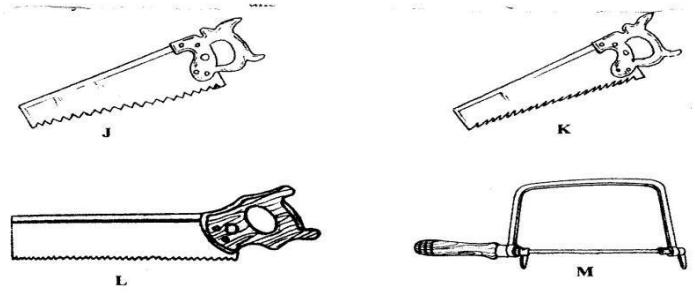
a) Label parts marked A B C and D [2 mk]
b) Name two essentials of clean milk production [2mk]
c) What is dry cow therapy [1mk]

16. The diagram below shows reproduction system of a hen.



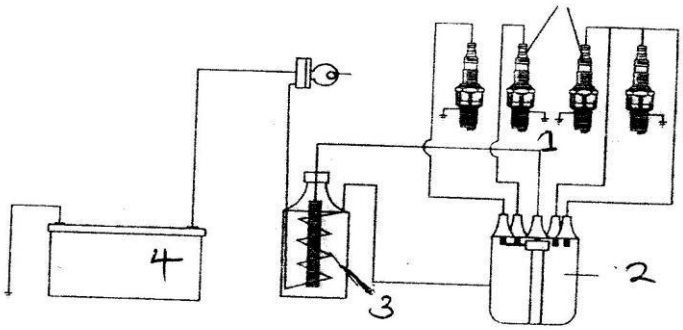
a) Name parts labeled K L M N [2mk]
b) Give the function of the following parts in egg function [2mk]
c) How long does the egg take to form [1mk]

17. The diagram below represents various workshops tools basically used for cutting .Study them carefully and answer the question that follows.



a) Identify the tools labeled J K L and M [2 mk
b) Give one use of each of the tools labeled J K L and M [2 mks]
c) Give two maintenance practices which should be carried out on the tools labeled K [1mk]

18. The illustration below shows the major parts of a tractor ignition system study it and answer the questions that follow



a) What are the functions of the parts of the system labeled 1 2 and 3 [3mks]
b) State the maintenance practices that should be carried out on the ignition system of the tractor. [2mks]

SECTION C Instructions:
Answer any two question from this section in the spaces provided after question 22

19. (a) Describe the rearing of fresh water fish in an artificial pond under the following subheadings
Types of fish reared [2mks] Stocking of the pond [2mks] Practice done to increase fish yield [4mks] Cropping of fish [3mks]
(b) Describe the uses of fences in a farm. [3mks]

20. (a) Describe the maintenance practices carried out on a tractor before its put to daily uses. [10mks] (b) Outline the factors that should be considered when siting a calf pen on the farm. [10mks]

21. (a) Explain nine management practices that should be carried out on dairy cows during gestation period. [9mks]
(b) Explain the factors that should be considered to ensure efficient cultivation using oxen and ox-drawn plough. [10mks]

KCSE MOCK TRIAL 10
PAPER 1
2 HOURS
SECTION A (30 MKS

Answer all questions in this section in the spaces provided.

1. Give two causes of hard pans in the soil (1mks)
2. List three roles of mineral matter in the soil. (1 ½ mks)
3. State three advantages of direct planting over transplanting. (1 ½ mks)
4. List four natural factors that encourage soil erosion. (2mks)
5. Name the two main types of costs in farm accounting. (1mks)
6. List four factors that influence seed rate. (2mks)
7. Give four factors that influence the quality of hay. (2mks)
8. List four roles of phosphorous in crops. (2mks)
9. Mention four ways of acquiring agricultural land. (2mks)
10. State four factors that influence choice of farming methods in Kenya. (2mks)
11. Give two ways in which wind encourage agricultural production. (1mk)
12. State four advantages of paddocking in livestock management. (2mks)
13. List three ways in which biotic factors limit agricultural production. (1 ½ mks)
14. Name four insect pests of beans. (2mks)
15. State four factors that influence the quality of farm yard manure. (2mks)
16. List benefits of a title deed to a farmer. (1 ½ mks)
17. Name two chemicals used in the treatment of water for domestic use. (1mks)
18. List four ways in which pruning control pests in coffee. (2mks)

SECTION B (20MKS)

Answer all questions in this section in the spaces provided.

19. The diagram below represents a vegetative material used in the propagation of tea. Study it and answer the question that follow.

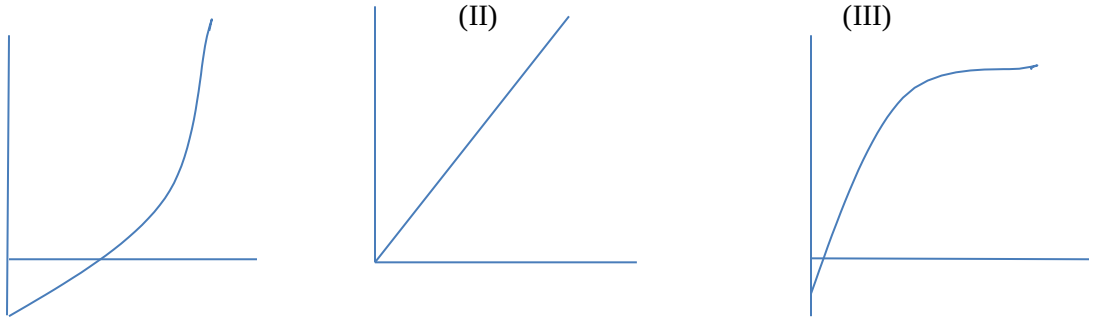


a. Name the material. (½ mk)

b. Name the part labeled X (½ mk)
c. Give three desirable characteristics from which the material in (a) above were obtained. (3mks)

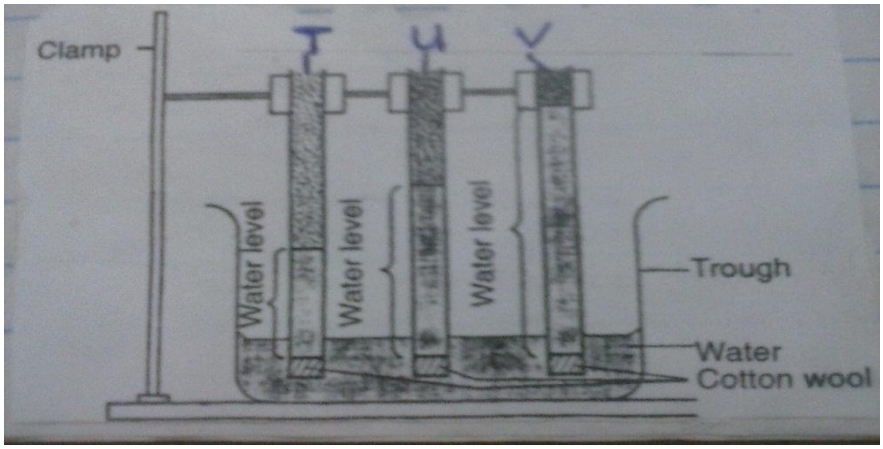
20. Below are graphical representations showing different types of production functions. Study them and answer the questions that follow.

(I) (II) (III)



a. Identify the types of production function represented by the diagrams.
b. What is meant by production function as used in agricultural economics?

21. The diagram below represents a set up used in soil study.



a. What aspect of soil is investigated using the set up? (1mks)
b. Name the soil types T, U, and V. (3mks)
c. Name the characteristic texture of the soil types T and V. (1mk)

22. A farmer was advised to apply 40kg of P_2O_5 per hectare of maize at planting time. He decided to use single super phosphate containing 20%P_2O_5.

(a) Calculate the amount of single super phosphate he would have to apply on his two hectare farm. (2mks)
(b) State the reason for applying phosphatic fertilizers at planting time. (1mk) (c)

Give one cause of phosphorous unavailability to crops. (1mk)

23. List three precautions observed during harvesting of cotton. (3mks)

Section C (40 MKS)

Answer any two questions from this section in the spaces provided after question 26.

24. a) State five advantages of budgeting in farm management. (5mks)

b) Explain five problems faced in the marketing of milk in Kenya. (10mks)

c) Describe five management practices carried out in nippier grass to maximize production. (5mks)

25. a) Explain five ways in which draining mashy land encourage crop growth. (10mks)

b) Giving an example in each case, describe five ways in which field pests reduce crop yields. (10mks)

26. a) Describe six factors that determine the stage of harvesting crops. (6mks)

b) Describe production of carrots under the following subheadings.

(i) Planting. (3mks) (ii)

Field management (6mks) (iii)

Harvesting. (2mks)

(c) Describe three importance of agroforestry. (3mks)

KCSE MOCK 10

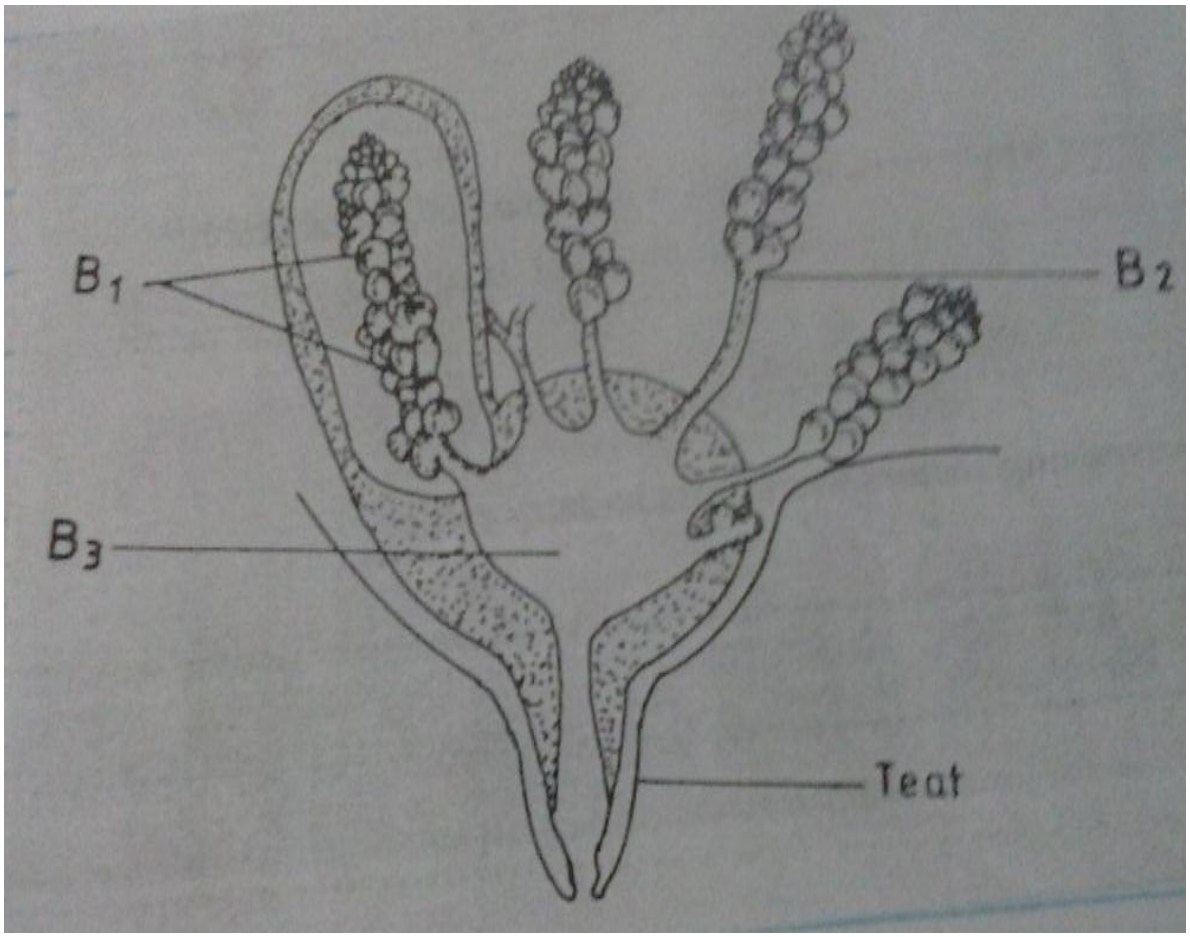
PAPER 2

TIME: 2 HOURS

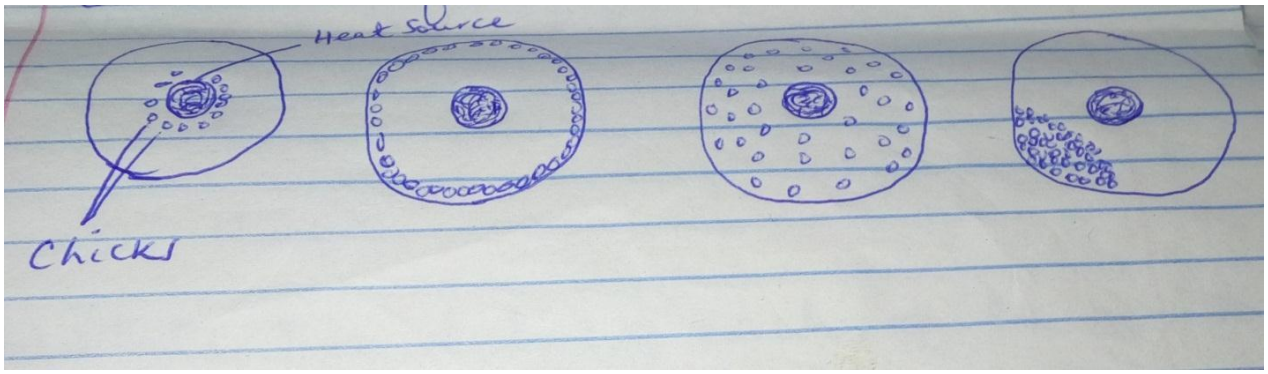
SECTION A (30MKS
Answer all questions in this section in the spaces provided.

1. State the appropriate use of each of the following farm tool: (1mk)
   (i) Stock and die
   (ii) Oil stone
2. Give the distinguishing colour for each of the following breeds of livestock; (2mks)
   (i) Essex saddle back pig.
   (ii) Toggenburg goat.
3. What do the figures in the ratio 1:2:4 stand for in construction? (1 ½ mks)
4. State the use of the P.V.C Sheet when laying a foundation of a farm structure. (1mk)
5. Name three methods of applying acaricides on livestock. (1 ½ mks)
6. Identify two methods used in castration of cocks. (1mks)
7. List three functions of a carburetor in a petro engine. (1 ½ mk)
8. Name four systems of a tractor. (2mks)
9. Under what three conditions would a farmer prefer to use an ox-cart instead of a tractor drawn trai(1 ½ mks)
10. (a) State two reasons for docking young rams. (1mk)
    (b) What should be done to a ram during the mating season to enable a farmer to identify the ewes it has mated? (½ mk)
11. Why should eggs be packed in trays with their broad end facing upwards? (½ mks)
12. Name two recommended methods for identifying goats. (1mk)
13. State two maintenance practices that should be carried out in a wheel barrow. (1mks)
14. Name two developmental stages of a liver fluke (Fasciola Sp.) which occur in a fresh water snail (Limnaea sp.)(1mk)
15. Give a reason for each of the following practices in artificial incubation of eggs. (1 ½ mk)
    a. Provision of fresh air.
    b. Maintaining humidity at 60%
    c. Regular turning of eggs.
16. Give four factors considered in grading of eggs. (2mks)
17. Why is castor oil important in preparation of artificial colostrum? (1mk)
18. Name three types of lubrication used in tractors. (1 ½ mks)
19. Give the meaning of the following terms as used in livestock health. (3mks)
    a. Incubation period. b. Mortality
    c. Predisposing factors of a disease.
20. State two functions of the crop in the digestive system of a hen. (1mk)
21. List four causes of infertility in a dairy cow. (2mks)

SECTION B (20MKS
Answer all questions in this section in the spaces provided.
22. The diagram below shows a cross section of a cow‟s udder. Study it and answer the questions that follow



23. (a) The diagrams below show the behavior of the chick at different condition. Study the diagrams and answer the questions
below.



Indicate below each diagram the conditions in the brooder. (2mks)

(b) What are the features of a poor layer that a farmer should look for in the following parts of a hen during a culling? Give one feature in each . (4mks)

(i) Vent

(ii) Comb

(iii) Pelvic bones

(iv) Abdomen

24. The diagrams below illustrate various types of bees found in a colony. Study them and answer questions that follow.



a. Name the type of bees labeled F, G and H. (1 ½ mks
b. State two duties of each of the members in a colony. (2mks)
c. List three materials collected by bees. (1 ½ mks)

25. A dairy farmer is required to prepare 100kg of dairy meal containing 20%. Digestible crude protein (D.C.P). Using the pearson"s square method calculate the quantity of soya bean (40% D.C.P) and rice (16 % D.C.P) the farmer requires for the dairy meal.

SECTION C (40MKS

Choose any two questions from this section only.

26. (a) Discuss foot rot disease under the following sub-headings.
(i) Signs of infection. (4mks) (ii) Control measures. (4mks)

(b) Name five parts of a plunge dip and for each named part, explain the importance of including it in the construction of the dip. (10mks

(c) Give two reasons why sows may have a tendency of feeding on piglets immediately after farrow (2mks)

27. (a) State six factors to consider when selecting materials for constructing a calf pen. (6mks)
(b) Explain how a two stroke cycle engine works. (6mks)
(c) Outline the procedure of honey harvesting (8mks)

28. (a) Describe fish farming under the following sub-headings.
(i) Siting of pond. (4mks)
(ii) Pond construction. (8mks)
(iii) Feeding fish. (2mks)
(b) State the advantages of farm mechanization. (6mks)

KCSE MOCK 11

443/1

AGRICULTURE

PAPER 1

2 HOURS

SECTION A (30 MKS)
ANSWER ALL QUESTIONS IN THE SPACES PROVIDED

1. Give 4 factors that characterize large scale farming (2mks)

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2. State 4 reasons for treating water on farm (2mks)

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3. Give 4 examples of working capital in the production of maize (2mks)

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4. Explain the meaning of the following terms
   i) Nitrogen –fixation in the soil (1mk)

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   ii) phosphorus-fixation in loss of soil fertility (1mk)

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5. Give the element whose deficiency in plants is plants is characterized by the following
   (a) Interveinal chlorosis of the leaves ..... (½ mark)

   (b Blossom end rot in tomatoes ..... (½ mark)

   (c) Scorched edges of a leaf ..... (½ mark)

6. State two activities carried out during hardening cabbage plants in the nursery (2mks)

(i) .....

(ii) .....

7. Name three methods of controlling blossom endrot in tomatoes (1 ½ mk)

(i) .....

(ii) .....

(iii) .....

8. Outline four conditions that may lead to agricultural land fragmentation and subdivision (2mks)

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9. State four factors that influence solifluction (2 marks)

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10. Give four reasons for keeping health records (2 marks)

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11. Name four processes involved in chemical weathering (2mks)

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12. Outline four reasons why it is undesirable to carry out minimum tillage before planting (2mks)

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13. State four advantages of practicing crop rotation (2mks)

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14. State four factors that determine the stage at which a crop is harvested (2mks)

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15. Below is a list of weeds found in the farm. Use them to answer the questions below.
Wild oat, Wondering Jew, pigweed, Mexican Marigold, Sodom Apple, Couch Grass and Thorn Apple.

i) Name two narrow leaved weeds. (1 mark)

……..

ii) Give two weeds that are poisonous. (1 mark)

……

iii) Identify two annual weeds from the above list (1 mark)

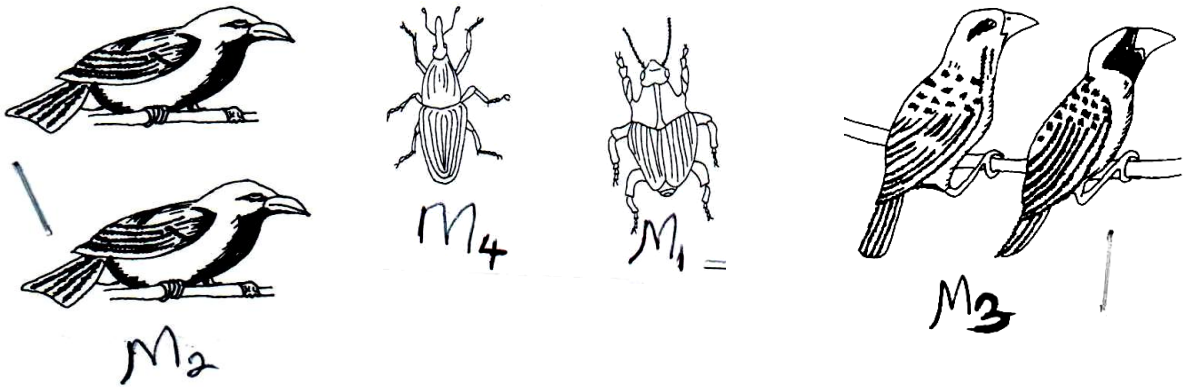
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SECTION B (20MRKS)

Answer all the questions in their section in the spaces provided.

16. The diagrams below illustrate both field and storage pests



a) Identify the pests in the illustration. (1mark)

M_1:……

M_2:……

b) State **two** ways by which pest labelled M_2 causes loss in cereal crops. (2marks)

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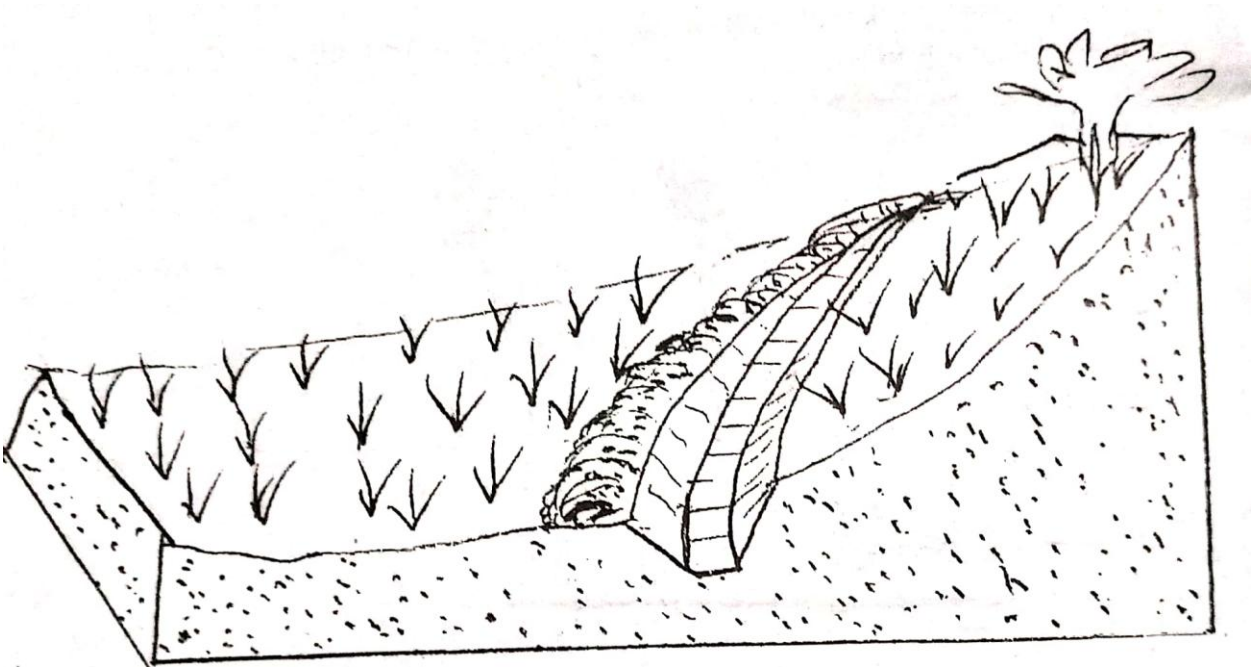
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c) State **two** methods which are used to control the pest labeled M_2. (2marks)

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17. Study the diagram of cut off drain below and answer the questions that follow.



a) Outline the procedure of constructing a cutoff 4mks

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b) State two ways through which the methods above helps in soil and water conservation (2mrks)

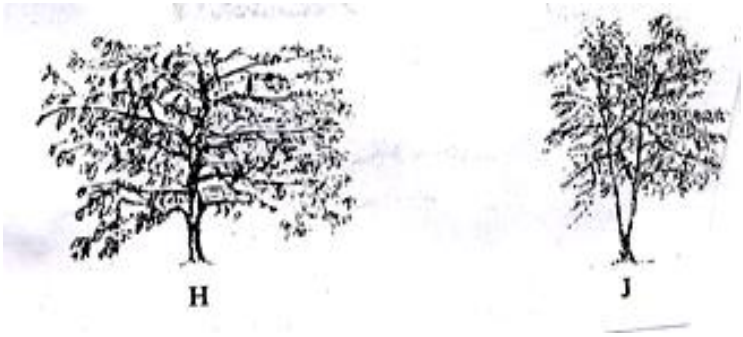
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18) The diagrams below labeled H and J are illustrated of coffee plants establishing using two different pruning systems. Examine them closely and answer the questions that follow



a) Name the pruning systems illustrated by diagrams H and J (1 mark)

H……..

J……..

b) Give one advantages of pruning system illustrated by diagram H. Over that one illustrated by diagram J (1 mark)

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19 (a) A farmer was advised to apply 40kg/ha.P_2O_5. Calculate the amount of DSP the farmer will require for 2 ha of land. Show your working(DSP has 20%P_2O_5) (3mks)

20. The table shows output of maize at various quantities D.A.P. application per hectare.

FIXED INPUT(LAND)	VARIABLE INPUT D.A.P IN 30 KG BAG	TOTAL PRODUCT MAIZE IN 90 KG BAG	AVERAGE PRODUCT (AP)	MARGINAL PRODUCT(MP)
1	0	2		
1	1	5		
1	2	14		
1	3	21		
1	4	26		

Fill in the table above to show average product (AP) and marginal product (MP) (4mks)

SECTION C (40MARKS)

Answer any TWO questions from this section in the spaces provided after question 23

21. (a) A farmer wishes to change her enterprise from vegetable production to dairy cattle rearing. The costs she incurs in growing of vegetables is as follows:

- Weeding Sh. 200, Harvesting Sh. 300, Fertilizers Sh. 500 and Seeds Sh. 400.When she changes her enterprises to dairy cattle rearing, she incurs the following cost:
- Cost of buying cattle Sh. 5000 ,Disease control, Sh. 200 ,Salary of milk person Sh. 2000 and Fencing Sh. 500 .The revenue she got when growing vegetable is 10,000.

In dairy production, the revenue she gets from milk sales is Shs. 15,000 and manure sales shs. 1,000.

Draw up the partial budget and indicate if the change is worthwhile. (Show your working) (10marks)

(b) Explain five benefits of agro-forestry in agriculture (5mks)

(c) Outline any five problems facing agriculture in Kenya (5mks)

22. (a) Explain five roles played by a good manager (5mks)

(b) Explain five benefits of land consolidation (10mks)

(c) Outline five effects of late defoliation in forage crops (5mks)

23. (a) Explain five factors that may influence the spacing used during planting of crops (10mks)

(b) Outline five precautions taken when harvesting tea (5mks)

(c) Outline five characteristics of plants suitable for making green manure (5mks)

KCSE MOCK 11

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AGRICULTURE

PAPER 2

2 HOURS

SECTION A (30 MARKS)

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

1. State four light breeds in poultry (2 marks)

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2. Give two effects of lice infestation in sheep production (1 mark)

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3. State four advantages of contemporary comparison in selection of livestock. (2 marks)

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4. State two reasons for docking in sheep management (1 mark)

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5. State two functions of differential in a tractor transmission system. (1 mark)

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6. Give four effects of protein deficiency in livestock production. (2 marks)

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7. State four predisposing factors of pneumonia in livestock production. (2 marks)

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8. Give four factors influencing milk let down in dairy cattle production. (2 marks)

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9. Name four instances where animal power is advantageous over other form of powers. (2 marks)

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10. State four reasons for handling dairy cattle in livestock production. (2 marks)

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11. Give factors considered in choice of rearing systems in poultry production. (2 marks)

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12. State four factors that affect the choice of feedstuff in livestock. (2marks)

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13. Give four practices carried out on fish before preservation. (2 mark)

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14. State four disadvantages of live fence in livestock production. (2 marks)

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15. a) Give four prophylactic measures used in controlling diseases in livestock. (2 marks)

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b) State **four** practices that ensure maximum harvest of fish. (2mks)

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16. State two functions of caecum in poultry production. (1 mark)

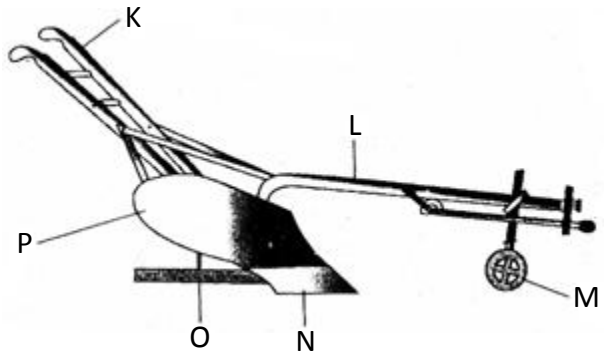
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SECTION B (20 MARKS)

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

17. Below is an illustration of a farm implement. Study it carefully and answer the questions that follow.



a. Identify the farm implement. (1mk)

……..
…

b. Name the parts labeled **L**, **M**, **O** and **P**. (2mks)

L……
…

M……
……..

O……
…..

P……
…

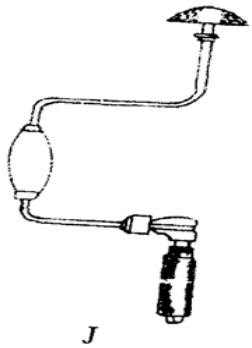
c. Give **one** function of the parts **M**, **N** and **P**. (3mks)

M……
…….

N……
….

P……

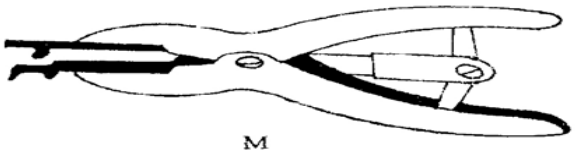
18. Below are illustrations of farm tools and equipment.



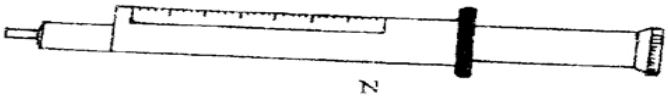
J



K



M



N

a) Identify the tool labelled J and K

J (1 mark)

……

……

K (1 mark)

……

……

(b) State one use of tool M and N. (2mks)

M……

……

……N……

……

……

……

……

(c)Explain one maintenance practice carried on tool J. (1mk)

……

……

19. The diagram below illustrates a calf rearing practice.



a) Identify the practice illustrated above. (1mk)

……

……

……

b) i) Describe the procedure followed in the feeding practice named in (a) above. (3mks)

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ii) Give ***two*** precautions taken while using the rearing practice stated in (a) above. (1mk)

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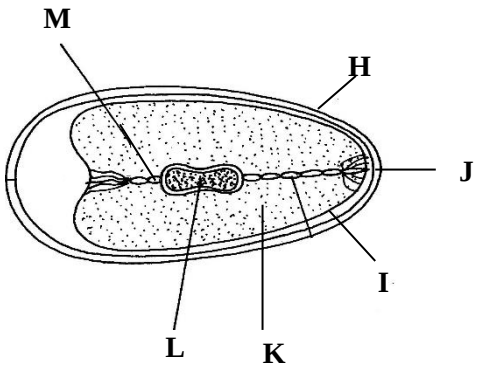
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20. The diagram below is an illustration of an egg. Study it carefully and answer the questions that follow.



a) Name the parts labelled I, J, K and M. (2 Marks)

……

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……

……

b) Give two qualities of the part labelled H that would be considered when selecting eggs for incubation. (1 Mark)

……

……

……

……

……..

c) What is the function of the part labelled L (1 Mar

……

……

……

<u>SECTION C (40 Marks)</u>

Answer any two questions from this section.

21. a) State five reasons for feeding livestock (5 marks)

b) Describe the factors a farmer should consider when selecting a gilt for breeding. (8 marks)

c) Outline seven management practices that a farmer should carry out to maintain good health in a herd of cattle. (7 marks)

22. a) Outline routine maintenance practices that should be carried out in deep litter system.(5 marks)

b) State eight practices that would ensure clean milk production. (8 marks)

c) Compare the use of an ox-drawn mouldboard plough with that of a tractor drawn plough (7 marks)

23. a) Give FIVE general characteristics of dairy cattle breeds (5marks)

(b) Outline the procedure one would follow when castrating a male piglet. (5mks)

c) Outline five causes of stress in poultry. (5 marks)

d) Describe the life cycle of two host tick (5 marks)

KCSE MOCK 12

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AGRICULTURE

PAPER 1

2 HOURS

Answer all the questions in this section in the spaces provided

1a)Distinguish between flood irrigation and basin irrigation (1mk)

b) Give two maintenance practices required in flood irrigation system. (1mk)

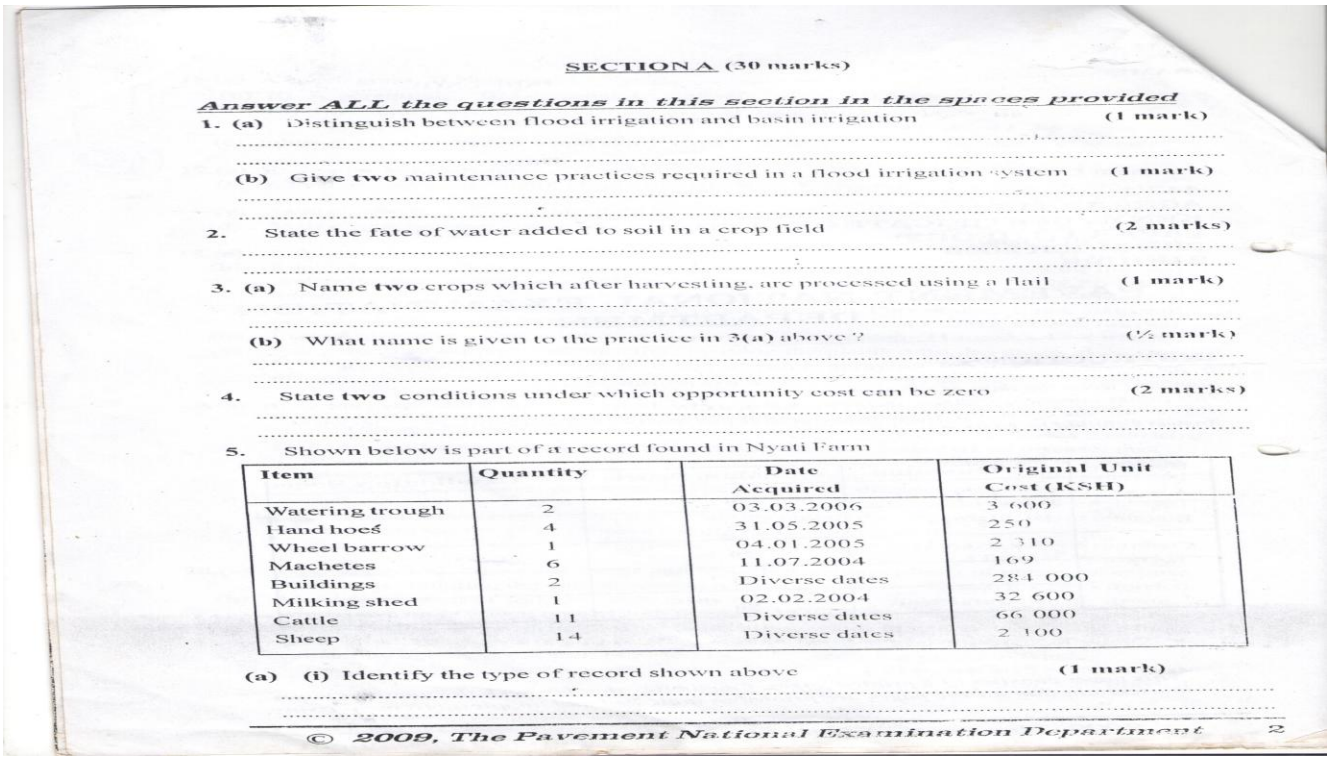
2) State the fate of water added to soil in crop field. (2mks)

3a)Name two crops which after harvesting are processed using a flail. (1mk)

b) What name is give to the practice in 3a above. (1/2mk)

4State two conditions under which opportunity cost can be zero. (2mks)

5. Shown below is part of a record found in Nyali farm



SECTION A (30 marks)

Answer ALL the questions in this section in the spaces provided

1. (a) Distinguish between flood irrigation and basin irrigation (1 mark)

(b) Give **two** maintenance practices required in a flood irrigation system (1 mark)

2. State the fate of water added to soil in a crop field (2 marks)

3. (a) Name **two** crops which after harvesting, are processed using a flail (1 mark)

(b) What name is given to the practice in 3(a) above ? (½ mark)

4. State **two** conditions under which opportunity cost can be zero (2 marks)

5. Shown below is part of a record found in Nyati Farm

Item	Quantity	Date Acquired	Original Unit Cost (KSH)
Watering trough	2	03.03.2006	3 600
Hand hoes	4	31.05.2005	250
Wheel barrow	1	04.01.2005	2 310
Machetes	6	11.07.2004	169
Buildings	2	Diverse dates	284 000
Milking shed	1	02.02.2004	32 600
Cattle	11	Diverse dates	66 000
Sheep	14	Diverse dates	2 100

(a) (i) Identify the type of record shown above (1 mark)

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a)i Identify the type of record shown above. (1mk)

ii) Give reason for your answer to a (i) above. (1mk)

b)What other column should be added to this record, to make it complete. (1mk)

6Give two disadvantages associated with burning as a land clearing method. (1mk)

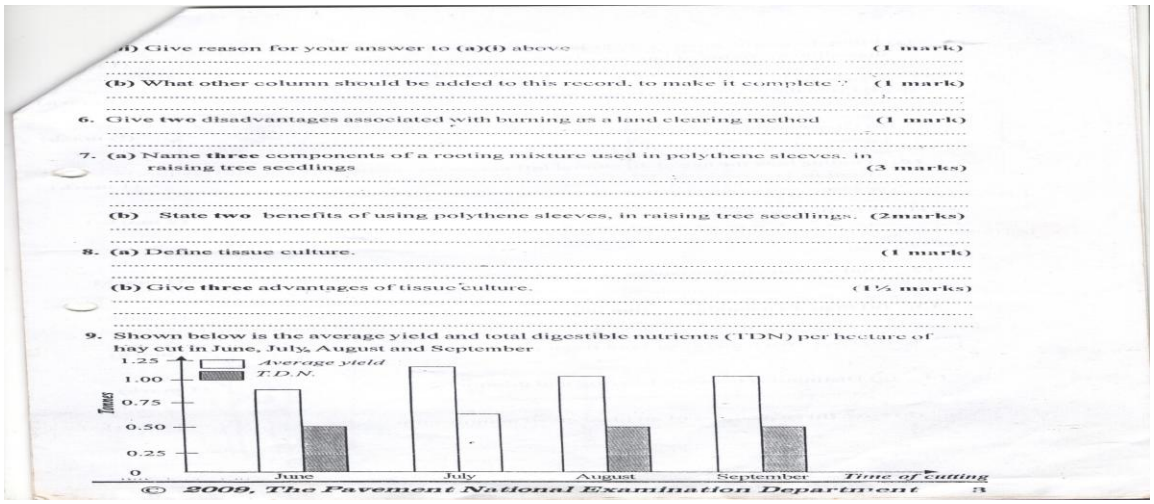
7(a)Name three components of rooting mixture used in polythene sleeves in raising tree seedlings. (3mks)

b) State two benefits of using polythene sleeves, in raising tree seedlings. (2mks)

8. a)Define tissue culture. (1mk)

bGive three advantages of tissue culture

9. Shown below is the average yield and total digestible nutrients (TDN) per hectare of hay cut in June July, August and September



a)From the graph identify the relationship between average yield and total digestible nutrients of hay. (1mk)

a) From the graph, identify the most appropriate month of harvesting hay. (1mk)

10. Outline how the age of an animal influences the quality of farm yard manure production form it. (1mk)

11. List four soil requirements for tomatoes. (2mks)

12. Under what circumstance are beans referred to as vegetables. (1mk)

13a) State two conditions that may lead to land fragmentation. (1mk)

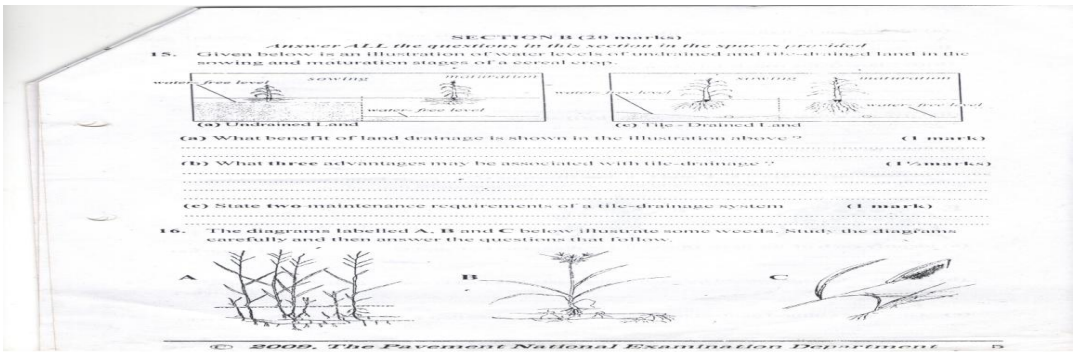
b) Give two benefits of land fragmentation. (1mk)

14a) Distinguish between tillering and thinning. (1mk)

b) Give three features of an ideal green manure crop. (11/2 mks)

SECTION B (20MKS)

15 Given below is an illustration of water levels of undrained and tile – drainage land in the sowing and maturation stage of cereal crop

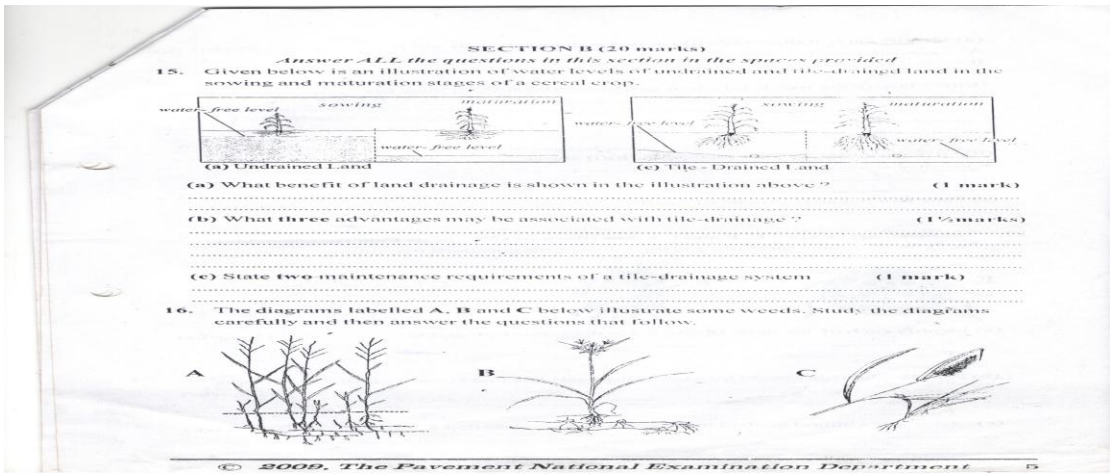


a) What benefit of land drainage is shown in the illustration above? (1mk)

b) What three advantages may be associated with tile-drainage? (11/2mks)

c) State two maintenance requirements of tile-drainage system. (1mk)

16. The diagrams labeled A,B and C below illustrate some weeds. Study the diagrams carefully and then answer the questions that follow.



SECTION B (20 marks)

Answer ALL the questions in this section in the spaces provided

15. Given below is an illustration of water levels of undrained and tile-drained land in the sowing and maturation stages of a cereal crop.

(a) Undrained Land (c) Tile - Drained Land

(a) What benefit of land drainage is shown in the illustration above ? (1 mark)

(b) What **three** advantages may be associated with tile-drainage ? (1½marks)

(c) State **two** maintenance requirements of a tile-drainage system (1 mark)

16. The diagrams labelled **A**, **B** and **C** below illustrate some weeds. Study the diagrams carefully and then answer the questions that follow.

A B C

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a) Identify each of the weeds illustrated in diagram A,B and C. (3MKS)

A

B

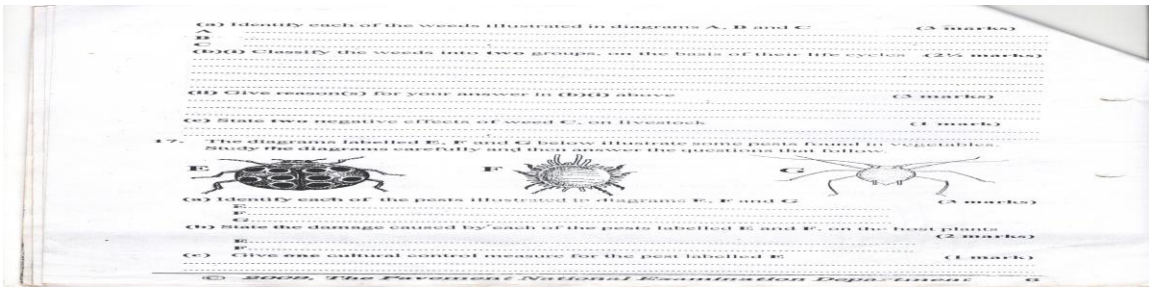
C

B)i Classify the weeds into two groups, on the basis of their life cycles. (21/2marks)

ii) Give reasons for you answer in (bi) above. (3mks)

c)State two negative effects of weed C, on livestock. (1mk)

17. The diagram labeled E, F and G below illustrate some pest found in vegetables study the diagrams carefully and then answer the questions that follow



a) Identify each of the pest illustrate in diagram E,F, and G. (3MKS)

B) State the damage caused by each of the pest labeled E and F, on the host plants. (mksa_

c)Give one cultural control measure for the pest labeled E (1mk)

d) Other than vegetables name two crop plants that may be infested with the pest labeled G

SECTION C (40MKS)

Answer an two question in this section the space provided

18Discuss vegetable crops under the following sub- headings

a)Definition of vegetable. (1mk)

b)Management of perishability vegetables. (4mks)

c)Importance of vegetables. (6mks

d)Common stem vegetables. (4mks)

e)Staking in tomatoes. (5mks)

19a) Discuss budding a applied in crop production under the following sub-headings

i) Timing (5mks)

ii) Advantages over grafting. (4mks)

iii) Materials used. (6mks)

iv) Briefly describe whip grafting. (5mks)

20 Discuss wind erosion under the following sub- headings

a)Destructive effects of wind erosion on crop plants. (5mks)

e) Factors affecting susceptibility of soil to wind erosion. (15mks)

KCSE MOCK 12

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AGRICULTURE

PAPER 2

2 HOURS

SECTION A: (30 MARKS)

Answer ALL questions in the spaces provided

1. (a) State **four** importance of keeping rabbits. (2 marks)

(b) Name **two** dual purpose breeds of cattle. (1 mark)

---

2. Give **two** reasons for flushing in sheep management. (2 marks)

---

3. State **four** qualities of a good vaccine. (2 marks)

---

4. Name any **four** components of a zero-grazing unit. (2 marks)

---

5. Give **four** management practices carried out in a crush. (2 marks)

---

6. (a) State **four** symptoms of coccidiosis. (2 marks)

(b) Give **two** ways in which the health of an animal can be restored. (1½ marks)

---

7. List **four** abnormalities which may arise during egg formation. (2 marks)

---

8. Name any **six** milking requirements after restraining a dairy cattle. (3 marks)

---

9. Name **four** factors that influence the amount of concentrates fed to a milking cow. (2 marks)

---

10. Give the breeding system involved in each of the following cases;

(a) Friesian sire mated with Aryshire dam. (½ mark)

(b) Friesian sire (father) mated with Friesian dam (daughter). (½ mark)

---

11. State **four** control measures of Tsetseflies. (2 marks)

---

12. Name **four** examples of succulent feeds. (2 marks)

---

13. List down **three** methods of treating bloat. (1½ marks)

---

14. Give **four** reasons for maintaining farm tools. (2 marks)

SECTION B: (20 MARKS)

*Answer **ALL** the questions in the spaces provided.*

15. (a) The diagram below represents a cross-section of a floor of a permanent milking shed.

(i) Label on the diagram, the layers marked 1, 2, 3 and 4. (2 marks)

1 ---

2 ---

3 ----------

4 ----------

(ii) State **two** factors that influence quality of concrete. (2 marks)

---

16. Below is a diagram illustrating a farm structure. Study it carefully and answer the questions bel

(a) Identify the structure. (1 mark)

(b) Name the parts G, H and K. (3 marks)

G ----------

H ----------

K ----------

(c) State the factors to consider when siting the structure. (2 marks)

---

17. Below are illustrations of live stock parasites. Study them and answer the questions that follow.

(a) Identify the parasites A and B. (2 marks)

A ----------

B ----------

(b) State **two** control measures for parasite B. (2 marks)

(c) Give **two** symptoms of parasite A attack on cattle. (2 marks)

---

18. Study the illustrations below and answer the questions below and answer the questions that follow.

(a) Identify the tools J, K, L and M. (4 marks)

J ----------

K ----------

L ----------

M ----------

SECTION C: (40 MARKS)

Answer any TWO questions from this section in the spaces provided.

19. (a) Discuss **five** factors considered when constructing a farm structure. (5 marks)

(b) State any **five** factors that should be considered when choosing tools and equipment to use in the farm. (5 marks)

(c) Describe ten management practices carried out on a fish pond. (10 marks)

20. (a) Compare the use of animal drawn implement to tractor drawn implements. (10 marks)

(b) Describe any **five** maintenance practices carried out on an ox-drawn plough. (5 marks)

(c) Discuss the advantages and disadvantages of using tractor hire serves in the farm over using own tractor. (5 marks)

21. (a) Describe the general effects of parasites on livestock. (8 marks)

(b) Describe East Coast Fever (ECF) under the following sub-headings.

(i) Animal attacked (1 mark)

(ii) Causal agent (1 mark)

(iii) Vectors (1 mark)

(iv) Symptoms (5 marks)

(v) Control measures (2 marks)

(d) Name any **four** internal predisposing factors of animal diseases. (2 marks)

KCSE MOCK 13

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AGRICULTURE

PAPER 1

2 HOURS

SECTION A (30MKS)

Answer all questions in this section on spaces provided.

1. Name two field management that are carried out to obtain optimum plant population in a crop field (1mk)

   i)……

   ……

   ii)……

   …….

2. Give two factors which characterize small scale farming (1mk)

   i)……

   ……

   ii)……

   …….

3. Give one examples of each of the following categories of water pipes

   a) Metal pipes (½mk)

   ……

   ……..

   b) Horse pipes (½mk)

   ……

   ……....

4. Name three forms of horticulture practiced in Kenya (1½mk)

   i)……

   ……

   ii)……

   …….

   iii)……

   ……

5. State four disadvantages of growing one type of crop on piece of land continuously(2mks)

   i)……

   ……

   ii)……

   …….

   iii)……

   ……

   iv)……

   ……

6. Outline four qualities of a mother plant from which vegetative propagation material should be obtained (2mks)

   i)……

   ……

   ii)……

   …….

   iii)……

   ……

   iv)……

   ……

7. State two ways in which crop rotation controls weeds (1mk)

   i)……

   ……

   ii)……

   …….

8. Give two reasons for imposing quarantine on imported planting materials (1mk)

   i)……

   ……

   ii)……

   …….

9. State two mechanical methods of separating soil particles according to sizes during soil analysis (1mk)

   i)……

   ……

   ii)……

   …….

10. Name four settlement schemes that the Kenyan government started as a result of the success of the million Acre scheme (2mks)

    i)……

    ……

    ii)……

    …….

    iii)……

    ……

    iv)……

    ……

11. State three practices which encourage soil erosion (1½mks)

    i)……

    ……

    ii)……

    …….

    iii)……

    ……

12. State four characteristics of a good vegetable seedling (2mks)

i)……
……
ii)……
……
iii)……
……
iv)……
……

13. List four pose-harvest practices that are carried out in maize production (2mks)

i)……
……
ii)……
……
iii)……
……
iv)……
……

14. List four environmental factors that affect crop production in Kenya (2mks)

i)……
……
ii)……
……
iii)……
……
iv)……
……

15. Give four reasons for seed selection in crop production (2mks)

i)……
……

ii)……
……
iii)……
……
iv)……
……

16. Give two benefits of top-dressing in management of grass pasture (1mk)

i)……
……
ii)……
……
iii)……
……
iv)……
……

17. State four disadvantages of communal land tenure system (2mks)

i)……
……
ii)……
……
iii)……
……
iv)……
……

18. State any two benefits a farmer would get by having correct plant population in the production of annual crops (1mk)

i)……
……
ii)……
……

19. Define the term opportunity cost as used in economic (1mk)

……

……

……..

20. State four pieces of information contained on a land title deed. (2mks)

i)……

……

ii)……

……

iii)……

……

iv)……

……

SECTION B (20MKS)

Answer all questions in this section

21. The table below shows PH value of different soil samples. Study it and answer the questions that follow.

Soil sample	**PH value**
S_1	3
S_2	4
S_3	5
S_4	6
S_5	7
S_6	8
S_7	9
S_8	10

a) Which soil sample has the highest acidity (1mk)

……

……..

b) Which soil sample has the lowest alkalinity (1mk)

……

……

c) State two ways in which the PHvalue of sample 3 can be raised (2mks)

i)……

……

ii)……

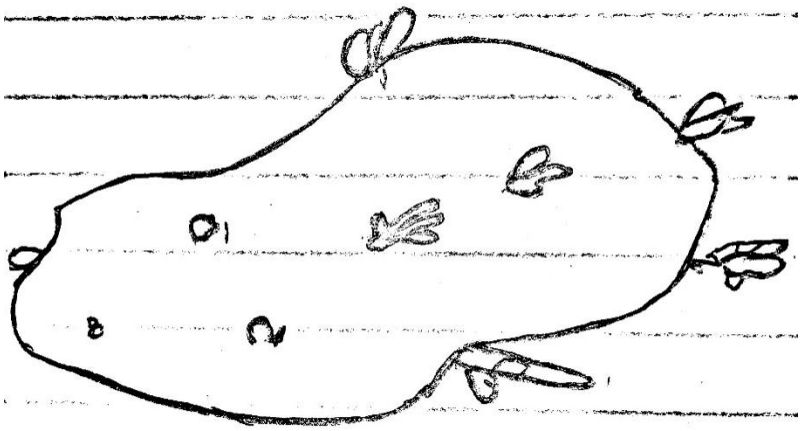
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d) Which of the above soil sample is suitable for growing maize (1mk)

……

……..

22. The diagram below illustrates a seed potato prepared for planting. Study it carefully and answer the questions that follow.



a) Name the practice used in preparing the seed potato above for planting (1mk)

……

……..

b) Describe the procedure followed in preparing seed potatoes for planting. (8mks)

……

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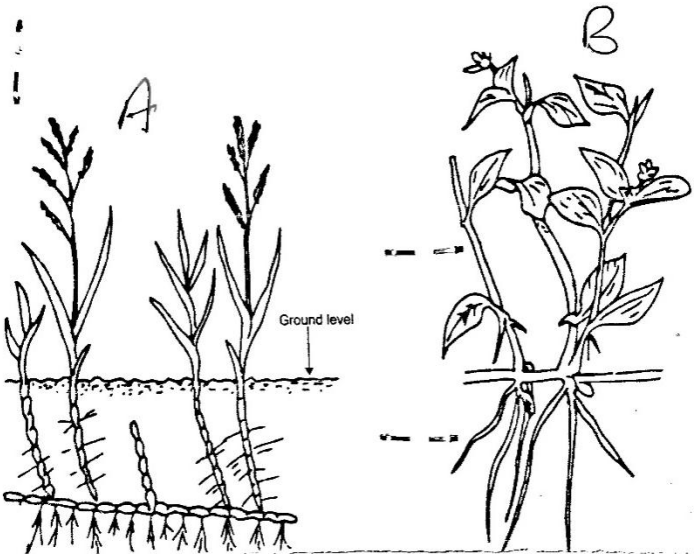
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……..

23. Below are diagrams of common weeds found in a crop field, study them carefully and answer questions that follow.



C



a) Identify the weeds (3mks)

Weed A …….

Weed B …….

Weed C …….

b) State one reason why weed A is difficult to control (1mk)

……

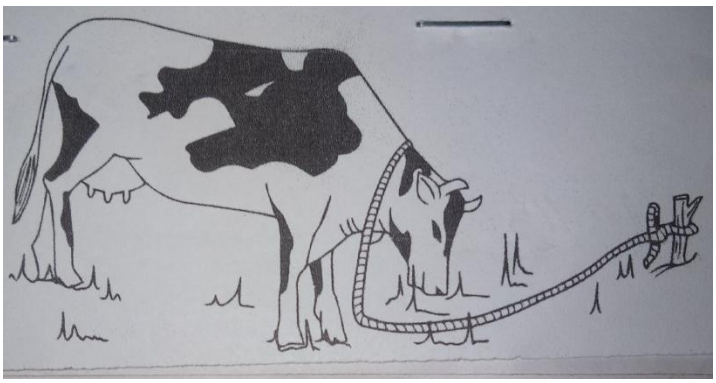
……

c) State one economic use of weed B (1mk)

……

……

24. Below is a method used in pasture management. Study it carefully and answer questions that follow.



a) Identify the type of grazing shown above (1mk)

……

……

b) State two limiting of the practice above (2mks)

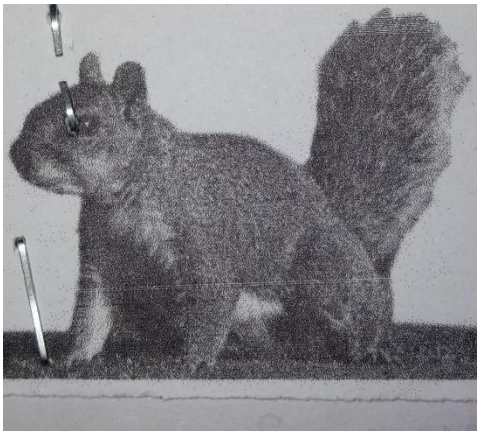
i)……

……

ii)……

……..

25. Below is a diagram of common pest found in the field. Study it carefully and answer questions that follows



a) Identify the pest (1mk)

……

……

b) State the stage at which the pest attack maize (1mk)

……

……

c) State one effect of the pest on crop production (1mk)

……

……

SECTION C (40MKS)

Answer any two questions only from this section

26. a) Explain five ways in which biotic factors influence crop production in Agriculture (10mks)

b) Explain four ways in which Government policy improves agricultural production (4mks)

c) Describes the properties of Nitrogenous fertilizer (6mks)

27. a) Describe the effects of pests on Beans in the field (4mks)

b) Describe the production of cabbage under the following seed headings.

i. Seed bed preparation (3mks)

ii. Transplanting of seedlings (4mks)

c) Describe various nursery management practices carried out on cabbage seeding in the nursery (5mks)

d) Describe how water is treated to remove solid impurities (4mks)

28. a) Describe five ways in which a grass cover help to conserve soil (5mks

b) Describe maize production under following sub-headings.

i. Land preparation (3mks)

ii. Planting (6mks)

iii. Field management practices (6mks)

KCSE MOCK 13

443/2

AGRICULTURE

PAPER 2

2 HOURS

SECTION A (30MKS|)

Answer all questions in this section on spaces provided.

1. State four non-chemical method used to control ticks (2mks)

   i)……

   ……

   ii)……

   …….

   iii)……

   ……

   iv)……

   ……

2. Highlight two management practices carried out on a broody hen (2mks)

   i)……

   ……

   ii)……

   …….

3. Give four characteristics of a good fish pond (2mks)

   i)……

   ……

ii)……

…….

iii)……

……

iv)……

……

4. Mention four physical characteristics of exotic beef cattle breeds (2mks)

i)……

……

ii)……

…….

iii)……

……

iv)……

……

5. Give four features of calf pen that help to control calf diseases (2mks)

i)……

……

ii)……

…….

iii)……

……

iv)……

……

6. a) What is dry cow therapy (1mk)

……

……

……

b) At what stage of gestation is dry cow therapy practiced (1mk)

……

……

7. Name four farm structures used for handling livestock (2mks)

   i)……

   ……

   ii)……

   …….

   iii)……

   ……

   iv)……

   ……

8. Give four symptoms of respiratory disorder in a sick cow (2mks)

   i)……

   ……

   ii)……

   …….

   iii)……

   ……

   iv)……

   ……

9. Mention two characteristics of abdomen of a poor layers (2msk)

   i)……

   ……

   ii)……

   …….

10. Distinguish between mothering ability and prolificacy (2mks)

    ……

    ……

    ……

    ……

11. List two factors that can lead to conception failure after female cow has been served (2mks)

    i)……

    ……

ii)……

……

12. Give four factors that may lead to a farmer culling dairy cattle (2mks)

i)……

……

ii)……

……

iii)……

……

iv)……

……

13. State four reasons for doing Agriculture as a discipline (2mks)

i)……

……

ii)……

……

iii)……

……

iv)……

……..

14. Name four tools that are used when laying concrete blocks during construction of a wall (2mks)

i)……

……

ii)……

……

iii)……

……

iv)……

……

15. State four features on the animal which may pre-dispose it to livestock diseases (2mks)

i)……

……

ii)……

……

iii)……

……

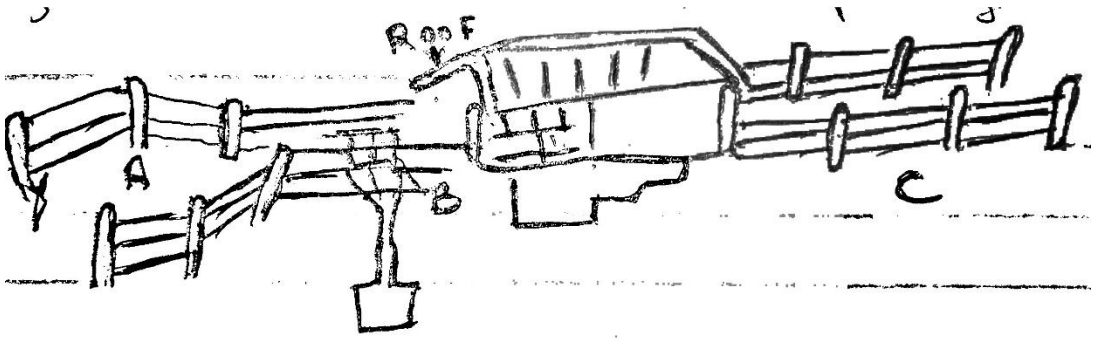
iv)……

……

SECTION B (20MKS)

Answer all the questions from this section.

16. Diagram below show a plunge dip.



d) Using a arrow on the diagram show the movement of cattle (½mk)

e) State one use of parts A, B and C (3mks)

A

……

……

B

……

……

C

……

……..

f) State two precautions a farmer should take on dip to ensure effective dipping (2mks)

i)……

……

ii)……

……

g) State two uses of the roof of the dip (2mks)

i)……

……

ii)……

……

b) Apart from use of acaricides explain other methods used to control ticks

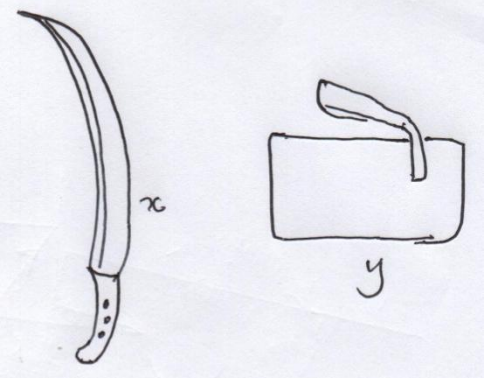
(3mks)……

……

……

……..

17. a) i) Identify the tools below (1mk)



X ……..

Y …….

ii) State the use of tools x and y (2mks)

X

……

……

Y

……

……

iii) Explain two maintenance practices carried on tool X (2mks)

i)……

……

ii)……

…….

b) Name the tools used in conjuction of following tools (2mks)

v. Troca

……

…….

vi. Hand

drill……

……

vii. Leading stick

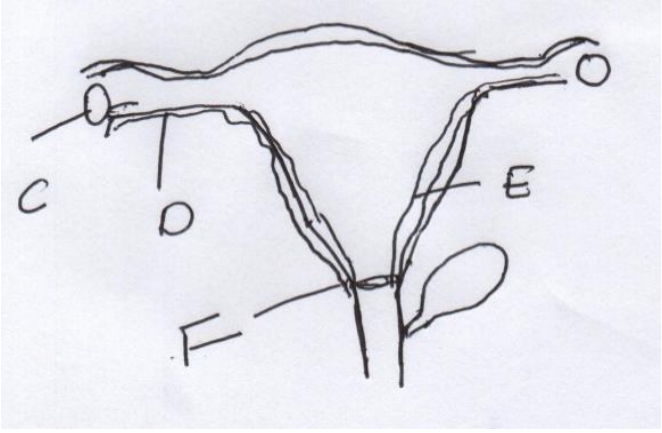
……

……

viii. Mallet

……

18. a) Diagram below show reproductive system of a female cow



iii. Name the part marked (1mk)

D

……

……

F

……

……..

iv. State the function of parts marked (1mk)

C

……

……

E

……

……..

b) At what stage should a gilt be mated? (½mk)

……

……

SECTION C (40MKS)

Answer ONLY TWO questions on answer booklets provided.

19. a) Explain features of ideal calf pen (6mks)

b) Outline various feeding practices a farmer undertake on calves up to weaning (8mks)

c) Describe uses of water in the animals body (6mks)

20. a) Describe mastitis disease under the following sub-headings

i. Causal organism (1mk)

ii. Disease pre-disposing factors (4mks)

iii. Symptoms (3mks)

iv. Control measures (6mks)

b) Describe factors to consider when culling a female (Cow) breeding stock (6mks)

21. a) Describe the artificial rearing of layers chick from one day up to the end of brooding (10mks)

b) Name three types of fences (3mks)

c) Explain the procedure of establishing wire fence (7mks)

KCSE MOCK 14

443/1

AGRICULTURE

PAPER 1

2 HOURS

SECTION A (30 MARKS)
Answer ALL Questions in the Spaces Provided

1. Differentiate between olericulture and pomoculture. (2mks)

   ……

   ……

2. Give **four** reasons why a well drained soil is suitable for crop production. (2mks)

   ……

   ……

   ……

   ……

3. State **four** reasons for deep ploughing during land preparation. (2mks)

   ……

   ……

   ……

   ……..

4. Name **four** types of water pumps which can be used on the farm. (2mks)

   ……

   ……

   ……

   ……

5. State **four** characteristics that make a crop suitable for green manuring. (2mks)

……

……

……

……

6. List any **four** pieces of information which should be shown on Health record. (2mks)

……

……

……

……

7. Give **four** reasons for seed selection in crop production. (2mks)

……

……

……

……

8. List **five** management practices carried out on a kale nursery two weeks after its establishment. (2½mks)

……

……

……

……

……

9. Differentiate between rogueing and thinning. (2mks)

……

……

10. Name **three** diseases that attack cabbage. (1½mks)

……

……

……

11. State **four** ecological requirements of tomatoes. (2mks)

……

……

……

……

12. List **four** factors that will lower demand of a commodity. (2mks)

……

……

……

……

13. State **four** routine practices of care and management of trees. (2mks)

……

……

……

……

14. State **four** ways by which a farmer can make efficient use of a pasture crop. (2mks)

……

……

……

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15. List **four** pieces of information found on a title deed. (2mks)

……

……

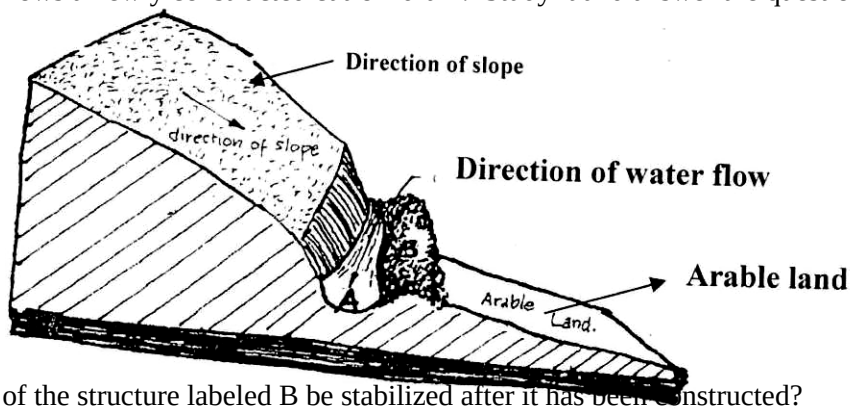
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SECTION B (20 MARKS)

Answer all questions in the spaces provided in this section

16. The illustration below shows a newly constructed cut-off drain. Study it and answer the questions that follow.



(a) (i) How can part of the structure labeled B be stabilized after it has been constructed?

(1mk)

……

(ii) Identify the part of the cut-off drain labeled A. (1mk)

……

(b) Describe the procedure of constructing a cut-off drain. (2mks)

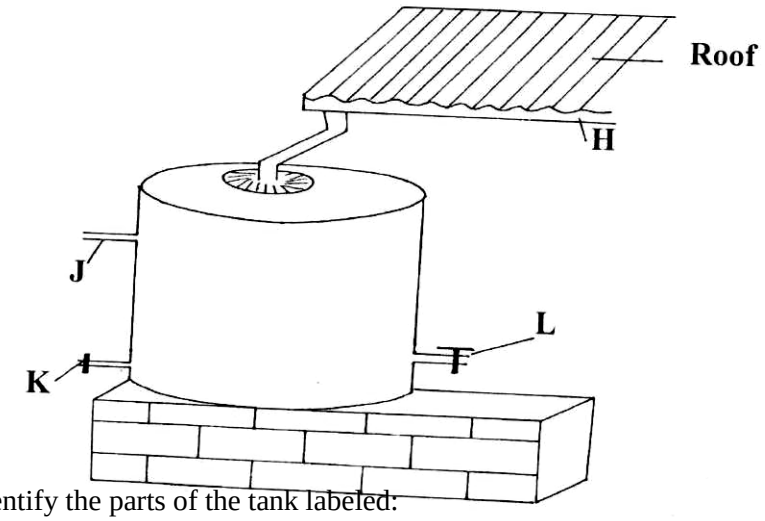
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17. The diagram below shows a house water storage tank. Study it and answer the questions that follow.



(a) Identify the parts of the tank labeled:

H:…… (1mk)

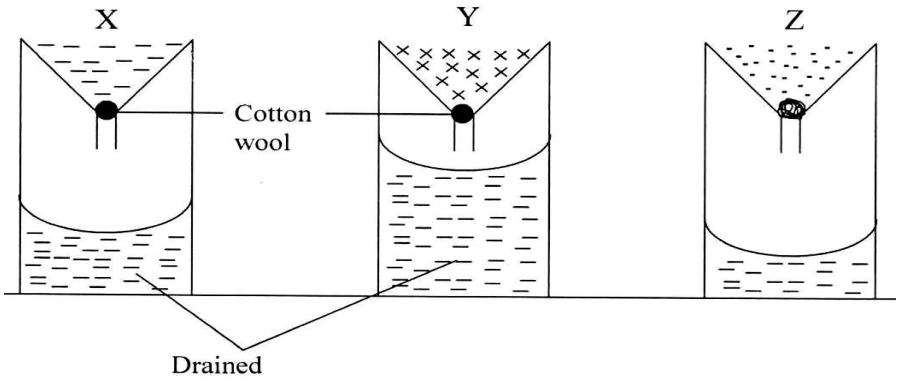
K:…… (1mk)

(b) Give the function of the part labeled J. (1mk)

……

……

18. The experiment below was set to compare the porosity and water holding capacity of three different types of soils.



(i) Identify the soils in each of the following funnels labeled. (1½mks)

X:……

Y:……

Z:……..

(ii) Which of the types of soil can be said to have the highest porosity rate? (½mk)

……

(iii) Give reasons for your answers in (ii) above. (2mks)

……

……

(iv) Which type of soil would be suitable for planting paddy rice? (1mk)

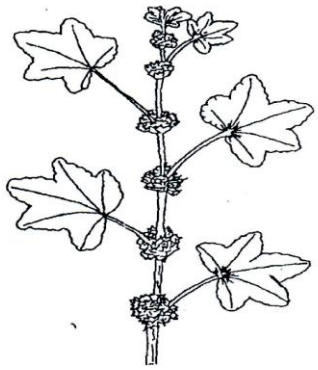
……..

(v) Explain your answer in (iv) above. (1mk)

……

……..

19. Below is a diagram of a Common East African Weed.



(i) Identify the weed illustrated above. (1mk)

……..

(ii) Give **one** harmful effect of the weed illustrated above to livestock. (1mk)

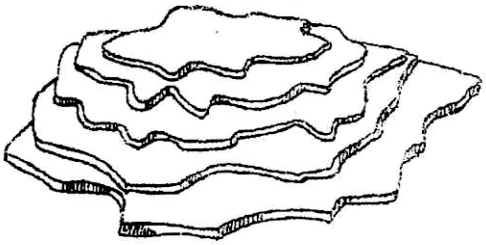
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(iii) State **two** methods of controlling the weed illustrated above. (1mk)

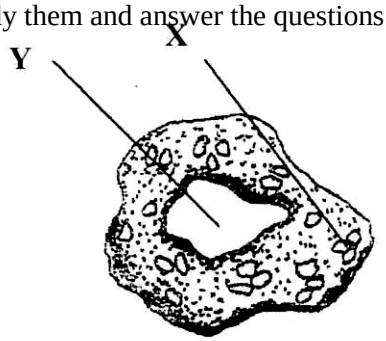
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20. The diagrams below illustrate some soil structures. Study them and answer the questions that follow.



G



(a) Identify the soil structures **F** and **G**. (1mk)

F:……..

G:……..

(b) Name the part labeled **X** and **Y** in diagram **F**. (1mk)

X:……

Y:…….

(c) State **two** ways through which structure **G** influence crop production. (2mks)

……

……

SECTION C (40 MARKS)

Answer any two questions from this section in the spaces provided

21. (i) Describe the field production of irrigated rice under the following sub-headings:

(a) Field preparation. (6mks)

(b) Water control (3mks)

(c) Field management (5mks)

(ii) Describe the precautions taken while harvesting:

(a) Pyrethrum (3mks)

(b) Tea (3mks)

22. (a) Name **two** types of inventory records in the farm. (1mk)

(b) Explain **six** importance of farm budgeting. (6mks)

(c) The inventory for Kipsinende farm as at 01.06.2011

	Kshs.	
Cash at hand		5,000
Broilers	30,000	
Maize in store		7,000
Calves	15,000	
Dairy cattle		120,000
Buildings		75,000
Machinery		95,000
Land		200,000

On the same day, the following information was obtained from the farmers records

	Kshs.	
Interest payable	2,000	
Cash in the bank		20,000
Taxes payable		750
Wages payable	5,600	
Bank loan		213,000
Egg sales on credit		10,000
Milk sales on credit		13,000
Farm inputs purchased on credit	19,800	
Vegetable sales on credit		5,000

Required: Prepare a balance sheet for the farm. (13mks)

23. (a) Outline the process of treating water for domestic use using chemical treatment system. (12mks)

(b) Explain **five** physical factors that increases the rate of soil erosion in a farm. (5mks)

(c) Explain how monoculture leads to loss of soil nutrients. (3mks)

KCSE MOCK 14

443/2

AGRICULTURE

PAPER 2

2 HOURS

SECTION A (30 MARKS)

Answer ALL Questions in the Spaces Provided

1. Why is Irish potatoes not recommended for feeding non-ruminant animals? (½mk)

   ……

   ……

2. Give **four** characteristics of succulent roughages. (2mks)

   ……

   ……

   ……

   ……

3. List **two** camel species reared in arid and semi-arid areas. (1mk)

   ……

   ……

4. Give **four** practices other than application of preservatives that can be carried out on wooden fencing posts to make them last long. (2mks)

   ……

   ……

   ……

   ……

5. Give **four** physical characteristics of a dairy cow. (2mks)

   ……

   ……

……

……

6. State **four** reasons for steaming up a dairy cow 2 months before calving down. (2mks)

……

……

……

……

7. State the causes of infertility in dairy cattle. (2mks)

……

……

……

8. State **two** circumstances which would lead a farmer to cull a high producing dairy cow.(1mk)

……

……

9. State the difference between crutching and raddling. (2mks)

……

……

10. Give **four** importance of keeping livestock healthy. (2mks)

……

……

……

……

11. How does isolation help in livestock disease control? (1mk)

……

12. What are the effects of parasites on livestock? (2mks)

……

……

13. State **four** methods of controlling liverflukes. (2mks)

……

……

……

……

14. Give **two** feeding rearing practices in livestock. (1mk)

……

……

15. State **three** properties of a good vaccine. (1½mk)

……

……

……

16. Give **two** symptoms of brucellosis in cows. (1mk)

……

……

17. State **three** ways of increasing ploughing depth when using a disc plough. (1½mks)

……

……

……

18. (a) Explain the term Epistasis as used in breeding. (½mks)

……

……

(b) State **three** methods used in selection of livestock for breeding. (1½mks)

……

……

……

19. Give **three** factors that may inhibit milk let down in dairy cattle. (1½mks)

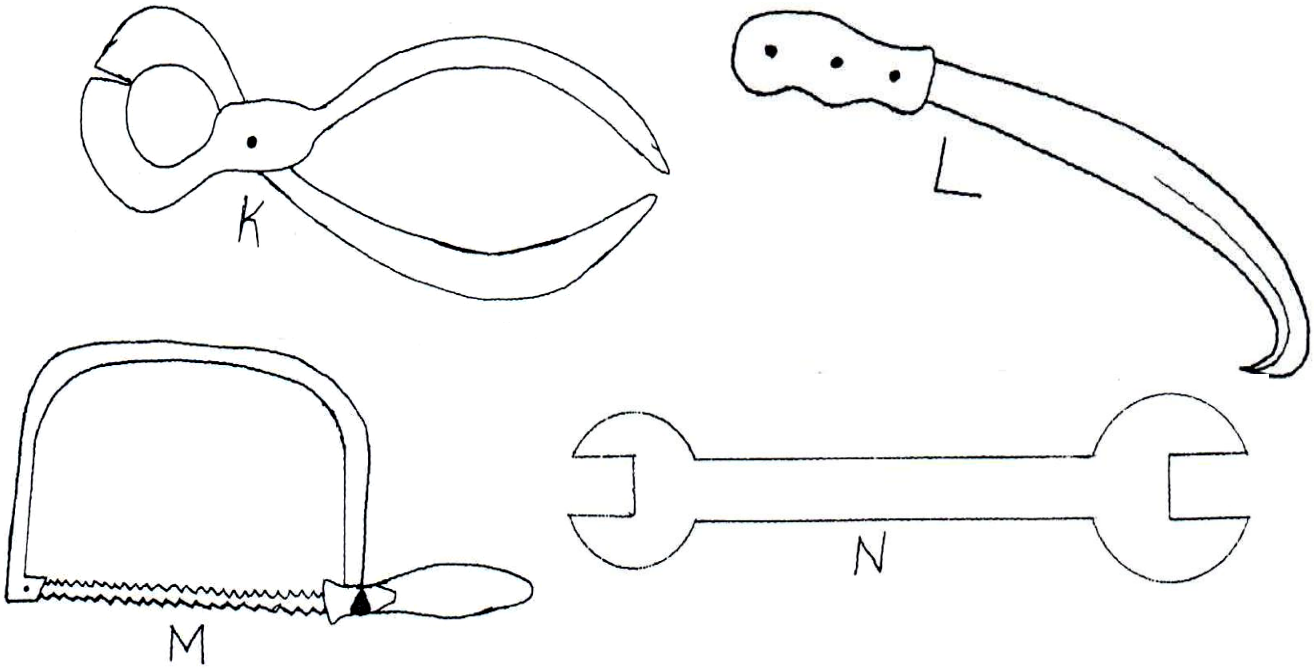
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SECTION B (20 MARKS)
Answer all questions in the spaces provided in this section

20. Study the following tools carefully and answer the questions that follow.



(a) Identify the structures labeled K, L, M and N.

K…… (½mk)

L…… (½mk)

M…… (½mk)

N…… (½mk)

(b) State the use of tools labeled K and N. (2mks)

K……

N……

(c) Give **two** maintenance practices of the tool labeled M. (2mks)

.....

.....

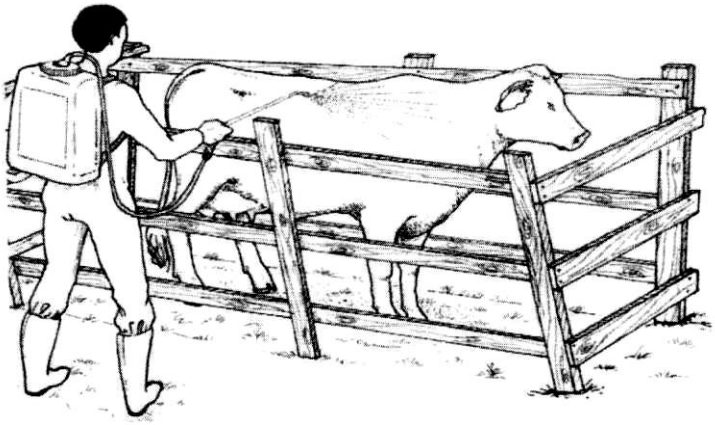
21. (a) Define the term feed conversion ratio as used in livestock production. (1mk)

……

……

(b) A bull gained 100kg of live weight after eating 400kg of beef concentrates over a period of time. Calculate the feed conversion ratio. (2mks)

22. Below is an illustration of a livestock routine management practice. Study it and answer questions that follow.



(i) State the reason for carrying out the routine practice shown above. (1mk)

……

(ii) Give **three** factors that affect the effectiveness of the chemical used above. (1½mks)

……

……

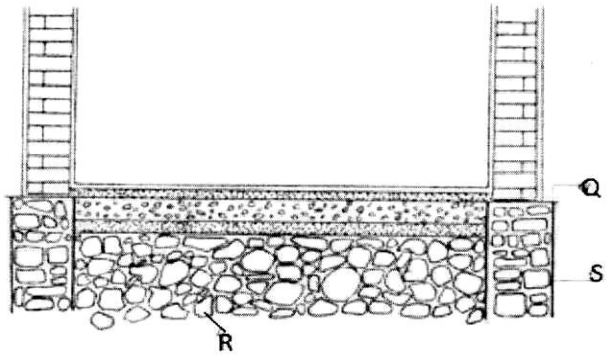
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23. Study the illustration below and answer questions that follow.



(i) Name the parts labeled Q, R and S. (1½mks)

Q:……

R:……..

S:……..

(ii) Give the function of the part labeled Q. (½mk)

……

……

(iii) State **four** factors that determine the type of materials to use in construction of the wall. (2mks)

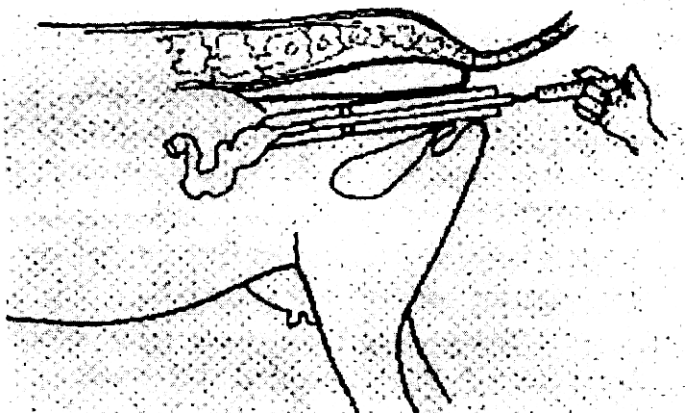
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24. Below is an illustration of a practice carried out in livestock production. Study it carefully and answer the following questions:



(i) Identify the practice illustrated above. (1mk)

……

(ii) Study **four** advantages of the above practice. (2mks)

……

……

……

……..

(iii) State **three** limitations associated with the above practice. (1½mks)

……

……

……

SECTION C (40 MARKS)

Answer any two questions from this section in the spaces provided

25. (a) Describe milk fever disease under the following sub-headings:
    (i) Animals affected. (1mk)
    (ii) Causal agent (1mk)
    (iii) Symptoms of attack (4mks)
    (iv) Control measures (4mks)
    (b) Explain the factors to consider when selecting livestock for breeding. (10mks)

26. Describe the management of a day old layer chick up to the end of brooding. (20mks)

27. (a) Describe the components of a cooling system of a tractor. (10mks)
    (d) Outline **five** care and maintenance practices of a tractor battery. (5mks)
    (e) State **five** uses of solar energy. (5mks)

KCSE MOCK 15

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AGRICULTURE

PAPER 1

2 HOURS

SECTION A (30marks).

Answer all Questions in this section.

1. State two advantages of organic farming. (2mks)

……

……

……

2. Name two ways through which government policies influence agriculture positively. (2mks)

……

……

……

3. State two ways through which living organisms influence soil formation. (2mks)

……

……

……

4. State two reasons of rolling in millet production. (2mks)

……

……

……

5. List two advantages of using certified seeds in crop propagation. (2mks)

……

……

……

6. State three importance of drainage in production of crops. (3mks)

……

……

……

……

7. State two advantages of green manure. (2mks)

……

……

……

8. State three concepts of agricultural economics. (3mks)

……

……

……

……

9. Given that a maize plantation measures 40m x 30m, and the maize plants are planted at a spacing of 75m x 25 cm. Calculate the plant population in the piece of land. (2mks)

……

……

……

……

10. State two precautions observed when harvesting pyrethrum. (2mks)

……

……

……

11. State two causes of river-bank erosion. (2mks)

……

……

……

12. State two advantages of biological weed control methods. (2mks)

……

……

……

13. List two advantages of individual land ownership tenure. (2mks)

……

……

……

14. State two advantages of land consolidation. (2mks)

……

……

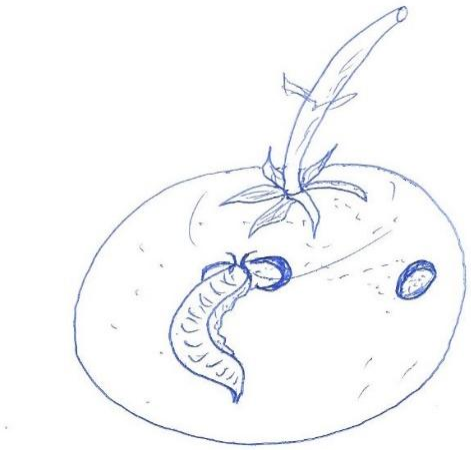
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SECTION B (20 MARKS)

Answer all questions in B.

15. Study the diagram below and answer the questions that follow.



a) Identify the crop pest shown above. (1mk)

……

……

b) State two methods used to control the pest above. (2mks)

……

……

……

c) Name three effects of the pest on tomato production. (3mks)

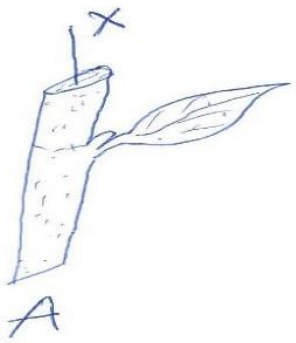
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……

16. study the diagrams and answer the questions below





a) Identify the diagrams above. (2mks)

A

……

B

……

b) Name a crop that can be propagated using the method shown in A above. (1mk)

……

……

c) State two factors that would make a farmer choose method B for propagating crops instead of method A. (2mks)

……

……

d) State the reason why the part labelled X in A above should be cut in a slanting manner. (1mk)

……

……

e) State one reason why the following practices should be done to the vegetative material labeled A.

i) When planting leaves should not touch the soil. (1mk)

……

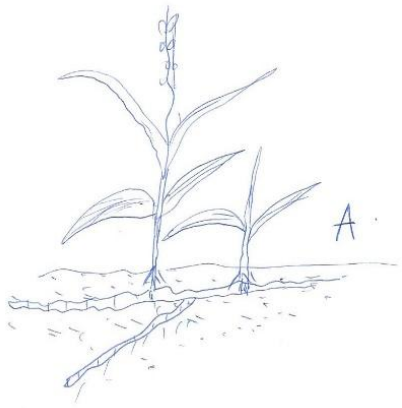
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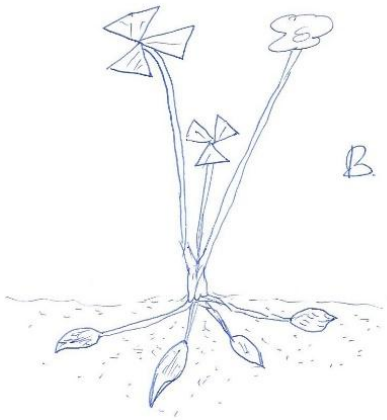
ii) The materials should be placed in water until when they are planted. (1mk)

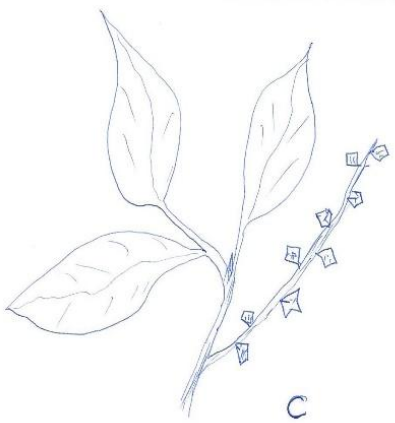
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17. Study the diagrams and answer the questions that follow.







a) Identify the weeds labeled A, B and C above. (3mks)

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b) Name one reason that makes it hard to control each of the weeds named above. (3mks)

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SECTION C (40 marks)

Answer only two questions in this section

18. a) Explain six cultural methods used to control weeds in a farm.
(12mks)
b) Explain four factors to consider when selecting planting materials. (8mks)

19. a) Explain five factors that influence soil erosion on an area.
(10mks)
b) Describe five cultural methods a farmer can use to control crop pests.
(10mks)

20. a) Explain four methods that determine the number of times secondary cultivation should be done on a
piece of land. (8mks)
b) Explain six reasons that would make a farmer carry out drainage on a piece of land.
(12mks)

KCSE MOCK 15

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AGRICULTURE

PAPER 2

2 HOURS

SECTION A (30MARKS)

Answer all the questions in this section.

1. Name two livestock tools that are used together as a pair. (2mks)

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2. State two uses of pliers in the farm. (2mks)

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3. Name two characteristics of merino sheep breed. (2mks)

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4. State four factors that influence the pulse rate of a dairy cow. (2mks)

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5. State three conditions that a good livestock structure should meet. (3mks)

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6. Name two characteristics of an effective acaricide that a farmer would use to control ticks in livestock.

(2mks)

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7. Name three sources of water in an animals body. (1 ½ mks)

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8. List three methods a farmer can use when selecting a breeding stock. (1 ½ mks)

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9. List two ways through which a vaccine can be administered to poultry. (2mks)

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10. State two signs of lambing in sheep. (1mk)

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11. Identify the main use of queen excluder in a Kenya top bar hive. (1mk)

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12. List two necessities of an Apiary. (2mks)

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13. State two factors that may predispose dairy cattle to mastitis. (1mk)

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14. State the importance of the following parts in an egg.

a) Chalaza

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b) Air space (2mks)

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15. List two ways of controlling cannibalism in poultry production. (1mk)

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16. State two advantages of raising calves using natural method. (1mk)

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17. State two disadvantages of using animal power in a farm. (2mks)

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18. Name two maintenance practices carried out on a tractor battery. (1mk)

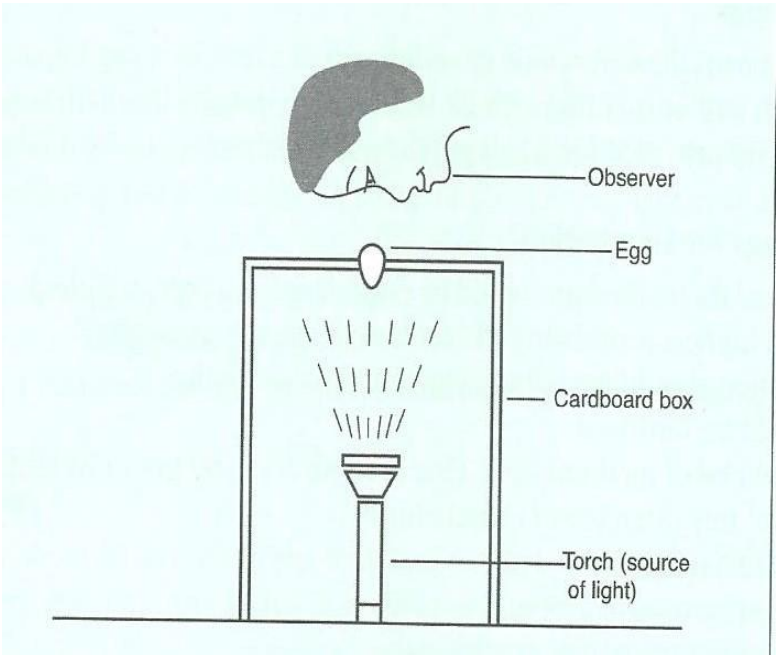
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SECTION B (20MARKS)

Answer all questions in this section.

19. Study the diagrams below and answer the questions that follow.



a) Identify the practice above in poultry production (1mk)

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b) State two signs of broodiness in hens. (2mks)

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c) State three factors observed in an egg using the method shown above. (3mks)

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d) Name one reason why a brooder should be round in shape. (1mks)

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20. Study the diagram below and answer the questions.



a) Identify the practice above in sheep production (1mk)

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b) Name two tools used to carry out the practiceabove (2mks)

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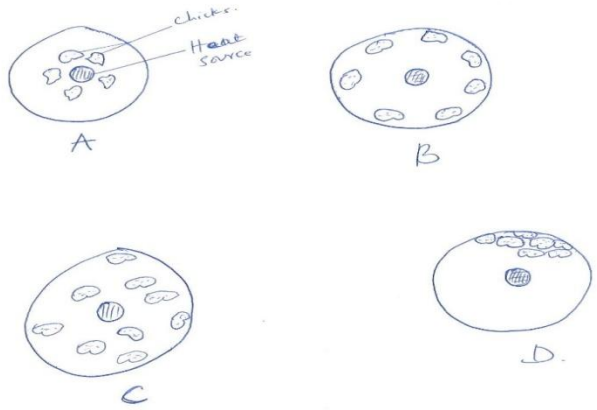
c) State three reasons why a farmer should carry out the practice above. (3mks)

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21. Study the diagrams below and answer the questions following.



a) Explain the temperature and the behavoiur of chicks in each diagrams shown above. (4mks)

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b) List three requirement of a good brooder. (3mks)

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SECTION C (40 MARKS)

Answer any two questions.

22 a) Explain five reasons that would make bees swarm from the hive. (10mks)

b) Discuss the procedure a farmer would follow when establishing a fish pond. (10mks)

23a) Describe the factors farmers should consider when selecting materials for constructing farm structures. (10mks)

b) Explain five routine management practices in calf rearing. (10mks)

24a) State and explain five reasons why farmers should keep livestock healthy. (10mks)

b) Discuss four factors that influence the dairy feed requirement of an animal. (8mks)

c) Name two methods used to compute livestock feeds. (2mks)