TOP SCHOOLS MOCKS

AGRICULTURE

(MOCKS TRIALS 1-10)

SERIES 1 COMPILATION OF RECENT TOP NATIONAL SCHOOLS KCSE MOCK TRIALS FOR AGRICULTURE

KCSE MODEL MOCK TRIALS

SERIES 1

For Marking Schemes Call/WhatsApp

MR ISABOKE 0746222000

MWALIMU AGENCY

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 1 PAPER 1

NAME…… INDEX NO…….…..…

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER 1

(THEORY)

2 hours

Instructions to students

(a) *Write your name and index number in the spaces provided at the top of this page.*

(b) *Sign and write the date of the examination in the spaces provided.*

(c) *This paper consists of three sections:* ***A***, ***B*** *and* ***C****.*

(d) *Answer all questions in sections* ***A*** *and* ***B.***

(e) *Answer any two questions in section* ***C.***

(f) ***The photographs must be coloured.***

For Examiner's Use Only

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1 – 19	30	
B	20– 23	20	
C		20	
		20	
	TOTAL SCORE	**90**	

SECTION A- (30 MARKS)

Answer all questions in the spaces provided

1) State the **three** forms in which horticulture is practiced in Kenya **(1½ marks)**

2) Identify **two** ways in which agriculture support agro based industries **(1 mark)**

3) List down **three** biotic factors that influence agriculture negatively **(1½marks)**

4) Name any **three** crops that can be propagated by use of suckers **(1½marks)**

5) Outline **four** roles of trees in soil conservation **(2 marks)**

6) Identify **two** examples of intensive farming systems practiced in crop production **(1 mark)**

7) Outline **four**ways in which living organisms contribute to soil formation **(2 marks)**

8) Give **four** reasons that may necessitate sub soiling to be carried out on a piece of land **(2 marks)**

9) Name any **four** physical methods of water treatment **(2 marks)**

10) Give **three** reasons why green manure is not commonly used **(1½marks)**

11) Name **two** types of labour records that can be kept by a large scale plantation farmer. **(1 mark)**

12) Outline **four** areas that should be avoided when collecting a soil sample for testing **(2 marks)**

13) Differentiate between a seed bed and a seedling bed **(1 mark)**

14) Name **three** field practices that are used to support weak stemmed crops **(1½marks)**

15) Give **four** reasons that would make a farmer chose a jembe during land preparation over a disc plough **(2 marks)**

16) Give a reason why use of organic manure is discouraged in carrot production **(1 mark)**

17) Outline **four** advantages of zero grazing as a system of grazing **(2marks)**

18) Identify **four** sources of credit facilities where one can get capital to carry out crop production **(2 marks)**

19) Name any **three** fertilizer elements **(1½ marks)**

SECTION B (20 MARKS)

Answer all questions in this section.

20) The following are photographs of weeds obtained from the farm

A



B



C



D



i) Identify the weeds **(2 marks)**

ii) State **one** major disadvantage of weed labeled A **(1 mark)**

iii) Give **two** reasons why weed C is difficult to control. **(1 mark)**

iv) State **one** economic importance of the weed labeled (B) to human beings **(1 mark)**

21) The table below shows weekly demand for rice in am market

Price (ksh)	Quantity demanded (kgs)
10	250
9	350
8	550
7	600
6	700
5	1000
4	1500

a) Calculate the elasticity of demand (Ed) for rice when the price falls from Kshs. 10 to Kshs. 9 per Kg. (show your working) **(3 marks)**

b) Other than price state any other factor that may factor that may increase the demand for rice in the market **(2 marks)**

22) The following diagrams shows various samples of soil aggregates

P



Q



R



S



a) Identify the type of soils structures **(2marks)**

b) Briefly explain how soil structures P can be improved **(1mark)**

c) Name two places where soil structure labeled S can be found **(2 marks)**

23) Study the following photographs and use them to answer the question that follows



a) Identify the type of irrigation shown in the photograph **(1 mark)**

b) State any **two** advantages of the above method of irrigation **(2 marks)**

c) Other than the one shown above identify any other **two** methods that a farmer can use to irrigate his crops **(2 marks)**

SECTION C – 40 MARKS)

Answer any two questions and answer them in the spaces provided after question 26

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

i) Draw up a partial budget and advice the farmer accordingly. **(9 marks)**

ii) Name the other type of budget that can be prepared by a farm manager **(1 mk)**

b) Discuss the various problems associated with land fragmentation **(6mks)**

c) Explain **four** environmental factors that affect the effectives of herbicides **(4 mks)**

25. a) Discuss the various cultural practices carried by farmers to control pests **(10marks)**

b) Discuss the production of dry beans under the following headings

(i) Varieties **(2 marks)**

(ii) Section of planting materials **(3 marks)**

(iii) Postharvest practices of dry beans **(5 marks)**

26 a) Describe harvesting of pyrethrum under the following subheading

i) Method and procedure **(3 marks)**

ii) Precautions **(3 marks)**

b) State **five** characteristics of nitrogenous fertilizers **(4marks)**

c) Explain **five** factors to consider when designing a crop rotation programme **(10 mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 1 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

a) *Write your name and index number in the spaces provided above.*
b) *Sign and write the date of examination in the spaces provided above.*
c) *This paper consists of three sections A, B and C.*
d) *Answer **all** the questions in section A and B.*
e) *Answer any **two** questions in section C.*
f) *Candidates should answer all the questions in **English**.*

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-19	30	
B	20-23	20	
C		20	
		20	
	TOTAL SCORE	**90**	

QUESTIONS

SECTION A (30 MARKS)

1. Give the meaning of the following terms as used in livestock health. **(1mk)**
   a) Incubation period
   b) Mortality rate.
2. State **four** physical characteristics of a dairy cow**.** **(2mks)**
3. Name the **two** different types of rabbit houses. **(1mk)**
4. What is the role of a footbath in a poultry house? $(\frac{1}{2}mk)$
5. State **four** care and maintenance practices carried out on a tractor water cooling system. **(2mks)**
6. State **four** factors that affect the digestibility of a feed. **(2mks)**
7. Give **four** factors that should be considered when siting a beehive on the farm. **(2mks)**
8. Name the complementary tool for each of the tools named below: **(2mks)**
   a) Trochar
   b) Hand drill
   c) Elastrator
   d) Bull ring
9. State **four** advantages of embryo transplant when breeding livestock. **(2mks)**
10. Give **two** reasons why sows may eat piglets immediately after farrowing. **(1mk)**
11. State **three** reasons for docking in rams. $(1\frac{1}{2}mks)$
12. Name **four** components of a building truss. **(2mks)**
13. Differentiate between **strategic** and **tactical** treatment as used in the control of endoparasites. **(1mk)**
14. Name **four** diseases in poultry that are controlled by vaccination. **(2mks)**
15. List **four** vices that may be developed by birds kept under total confinement. **(2mks)**
16. Give **three** reasons for steaming up an in-calf heifer. $(1\frac{1}{2}mks)$
17. State **four** factors that influence the respiration rate in livestock. **(2mks)**
18. Name **three** dual purpose breeds of sheep. $(1\frac{1}{2}mks)$
19. Give **two** reasons why proper nutrition is important in livestock health. **(1mk)**

SECTION B (20MARKS)

20. The diagrams below illustrate ectoparasites.Study them and answer the questions that follow.



A



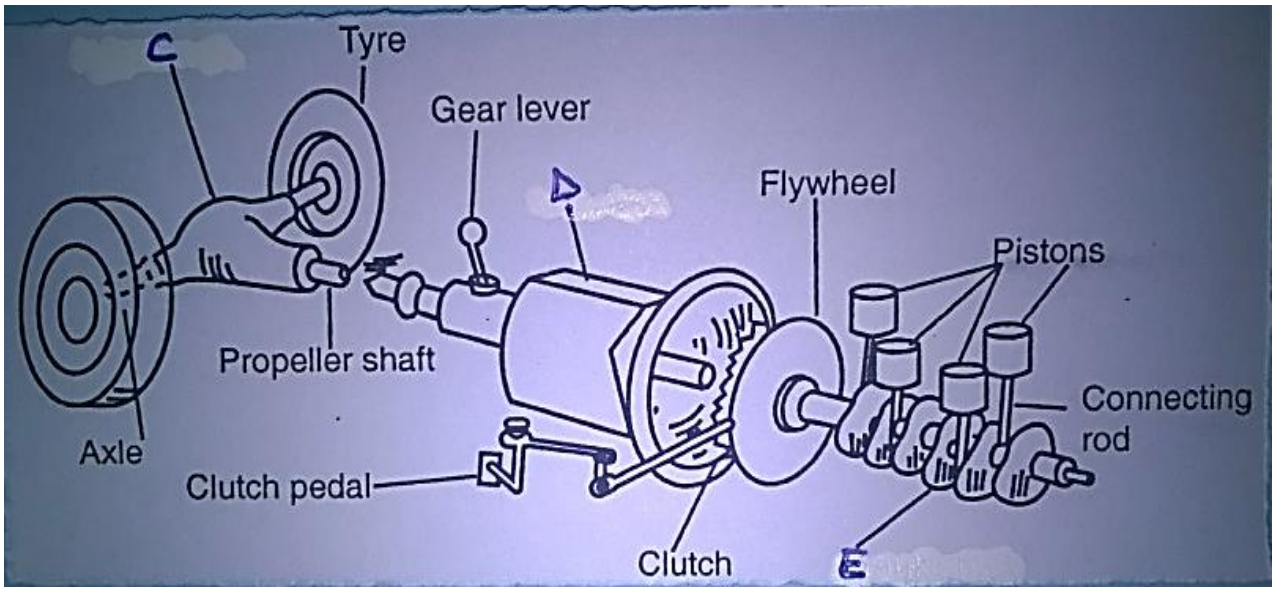
B

a) Identify the parasites labelled A and B. **(1mk)**

b) Name the livestock affected by the parasite labelled A. **(1mk)**

c) State **two** harmful effects of parasites A and B in livestock production. **(2mks)**

21. Below is a diagram of the power transmission system of a tractor engine. Study it and answer the questions that follow.



a) Name the parts labelled C, D and E. **(3mks)**

C……

D……

E……

b) State the functions of parts C, D and E. **(3mks)**

C……

D……

E……

22. **a)** Outline the procedure of castrating a male piglet. **(4mks)**

b) At what age should the male piglet be castrated? **(1mk)**

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



F



G



H



I

a) Identify the tools labelled F, G, H and I. **(2mks)**

F……

G……

H……

I……

b) Give the uses of each of the tools labelled H and I**.** **(2mks)**

H……

I…….

c) Name the part of the animal where tool F is placed when in use. **(1mk)**

SECTION C (40MARKS)

24. a) Explain the management practices that a farmer should carry out to improve milk production in a low dairy herd. **(10mks)**

b) Describe the rearing of one day old chicks to 8 weeks. **(10mks)**

25. a) Describe coccidiosis disease under the following sub-headings:

i. Causal organism **(1mk)**

ii. Pre-disposing factors. **(3mks)**

iii. Symptoms. **(4mks)**

iv. Control measures. **(2mks)**

b) Describe **five** parts of a piggery unit. **(10mks)**

26. a) Give **five** functions of water in livestock. (5mks)

b) State and explain **five** essentials of clean milk production. (10mks)

c) Give **five** operational differences between a disc pough and a mouldboard plough. (5mks)

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 2 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL…….. SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER I

TIME: 2 HRS

INSTRUCTIONS TO CANDIDATES

- ***a)*** *Write your name and index number in the spaces provided*
- ***b)*** *This paper consist of three sections A, B and C*
- ***c)*** *Answer **ALL** questions in Section A, B and C*

SECTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	30	
B	20	
C	40	
TOTAL	90	

SECTION A (30 MARKS)

Answer ALL the questions in this section in the spaces provided

1. List **three** characteristics of large scale farming system **(1½ mks)**

2. Differentiate between grafting and budding **(lmk)**

3. State **three** pieces of information contained in a land title deed **(1½ mks)**

4. Distinguish between each of the following pairs of terms

i)Pricking out and thinning **(lmk)**

ii) Nursery bed and a seedling bed **(lmk)**

5. Give reasons for carrying out the following practices in a tomato nursery

i) Avoid excess application of nitrogen **(½mk)**

ii) Sinking the nursery bed below the ground level **(½ mk)**

iii) Hardening off **(½mk)**

6. Give **two** ways in which cut off drains control soil erosion **(l mk)**

7. State **six** ways through which soil looses fertility **(3mks)**

8. Name **two** examples of potassic fertilizers **(lmk)**

9. State **two** diseases of leaf that attack sorghum. **(lmk)**

10 .Give **three** reasons why a farmer needs to conserve forage . **(1½ mks)**

11. State **two** positive effects of high environmental temperatures on crop farming **(lmk)**

12. State **four** biological methods of soil erosion control **(2mks)**

13. Name **two** types of labour records **(lmk)**

14. State **four** physical methods of pest control **(lmk)**

15. Outline **three** reasons of top dressing a pasture land **(1½ mks)**

16. State **three** symptoms of bacterial attack in crop production **(1½ mks)**

17. State **four** factors which affect the quality of a silage. **(2mks)**

18. State **two** conditions under which opportunity cost is zero in a farming enterprise. **(lmk)**

19. Give **four** reasons of using certified seeds for planting . **(2mks)**

20. State **four** factors that affect rooting of cuttings. **(2mks)**

SECTION B (20MARKS)

Answer ALL Questions in this section

21. Below is a record format kept in the farm

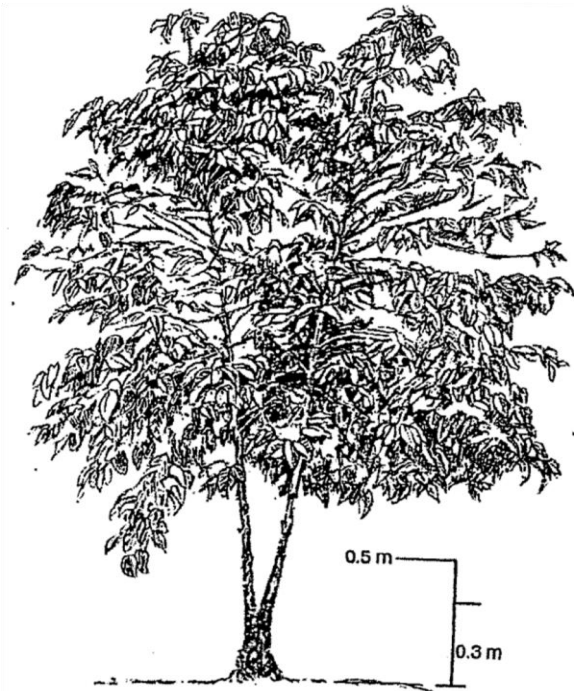
Sow No…… Breed……	Sire No……..… Breed……	Date of service	Date of farrowing		Remarks
Sow1…….…… …… Sow 2			Expected	Actual	

a) Identify record format illustrated above **(lmk)**

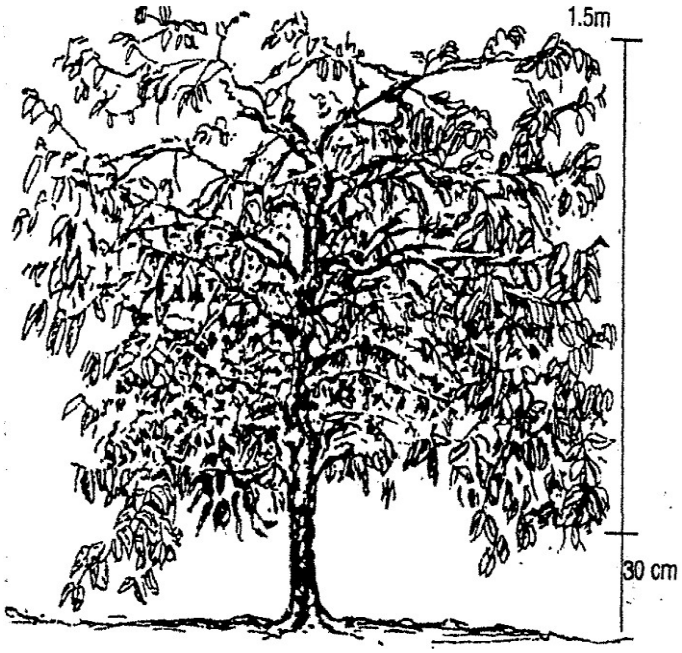
b) State **two** importance of a farmer keeping the type of records identified above **(2mks)**

c) Why do institutions loaning money (credit) to farmers insist on seeing farm records of the loan applicant? **(lmk)**

22. The diagrams labeled **A** and **B** are illustrations of coffee established using two different formative pruning systems. Study them and answer the questions that follow.



A



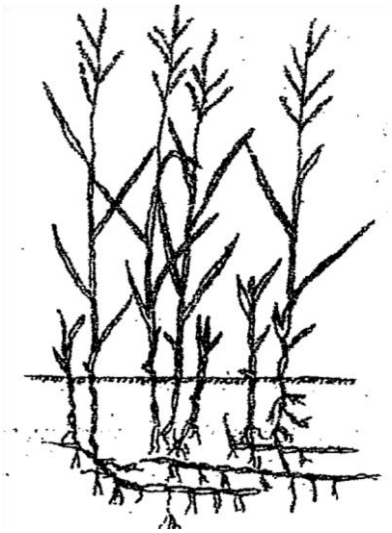
B

a)Name the system of pruning illustrated in diagram **A** and **B** above. **(2mks)**

b) Outline the procedure of how the pruning illustrated in diagram **B** is carried out.

(3mks)

23. The diagrams below show common weeds on arable land



C



D

i) Identify the weeds **(2 mks)**

C……

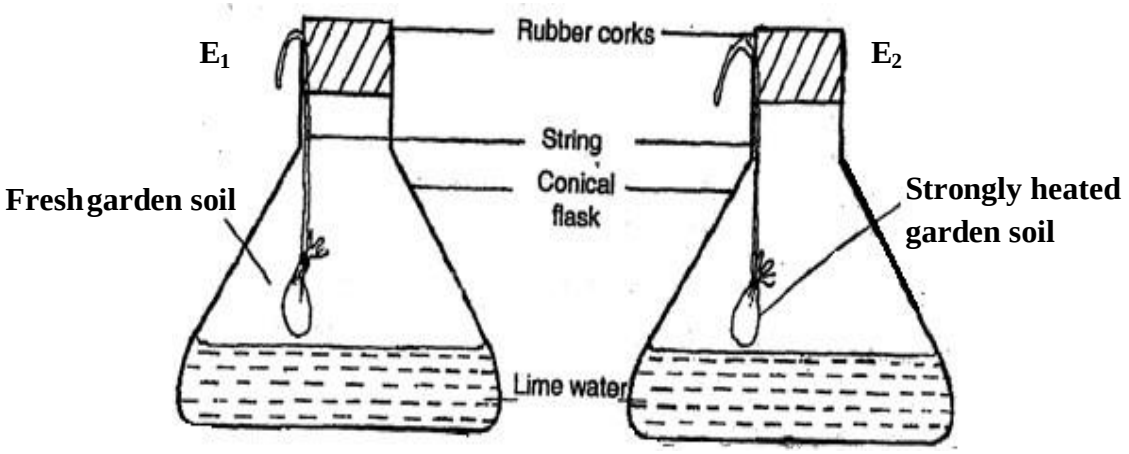
D……..

ii) Why is it difficult to control weed **C** **(lmk)**

iii) Name **three** chemicals used to control weed **C** in a field of coffee **(3mks)**

iv) State **two** harmful effects of weed **D** **(2mks)**

24. The diagram below illustrates an experiment carried out by a form one boy. Study it carefully and answer the that follow



The set ups were allowed to stand for five hours.

a) State the aim of the experiment. **(lmk)**

b) Explain the results expected in

i) Set up E_1 **(lmk)**

ii) Set up E_2 **(lmk)**

SECTION C (40MARKS)

Answer ALL questions from this section

25 a) Explain **five** ways in which trees help in soil conservation. **(5mks)**

b) State **five** uses of water on the farm. **(5mks)**

c) Describe the process of treating water for domestic use using chemical treatment system. **(l0mks)**

26. a) Describe transplanting of onions in the field. **(l0mks)**

b) Explain the various factors that influence spacing in crops. **(5mks)**

c) Describe the various types of farm records kept by a dairy farmer. **(5mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 2 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- *Write **your name** and **Index number** and **sign** in the spaces provided above.*
- *Answer **ALL** the questions in section **A** and **B** in the spaces provided in this booklet.*
- *Answer **any two** questions in section **C** in the spaces provided after the last question.*
-

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-18	30	
B	19-21	20	
C	22-24	40	
	TOTAL	**90**	

SECTION A (30MARKS)

Answer all the questions in this section.

1. State two reasons of using farm tools and equipment in the farm. **(2mks)**

2. State three reasons that would make a farmer opt to rear indigenous cattle breeds instead of exotic cattle breeds. **(1 ½ mks)**

3. State three characteristics of Bacterian type of camel. **(1 ½ mks)**

4. Name four factors that influence the pulse rate of an animal. **(2mks)**

5. State three signs of attack by endoparasites a farmer can observe. **(1 ½ mks)**

6. State four factors that determine the amount of food given to an animal. **(2mks)**

7. Name three reasons that would make a farmer use a machakos dip instead of a plunge dip to control ticks. **(1 ½ mks)**

8. State four factors considered when selecting construction materials. **(2mks)**

9. Name three methods a farmer can use when selecting livestock for breeding.**(1 ½ mks)**

10. Mention three signs of heat in a doe. **(1 ½ mks)**

11. Mention four reasons that would make a farmer carry out identification to his herd. **(2mks)**

12. State two diseases that commonly affect bees in bee farming. **(2mks)**

13. State four methods a farmer can use when preserving fish after harvesting. **(2mks)**

14. State four factors that determine the choice of poultry rearing system that a farmer chooses to use. **(2mks)**

15. State one significance of mobile calf pen in calf rearing. **(1mk)**

16. State two disadvantages of a two stroke engine. **(1mk)**

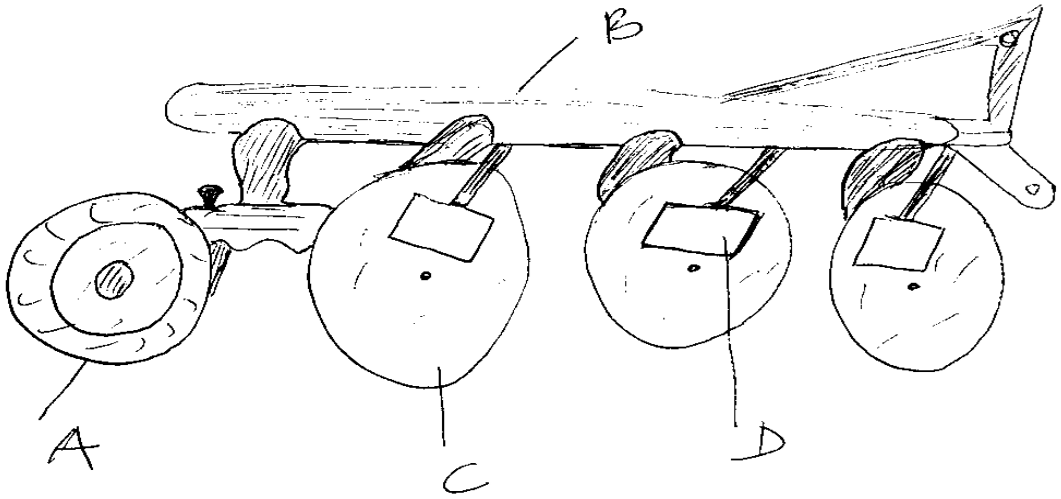
17. State two factors that could cause sudden stopping of a tractor engine. **(1mk)**

18. State four disadvantages of animal drawn implements over tractor drawn implements. **(2mks)**

SECTION B (20MARKS)

Answer all questions in this section.

19. The diagram below shows a tractor drawn implement. Study it and answer the questions that follow.



a) Name the parts A, B, C and D. **(4mks)**

b) State two advantages of using the above implement over mould- board plough. **(2mks)**

c) State the function of the parts labeled. **(2mks)**

i) A

ii) D

20. The diagram below shows livestock parasites. Study the diagrams and answer the questions that follow.



X



Y

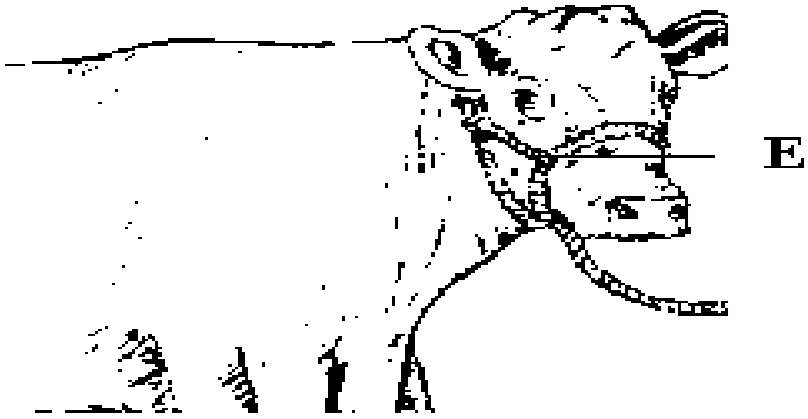
a) Identify the parasites X and Y above. **(2mks)**

b) State two effects that are caused by the parasite labeled X on the animal's body. **(2mks)**

c) Name one disease transmitted by parasite labeled X above. **(1mk)**

d) State three measures taken to control the parasite labeled Y above. **(3mks)**

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



a) Identify the livestock equipment marked E above. **(1mk)**

b) State two reasons that make branding be discouraged as a method of livestock identification. **(1mk)**

SECTION C (40 MARKS)

Answer any two questions.

22. **a)** State five factors that predispose livestock to diseases. **(10mks)**

b) State and explain five factors a farmer will consider when siting beehives in the farm. **(10mks)**

23. **a)** Briefly state and explain five equipment a farmer will need when milking and state their uses. **(10mks)**

b) Explain five factors to consider when selecting a breeding stock. **(10mks)**

24. **a)** State and explain four materials collected by bees. **(8mks)**

b) State and explain the use of four equipments a honey harvester would require to have when harvesting honey. **(8mks)**

c) List four main reasons that make fish farming popular. **(4mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 3 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO…….…..…

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

Paper 1

2 Hours

INSTRUCTIONS TO CANDIDATES

- ***a)*** *This paper consists of three sections,* ***A,B*** *and* ***C****. Answer all questions in sections A and B and any two questions in section* ***C.***
- ***b)*** *All answers be written in the spaces provided after every question.*
- ***c)*** *Candidates should write their names and index numbers in the spaces provided above.*

For Examiner's Use Only

Section	Question	Maximum Score	CANDIDATES SCORE
A	1 -17	30	
B	18 -21	20	
C		20	
		20	
		90	

QUESTIONS

SECTION A (30 Marks)

Answer all questions in this section in the spaces provided.

1 Differentiate between pastoralism and nomadic pastoralism. **(1mk)**

2 Give four reasons for sub-soiling. **(2mks)**

3 State four advantages of drip irrigation. **(2mks)**

4 Give three farming practices that will lead to pollution of water. **(1 ½ mks)**

5 Outline four factors that influence quality of compost manure. **(2mks)**

6 (a) what is opportunity cost as used in agricultural economics? **(1mk)**

(b) State two conditions under which opportunity cost is said to be Zero. **(1mk)**

7 Differentiate between under sowing and over sowing as used in pasture in production. **(1mk)**

8 State four disadvantages of broadcasting in crop production. **(2mks)**

9 Give four objectives of settlement schemes in Kenya soon after independence. **(2mks)**

10 (a) Name three types of legume trees used as a fodder. **(1 ½ mks)**

(b) Give four reasons for top-dressing pasture. **(2mks)**

11 Name three insect pests of cabbages. **(1 ½ mks)**

12 Give three importance of Agricultural Society of Kenya (A.S.K). **(1 ½ mks)**

13 (a) State two reasons for carrying out agroforestry on a river – bank. **(2mks)**

(b) Give four ways in which agroforestry seeds are prepared after collection in readiness for planting. **(2mks)**

14 Give two reasons for processing agricultural produce. **(1mk)**

15 State two functions of calcium in the soil. **(1mk)**

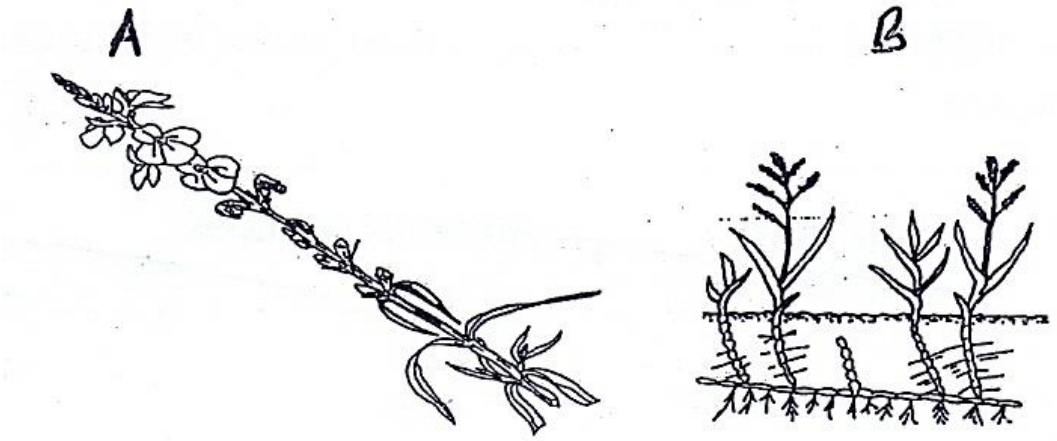
16 List four methods of applying fertilizers in crops. **(2mks)**

17. Give two reasons for cutting back in pyrethrum production. **(1mk)**

SECTION B (20 Marks)

Answer all questions in this section in the spaces provided.

18 The diagrams below shows two weeds labeled **A** and **B**. Study them and answer questions that follow.



(a) Identify the weeds labeled **A** and **B**. **(1mk)**

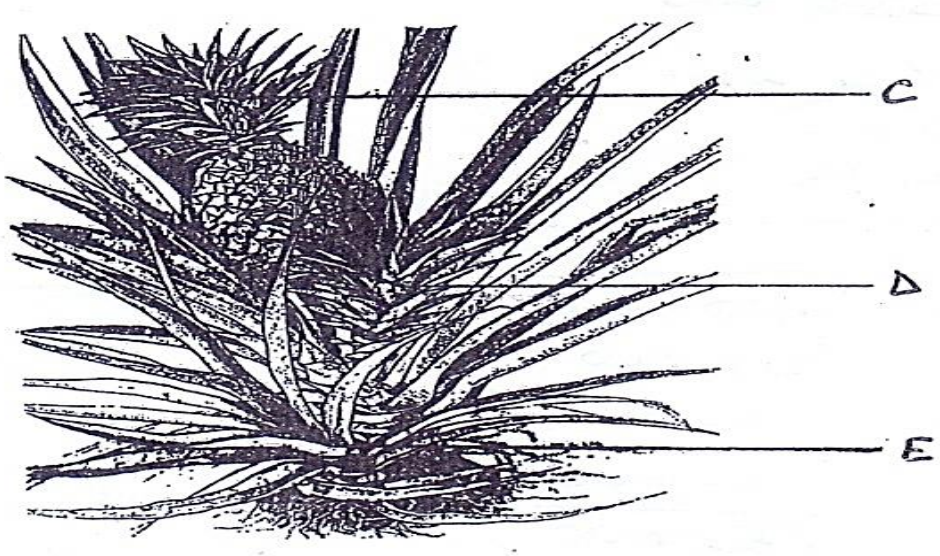
(b) Give one reason why the weed labeled **A** is referred to as a parasitic weed. **(1mk)**

(c) Name two crops that the weed illustrated A above commonly attack. **(1mk)**

(d) Give one reason why it is very difficult to control weed labeled B. **(1mk)**

(e) State one cultural method of controlling weed labeled A. **(1mk)**

19. The diagrams below illustrate a pineapple plant. Study it carefully and answer the questions that follow.



(a) Name the parts of propagating pineapple labeled **C,D** and **E.** **(1 ½ mks)**

C……

D……

E……

(b) (i) Which of the vegetative material is more suitable for propagation? **(½mk)**

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

(c) State three advantages of vegetative propagation**.** **(1 ½ mks)**

20 The following information was extracted from Mr. Njengas farm records on 31/12/2018. Use the information to answer the questions that follow.

Description	Kshs
Five year bank loan	400,000
One year loan with AFC	200,000
Creditors	45000
Debtors	20000
Land	600000
Buildings	420000
Dairy cattle	180000
Dairy meal	10000
Cash in hand	35000

(a) Prepare a balance sheet of Mr. Njengas farm. **(5mks)**

(b) Was Mr. Njengas business solvent or insolvent? **(1mk)**

21 An experiment was carried out to investigate soil constituents as described below.

(i) A 250 cm^3measuring cylinder was filed with water to 100cm^3 mark.

(ii) A 100cm^3 beaker was filled with garden soil up to brim.

(iii) The soil was emptied into one measuring cylinder and shook well.

(iv) The final volume was 150cm^3.

(a) What was lost when the 100cm^3 garden soil was poured to 100cm^3 of water in the measuring cylinder? **(½mk)**

(b) Calculate one percentage content of the soil constituents investigated in the experiment. **(2mks)**

(c) Give two importance of the substance lost above in the soil**.** **(2mks)**

SECTION C (40 Marks)

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

22 (a) Describe the production of beans under the following sub-headings

(i) Field preparation **(3mks)**

(ii) Planting **(3mks)**

(iii) Field management practices **(5mks)**

b) Outline the procedure of harvesting sugarcane. **(5mks)**

23 (a) Explain five land tenure systems practiced in Kenya. **(10 mks)**

b) Describe ten functions of agricultural marketing in Kenya. **(10 mks)**

24 (a) Explain five farming activities which may encourage soil erosion. **(10 mks)**

b) Explain five factors determining stage and time of harvesting crops. **(10 mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 3 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

Paper 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

a) *Write your name and index number in the spaces provided above.*
b) *Sign and write the date of examination in the spaces provided above.*
c) *This paper consists of three sections A, B and C.*
d) *Answer **all** the questions in section A and B.*
e) *Answer any **two** questions in section C.*

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-19	30	
B	20-23	20	
C		20	
		20	
	TOTAL SCORE	**90**	

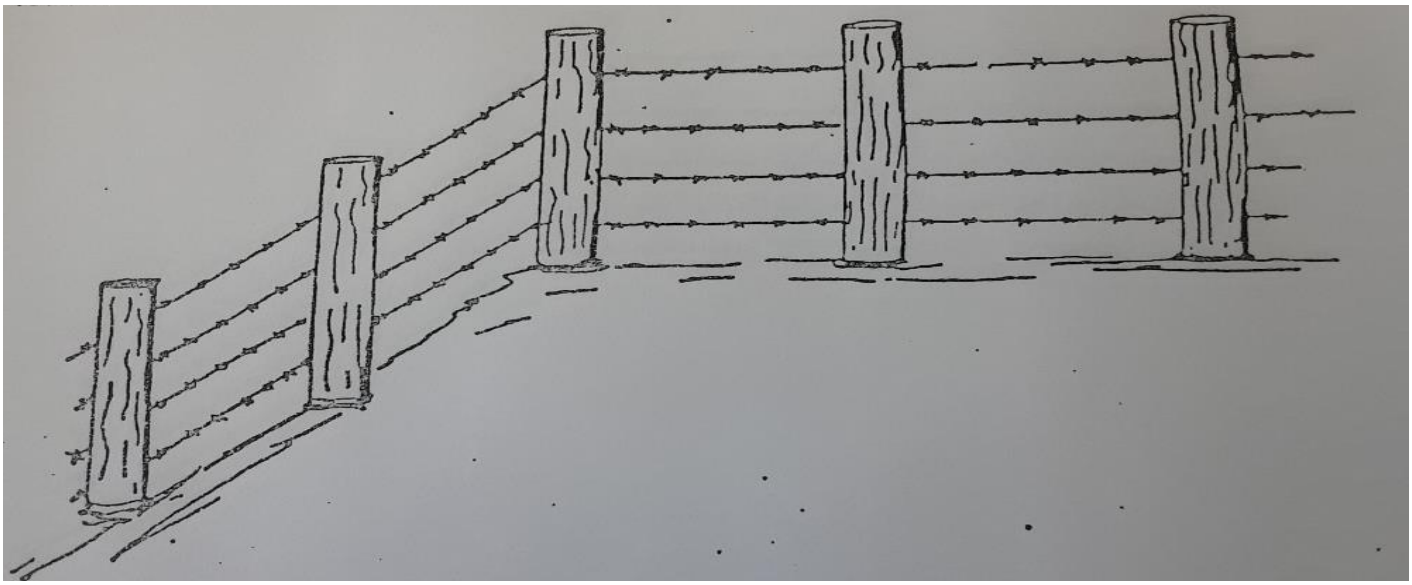
QUESTIONS

SECTION A (30 MARKS)

1. Give **four** livestock rearing practices that can be carried out in a crush. **(2mks)**
2. Name the part of the digestive system of poultry where insoluble grit is found. $(\frac{1}{2}\boldsymbol{mk})$
3. Give **two** distinguishing external characteristics of Californian breed of rabbit. **(1mk)**
4. State **four** pre-disposing factors of livestock diseases. **(2mks)**
5. Outline **four** functions of proteins in the body of an animal. **(2mks)**
6. State **four** observable features of indigenous cattle (*Bos indicus*) **(2mks)**
7. State **four** importance of creep feeding. **(2mks)**
8. Name **four** materials that are collected by bees. **(2mks)**
9. Give the function of each of the following parts of a fish pond.
   a) Spillway $(\frac{1}{2}\boldsymbol{mk})$
   b) Outlet $(\frac{1}{2}\boldsymbol{mk})$
10. State **four** advantages of cross-breeding. **(2mks)**
11. Name the part of the digestive system of a non-ruminant animal where cellulose is broken down $(\frac{1}{2}\boldsymbol{mk})$
12. State **three** field conditions under which a disc plough should be used instead of a mouldboard plough. $(1\frac{1}{2}\boldsymbol{mks})$
13. State **four** advantages of artificial incubation in comparison to natural incubation as a method of hatching chicks. $(1\frac{1}{2}\boldsymbol{mks})$
14. Give **four** maintenance practices carried out on the water cooling system of a tractor. **(2mks)**
15. State **four** advantages of a four-stroke cycle engine. **(2mks)**
16. Give **three** reasons why drenching alone is not an effective method of controlling intestinal parasites in livestock. $(1\frac{1}{2}\boldsymbol{mks})$
17. Name **three** poultry diseases that are controlled by vaccination. $(1\frac{1}{2}\boldsymbol{mks})$
18. Give the mineral whose deficiency causes the following disorders in livestock.
    a) Anaemia $\left(\frac{1}{2}mk\right)$
    b) Parakeratosis $\left(\frac{1}{2}mk\right)$
19. Give **three** reasons why liming is done in fish ponds. $(1\frac{1}{2}mks)$
20. If records show that a rabbit was served on 27th September 2020.Which date did it give birth. $\left(\frac{1}{2}\boldsymbol{mk}\right)$

SECTION B (20 MARKS)

21. Below is an illustration of part of a wooden post wire fence. Study it and answer the questions that follow.



a) Identify the type of wire in the illustration. **(1mk)**

b) On the illustration show by drawing how the corner post should be supported. **(1mk)**

c) On the illustration draw, label and give the function of a dropper. **(2mks)**

d) Name the correct tool for tightening the wire during construction of the fence. **(1mk)**

22. Observe the tools A, B and C illustrated below then answer the questions that follow.





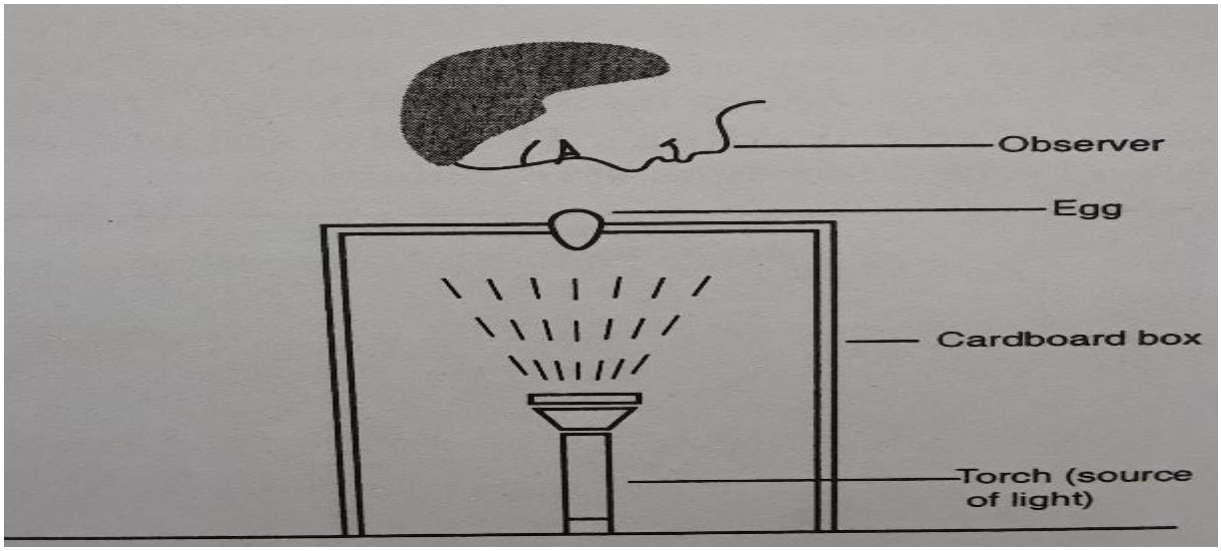


a) Name tools A, B and C and state the correct use of each tool. **(3mks)**

Tool	Identity	Function
A		
B		
C		

b) State **two** maintenance practices that should be carried out to ensure that tool C is in a good working condition. **(2mks)**

23. Below is an illustration of an activity carried out by a poultry farmer keeping layers



a) Identify the activity carried out using the set-up. **(1mk)**

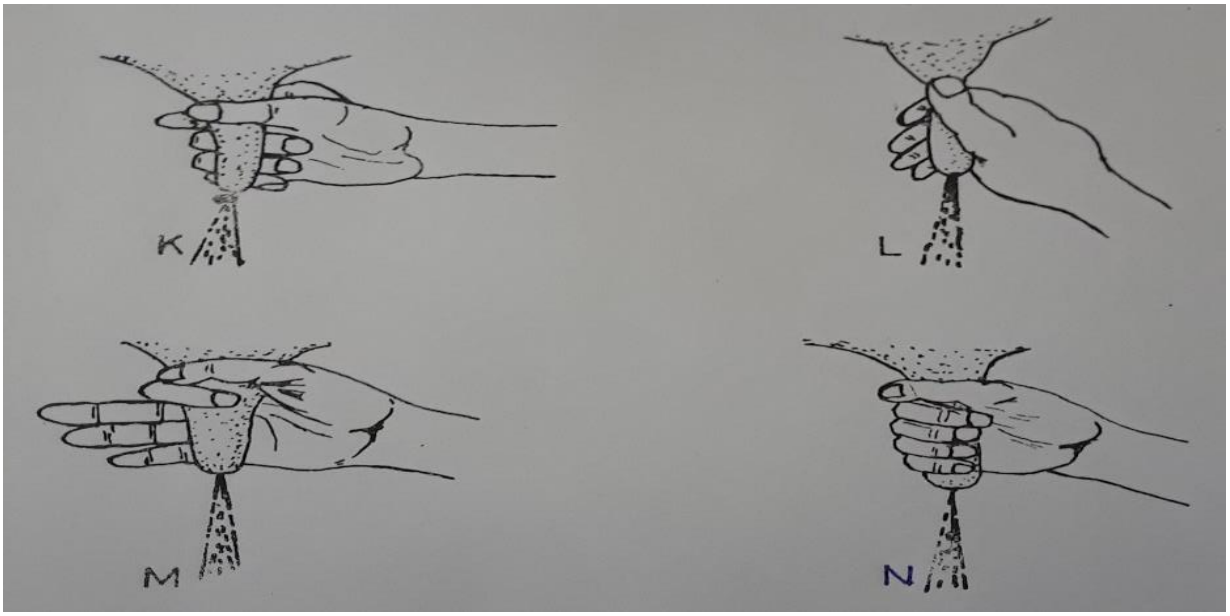
b) State **four** abnormalities in eggs that can be detected using the set-up above. **(2mks)**

c) How can a farmer improve the following?

i. Hardness of egg shells. **(1mk)**

ii. Yellowness of the egg yolk. **(1mk)**

24. The diagrams K, L, M and N below show four possible ways of drawing milk from the teat of a cow during milking.



a) Which diagram shows the proper way of drawing milk. **(1mk)**

b) How long should it take to milk a cow from the start to the end of milking. **(1mk)**

c) How would a milkman ensure that no milk remains in the udder at the end of milking? **(1mk)**

d) Give **two** practices carried out on milk immediately after milking. **(2mks)**

SECTION C (40MARKS)

25.a) Describe the advantages of battery cage system of rearing layers**.** **(10mks)**

b) State and explain **five** factors affecting milk production. **(10mks)**

26.a) State the functions of any **six** parts of a plunge dip. **(6mks)**

b) State and explain **four** ways through which power transmitted from the engine is made available for use. **(4mks)**

c) Explain **five** mechanical methods of controlling ticks. **(10mks)**

27.a) State **five** advantages of embryo transplant. **(5mks)**

b) Describe coccidiosis disease under the following sub- headings.

i. Animals attacked **(2mks)**

ii. Causal organism **(1mk)**

iii. Symptoms **(4mks)**

iv. Control measures **(3mks)**

c) A ration containing 20% DCP for growing chicks is to be obtained by mixing ground maize containing 10% DCP and fishmeal containing 50% DCP. Calculate the amount of each feedstuff in kilograms required to prepare 200kg of the feed.**(5mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 4 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

Paper 1

Time: 2Hours

INSTRUCTIONS TO CANDIDATES:

a) Write your **name** and **index number** in the space provided.
b) **Sign** and **write the date** of examination in the space provided
c) This paper consists of three section **A, B** and **C**.
d) Answer all questions in section **A** and **B**.
e) Answer any two questions in section C

FOR EXAMINERS USE ONLY

SECTION	QUESTINS	MAX SCORE	CANDIDATES SCORE
A	1-16	30	
B	17-20	20	
C	21	20	
	22	20	
	23	20	
TOTAL		90	

SECTION A (30MARKS)

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

1. Give four advantages of intensive farming. **(2mks)**

2. State four benefits of agroforestry to a maize crop. **(2mks)**

3. Name the plant part used for vegetative propagation of each of the following plants.

(i) Sisal **(½ mk)**

(ii) Pyrethrum **(½ mk)**

(iii) Sweet potatoes **(½ mk)**

(iv) Sugar cane **(½ mk)**

4. State four cultural ways of controlling couch grass **(2mks)**

5. Name three sources of underground water **(1½mks)**

6. State three causes of blossom end of rot in tomatoes **(1½mks)**

7. Give three qualities of a good green manuring plant **(1½mks)**

8. State four reasons for practicing minimum tillage. **(2mks)**

9. Name four farm records that should be kept by a poultry farmer. **(2mks)**

10. Give three ways in which pastures are classified **(1½mks)**

11. State four ways in which land reforms can be implemented in Kenya. **(2mks)**

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

13. Give four beneficial effects of weeds to a farmer. **(2mks)**

14. Give four advantages of practicing crop rotation. **(2mks)**

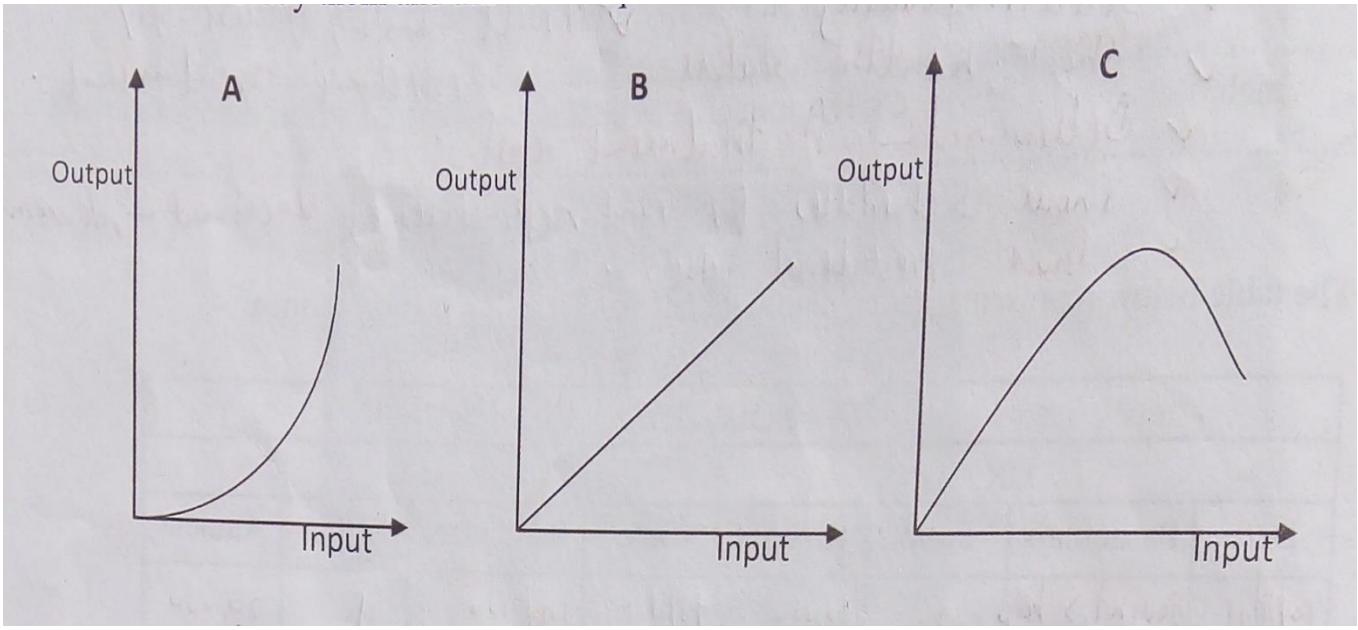
15. Name four methods of controlling pests. **(2mks)**

16. Distinguish between intensive hedgerow and border planting forms of agroforestry **(2mk)**

SECTION B (20 MARKS)

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

17. The following illustrations show different production function curves in agricultural economics. Study them and answer the questions which follows;



(a) Identify the production function curves labeled A, B and C

A ……..…….. **(1mk)**

B ……..…… **(1mk)**

C. ……. **(1mk)**

(b) What does the law derived from the production function labeled C state? **(1mk)**

(c)

(i) Which one of the three production functions curves is rare in Agriculture **(1mk)**

(ii) Give a reason for your answer in (i) above **(1mk)**

18. The table below shows the population and gross domestic products of countries A and B

Country	Gross Domestic product (million Ksh)	Population (million)
A	1800	36
B	1200	15

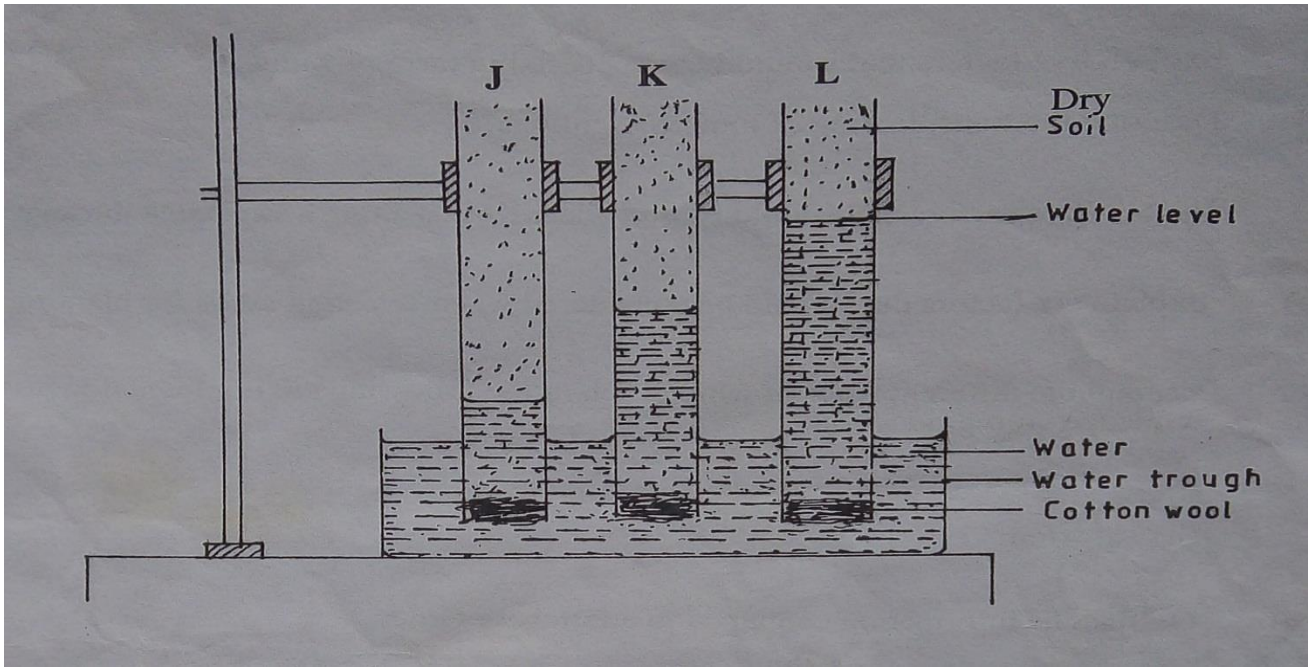
(a) Calculate the per capita income for each country show your working **(2mks)**

(b) Which of the two countries is more developed economically **(1mk)**

(c) Give a reason for your answer in (b) above **(1mk)**

(d) How can agriculture increase the gross domestic product of a country (1mk)

19. The diagram below illustrate investigation on a property of soil using soil samples labeled J, K and L.



(a) Name the property of soil being investigated **(1mk)**

(b) What is the relationship between the soil property above and the size of soil particles? **(1mk)**

(c) Which soil sample would be suitable for growing paddy rice? **(1mk)**

(d) Give a reason for your answer in (c) above **(1mk)**

20. The following is a list of nutrients: copper, calcium, nitrogen, molybodenum, zinc, phosphorus, carbon, sulphur, iron and magnesium. Which of the above nutrients are;

(a) Macro – nutrients **(1mk)**

(b) Micro – nutrient **(1mk)**

(c) Fertilizer elements **(1mk)**

(d) Liming elements **(1mk)**

(e) Primary macro nutrients **(1mk)**

SECTION C

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

21.

(a) Explain five functions of a live fence in a farm. **(5mks)**

(b) Describe various risks and uncertainties in crop farming **(10mks)**

(c) State five functions of young farmers clubs in Kenya **(5mks)**

22.

(a) Explain five factors that should be considered in farm planning **(10mks)**

(b) Explain the different ways in which each of the following environmental factors influence crop production.

(i) Wind **(5mks)**

(ii) Temperature **(5mks)**

23.

(a) Outline the information contained in a purchase order. **(5mks)**

(b) Describe the harvesting of tea **(7mks)**

(c) Explain the cultural methods of controlling soil erosion **(8mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 4 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

Paper 2

Time: 2Hours

INSTRUCTIONS TO CANDIDATES:

a) Write your **name** and **index number** in the space provided.

b) **Sign** and **write the date** of examination in the space provided

c) This paper consists of three section **A, B** and **C**.

d) Answer all questions in section **A** and **B**.

e) Answer any two questions in section C

FOR EXAMINERS USE ONLY

SECTION	QUESTINS	MAX SCORE	CANDIDATES SCORE
A	1-21	30	
B	22-24	20	
C	25	20	
	26	20	
	27	20	
TOTAL		90	

SECTION A (30MARKS)

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

1. Give **four** signs of ill health in livestock. **(2mks)**

2. List **four** materials that can be used in the construction of Kenya top bar hive. **(2mks)**

3. State **four** management practices carries out on a cows during parturition. **(2mks)**

4. Name four methods of controlling Newcastle disease in chicken **(2mks)**

5. State the role of the following practices when rearing piglets

(i) Iron injection. **(½mks)**

(ii) Tooth clipping **(½mks)**

6. State **two** functions of fats and oils in animals body. **(1mk)**

7. State **two** functions of a queen bee in a colony **(1mk)**

8. Name **four** species of fresh water fish reared in Kenya. **(2mks)**

9. State **two** forms in which tapeworms are found in livestock **(1mk)**

10. Give the distinguishing colour for each of the following breeds of livestock

(i) Chinchilla rabbit **(½mks)**

(ii) Toggen burg goat **(½mks)**

11. State **two** functions of ventilation in an animal house **(2mk)**

12. Give **two** reasons for using litter in a poultry house. **(2mk)**

13. State **one** role of each of the following ingredients as used in preparation of artificial colostrums. **(2mks)**

Castor oil

Cod liver oil

14. State four reasons for breeding animals. **(2mks)**

15. State the functions of each of the following

(a) Shovel **(½mks)**

(b) Strip cup **(½mks)**

16. Why is it necessary to have guard rails in a farrowing pen? **(1mk)**

17. Distinguish between the following practices as used in livestock production.

(a) Cropping and harvesting in fish farming **(1mk)**

(b) Crutching and ringing in sheep management **(1mk)**

18. State three instances when a bee keeper may handle bees. **(1½mks)**

19. State three functions of rumen in ruminant animals **(1½mks)**

20. Give two signs that indicate that a cow has died of anthrax. **(1mk)**

21. Why is it raddling essential in sheep management. **(1mk)**

SECTION B (20 MARKS)

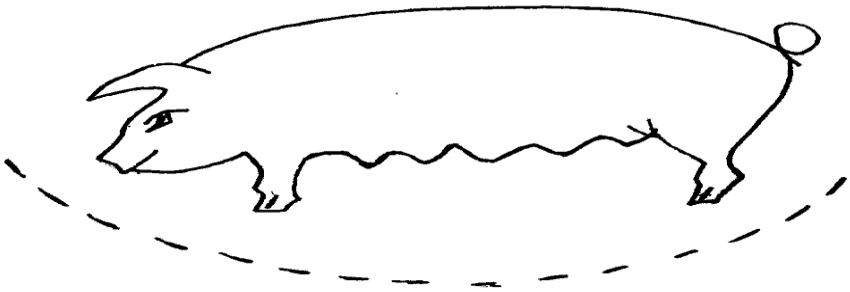
Answer all the questions in this section in the spaces provided.

22.

(a) If the maize meal contains 60% digestable crude protein (DCP) and Fish contains (64% DCP, calculate the amount of each feed stuff in Kilogrammes required to prepare 200kg of chickmash containing 18% DCP. **(4mks)**

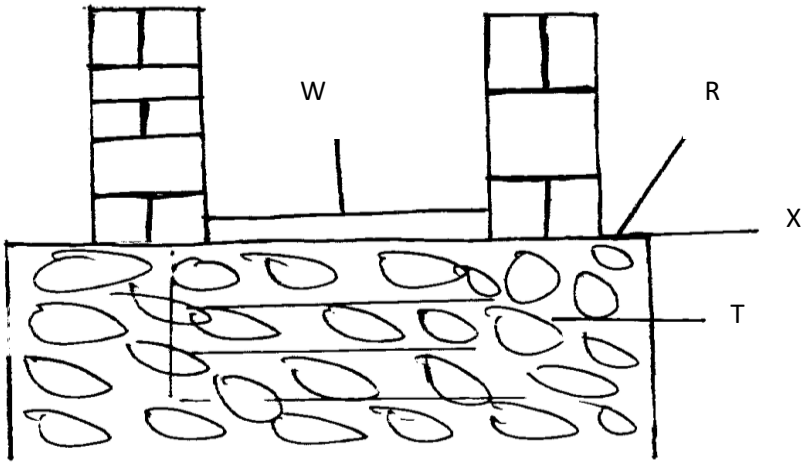
(b) Name two other feed ingredients which should be added to the chickmash to make it a balanced diet. **(2mks)**

23. The figure below is a pig with some body paints. Study it and answer the questions that follow.



(i) A farmer wants to select a breeding stock. State the three physical qualities the farmer should asses in order to select a pig. (3mks)

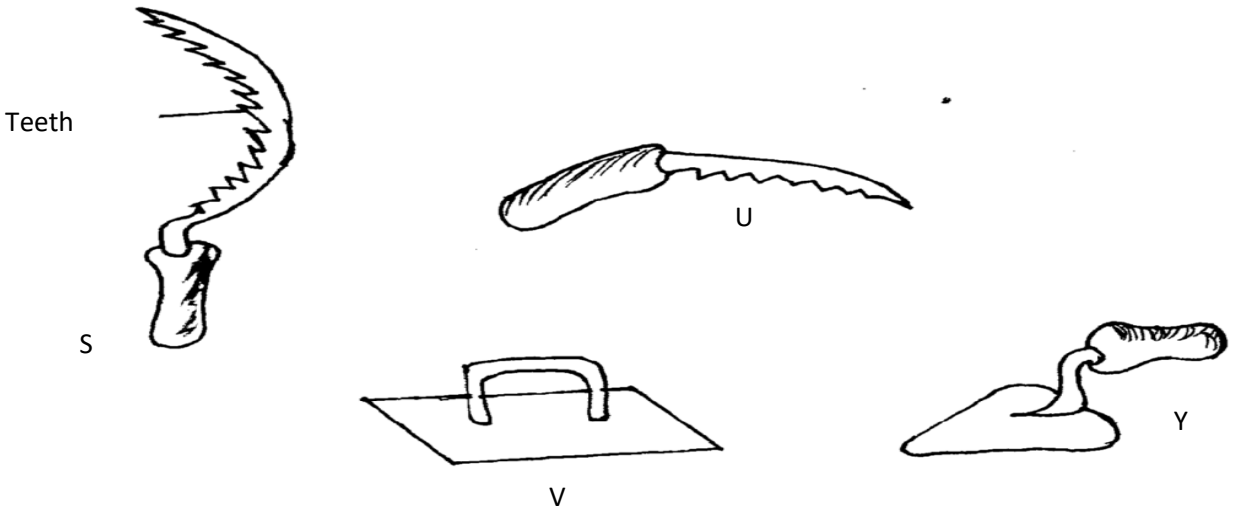
b) Study the illustration below of a hard flow foundation in a farm structure.



i) Name the parts labeled Rand T **(2mks)**

ii) State three advantages of concrete floor. **(3mks)**

24. The diagram below represents some farm tools



(a) State the use of each tool on the farm. **(4mks)**

S

……

U

……

V

……

Y

……

(b) Explain two maintenance practices that should be carried out on the teeth of tools in the diagram. **(2mks)**

SECTION C

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

25.

(a) Explain the factors considered when culling livestock. **(5mks)**

(b) Explain five factors considered when siting a cattle dip. **(5mks)**

(c) Give four conditions necessary for artificial incubation. **(4mks)**

(d) Outline the factors a farmer should consider to ensure fast and efficient cultivation by oxen. **(6mks)**

26.

(a) Describe East Coast Feaver (ECF) under the following sub headings.

(i) Animal attacked **(1mk)**

(ii) Causal organism **(1mk)**

(iii) Signs of infection **(5mks)**

(iv) Control measures **(3mks)**

(b) Explain seven factors that affect milk composition in a dairy farming. **(7mks)**

(c) State the advantages of a four stroke engine over a two stroke engine oil. **(3mks)**

27.

(a) Describe the feeding practices in artificial rearing of a dairy calf. **(10mks)**

(b) Describe the life cycle of a three host tick. **(10mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 5 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO…….……

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER 1

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- **a)** Write your name and index number in the spaces provided.
- **b)** Sign and write the date of examination in the spaces provided.
- **c)** This paper consists of three sections: A, B and C.
- **d)** Answer ALL the questions in Section A and B in the space provided.
- **e)** Answer any two questions in section C in the space provided.

For Examiners Use Only

SECTION	QUESTION	MAX SCORE	CANDIDATE SCORE
A	1 - 19	30	
B	20 - 25	20	
C	26	20	
	27	20	
	28	20	
	29	20	
TOTAL SCORE		90	

QUESTIONS

SECTION A: (30 MARKS)

Answer all questions in this section in the spaces provided.

1.(a) State **three** factors that determine the method used to harvest a crop. **(1½ marks)**

(b) Give **four** ways in which cereals are stored in Kenya. **(2 marks)**

2 .Outline **two** disadvantages of tenancy system in farming. **(1 mark)**

3. Outline **two** control measures of downy mildew in onions. **(1 mark)**

4. Name **two** pasture legumes grown in medium altitude zones **.(1 mark)**

5. Give **two** reasons why root pruning is done in the nursery management in agroforestry. **(1 mark)**

6. (a) Define the term joint products. **(1 mark)**

(b) Outline **two** examples of joint products in crop production. **(1 mark)**

7. State two benefits of optimum soil temperature in crop production. **(1mk)**

8. State four factors which determine the depth of ploughing. **(2mks)**

9 . Give two sub-branches of arable farming. **1mk**

10. Give two effects of scarcity in agricultural production. **(1mk)**

11. State two conditions that must exist for a market to be purely competitive. **(2mks)**

12. Name two types of pests with piercing and sucking mouth parts. **(1mk)**

13. Give four ways in which land reform can be implemented in Kenya. **(2 marks)**

14. Give four reasons why most farmers don't use green manure in crop production. **(2 mks)**

15. Name two crop production practices carried out after planting to achieve optimum plant population. **(1 mark)**

16. Name ***FOUR*** practices that increase light reaching a crop. **[2marks]**

17. State **three** functions of the coffee Board of Kenya **(1 ½ mks)**

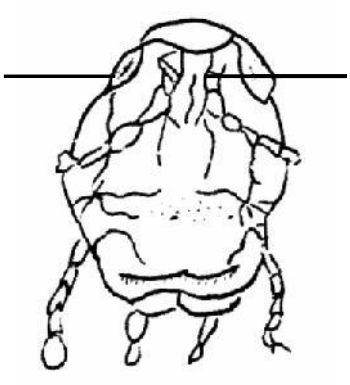
18 . Give four reasons why it is difficult to control Sodom apple (Solanum incanum**)** in pasture **(2mks)**

19. State four reasons for liming soils **(2 marks)**

SECTION B (20MARKS).

Answer all questions in the spaces provided.

20. Observe the diagram below and answer the questions that follow.



Mandible

Labrum

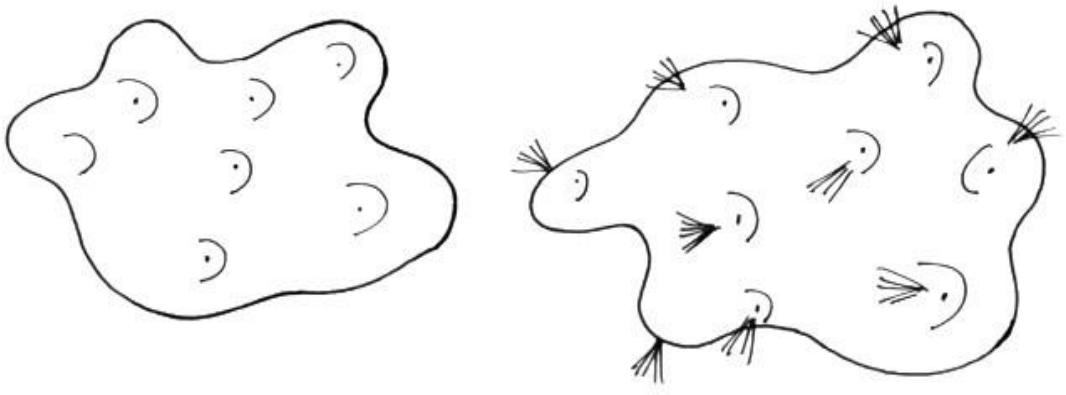
Labium

a) Identify the mode of feeding exhibited by a pest having such features. **(1 mark)**

b) Name any FOUR pests with the above feeding habits. **(2 marks)**

21. Below are two diagrams of Irish potato tubers after being subjected to some conditions before planting.

D1 D2



Before subjecting to the conditions After subjecting the conditions

i) Which process of potato treatment is illustrated above? **(1mk)**

ii) State **two** conditions necessary for the above process **(2mks).**

iii) Give **two** reasons for carrying out the above practice. **(2mks)**

22. a) Using the information on the table below answer the questions that follow.

Fertilizer input (units	Maize yield (bags)	Marginal products (bags)
0	50	-
1	62	12
2	66	4
3	68	2
4	69	1
5	69	0

a) The cost of fertilizer is sh.1500 per unit and the price of maize is sh.1200 per bag.

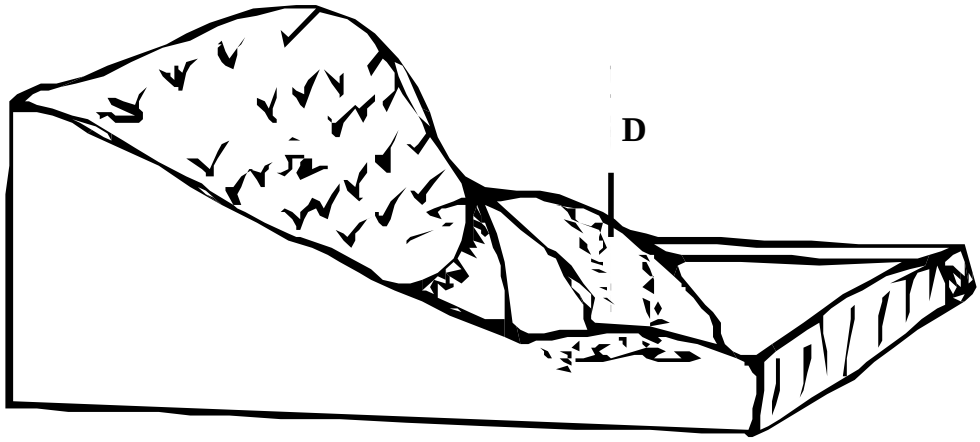
i) At what unit of fertilizer input should the farmer be advised to stop applying any more fertilizer to the maize ? **(1 mark)**

ii) Give reason for your answer in (i) above. **(1 mark)**

iv) Calculate the marginal return at the point of optimum production. **(1 mark)**

b) State the law of diminishing return in a production function. **(1 mark)**

23. The diagram below illustrates a physical method that is used to control soil erosion. Study it carefully and answer the questions that follow



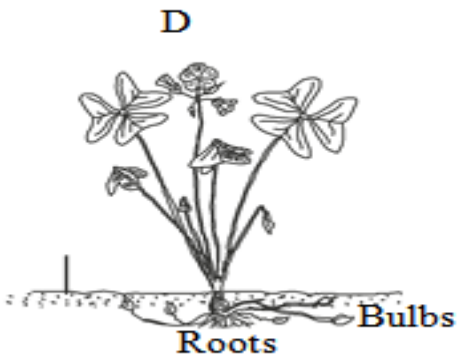
a) Name the physical soil erosion control method illustrated by the diagram above **(1 mk)**

b) Name the part labelled D on the diagram **(1 mk)**

c) State four places where water from the structure named in (a) above is discharged **(2 mks)**

24. The diagram below illustrate common weeds in arable land. Study them and answer the questions that follow.





a) Identify the weeds labelled D and C. **(2 marks)**

b) Classify the weed labeled C according to plant morphology. **(1 mark)**

c) Give one reason why it is difficult to control the weed labeled D. **(1 mark)**

SECTION C (40MARKS)

***Answer any two questions*.**

25 **[a]** Explain seven ways in which farmers adjust to risks and uncertainties in farming . **[7 marks]**

[b] Explain five qualities of a good farm manager. **[5 marks]**

[c] The following are expenses of Pioneer Farm in the year 2014.
Concentrates shillings 5500
Seeds shillings 4500
Fertilizer shillings 7000
Fuel shillings 2000
Disc harrow shillings 175000
The farmer sold wheat to millers for shillings 120000
Sold cabbages to the market for shillings 40000
Sold milk to school for shillings 30000
Sold poles to a saw mill for shillings 25000
The opening valuation was shillings 150000
The closing valuation was shillings 250000

i) Prepare a profit and loss account for Pioneer farm for the year ending December 2014 **[7 mark**

ii) Did the farm make a profit or a loss and of how much? **[1 mark]**

27. **a)** Describe the production of tomatoes under transplanting. **(5mks)**

b) Mention FIVE importance of organic matter in the soil. **(5 marks)**

c) State TEN uses of water in the farm. **(10 marks)**

29 **a)**Describe five management practices carried out on napier grass to maximize production. **(5mks)**

b)Explain five ways in which draining mashy/land encourage crop growth. **(5mks)**

c) Describe briefly the effects of mass wasting/solifluction. **(5mks)**

d) Explain five ways by which soil looses fertility **(5mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 5 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO ALL CANDIDATES

1. *Write your name and admission number in the spaces provided above.*
2. *This paper consists of three section A, B and C*
3. *Answer all questions in section A and B and any other questions in section C*
4. *Answers should be written in the spaces provided*

FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATES SCORE
A	30	
B	20	
C	40	
TOTAL	**90**	

QUESTIONS

1. State **four** signs of good health in a cow. **(2 mks)**

2. State **four** dairy cattle breeds reared in Kenya **(2 mks)**

3. State **four** advantages of embryo transplant **(2 mks)**

4. List **four** characteristics of a good dairy cow **(2 mks)**

5. Give **two** reasons why honey is harvested in the evening **(1 mk)**

6. State **two** methods recommended for identifying goats **(1 mk)**

7. State **two** advantages of using wood in farm buildings **(1 mk)**

8. State **four** characteristics of succulent roughage **(2 mks)**

9. What is the significance of microbial activities in the rumen? **(2 mks)**

10. State **four** factors that affect digestibility in livestock feeds **(2 mks)**

11. Name the tool used for the following functions **(1 mk)**

(a) Holding, tightening and loosening metallic pipes -

(b) Joining two ends of wire by winding it -

12. Name the livestock disease associated with deficiency of the following in the diet **(2 mks)**

(i) Iron -

(ii) Iodine -

(iii) Copper-

(iv) Magnesium -

13. List **two** methods of controlling rinderpest in cattle **(1 mk)]**

14. Name **two** functions of crop in digestive system of chicken **(1 mk)**

15. State **three** differences between dromedary and bactrian camel **(1 mk)**

16. State **two** reasons why maintenance of farm structures is important. **(1 mark**

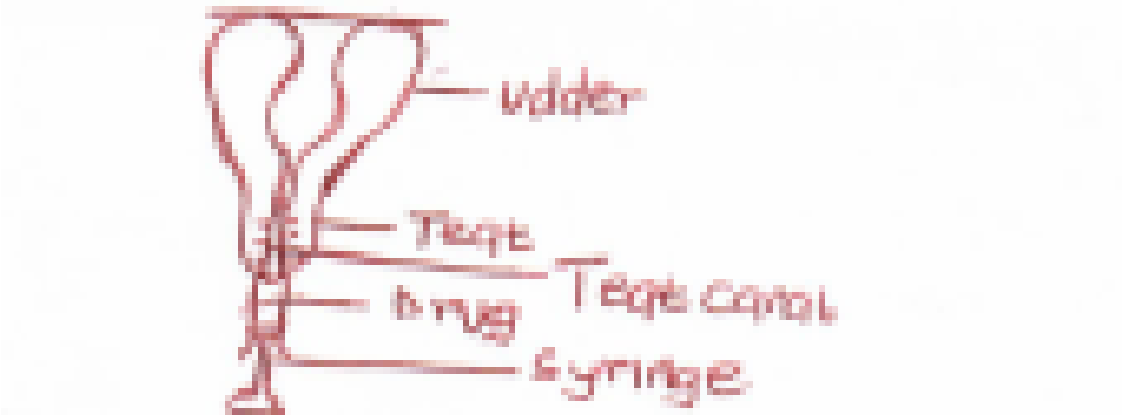
17. Name **two** kinds of livestock which can be castrated using a rubber ring **(1 mk)**

18. Name **two** ways of improving milk production in a herd of indigenous dairy goats **(1 mk)**

19. Outline **four** advantages of Kenya Top Bar Hive over the log hive **(2 mks)**

SECTION B – 20 MARKS

20. The diagram below illustrates a routine practice carried out to control a certain livestock disease. Study and answer the questions that follow.



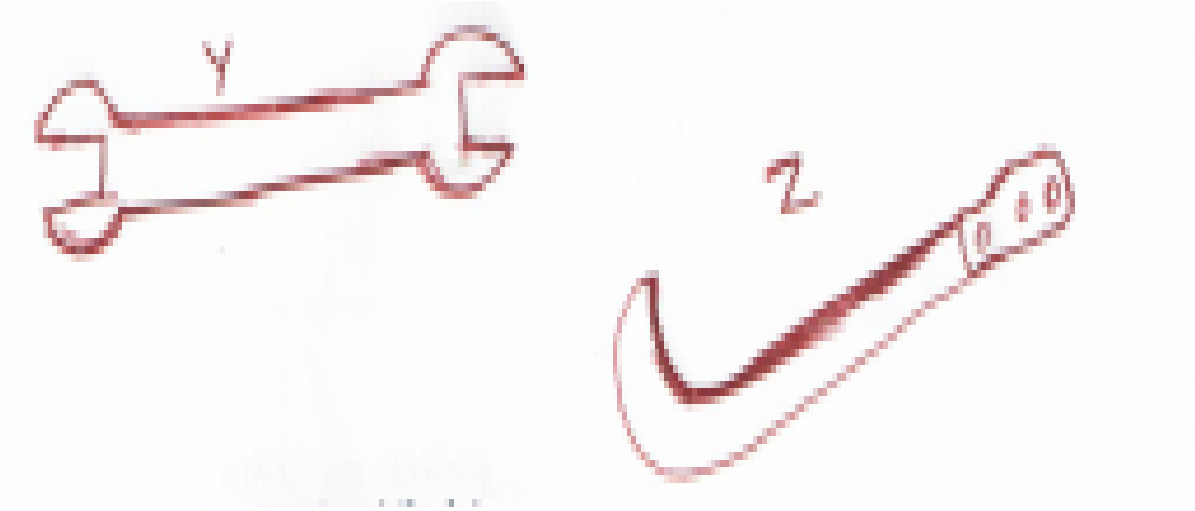
(a) Identify the practice **(1 mk)**

(b) Name the disease that is controlled by the above practice **(1 mk)**

(c) State **two** symptoms of the disease controlled by the practice above **(2 mks)**

(d) State **two** predisposing factors of the disease controlled by practice above **(2 mks)**

21. Study the farm tools below and answer the questions that follow.



(a) Identify each tool **(2 mks)**

(b) State the functions of each tool **(2 mks)**

(c) State **two** maintenances practices carried out on the tool marked Z. **(2 mks)**

22. The diagrams below shows livestock parasites. Examine them and answer the questions that follow. **(2 mks)**



(a) Identify each parasite **(2 mks)**

(i) L –

(ii) M –

(b) State **two** negative effects on animals caused by each of the parasites **(4 mks)**

L

(i) ……...

(ii) ……

M

(i) ……

(ii) ……..

(c) State **one** method of control for each parasite **(2 mks)**

(i) ……

SECTION C (40 MARKS)

Answer any TWO questions from this section in the answer booklet provided

23.(a) Describe the working principles of a four stroke cycle of a petrol engine **(12 mks)**

(b). State the components of power transmission system and one function of each component **(8 mks)**

24.(a) Discuss Newcastle disease under the following sub headings

(i) Causal organisms **(1 mk)**

(ii) Signs of attack **(7 mks)**

(iii) Control measures **(2 mks)**

(b). Outline the various management practices in a fish pond that ensure maximum yields of fish **(5 mks)**

©State **five** disadvantages of free range system of rearing poultry **(5 mks)**

25.(a) Describe **six** advantages of artificial insemination over natural **(6 mks)**

(b). List **four** types of fences **(4 mks)**

© Describe the advantages of fences **(10 mk)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 6 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER1

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

a) Write your name and index number in the spaces provided above.
b) Sign and write the date of examination in space provided.
c) This paper consists of three sections; A, B and C.
d) Answer all the questions in section A and B.
e) Answer any two questions in section C.

FOR EXAMINER'S USE ONLY

SECTION	Question	Maximum score	Candidates score
A	1 - 15	30	
B	16 - 19	20	
C		20	
		20	
	Total score	**90**	

SECTION A:(30MKS)

Answer all the questions in this section.

1. State four advantages of intensive system of farming. **(2mks)**

2. Give four conditions likely to facilitate land fragmentation. **(2mks)**

3. **a)** List four post harvest practices done on crops. **(2mks)**

b) What is earthing up in crop production. **(1mk)**

4. Give four reasons as to why burning as a method of bush clearing is not recommended. **(2mks)**

5. a) Give the form in which the following elements are available to plants **(1mk)**

i) Nitrogen

ii) Sulphur

b) State two liming elements in crop production. **(1mk)**

6. State four effects of ill – health and HIV /AIDs in agricultural production **(2mks)**

7. State the functions of the following components in a compost heap. **(2mks)**

i) Ash

ii) Garden soil

iii) Organic manure

iv) Stick

8. State four factors that can enhance rooting in a stem cuttings. **(2mks)**

9. Outline four reasons a farmer should have breeding records in livestock production. **(2mks)**

10. Give four ways of treating water for use in the farm. **(2mks)**

11. Name four methods of harvesting trees. **(2mks)**

12. Give two methods of conserving forage. **(1mk)**

13. State four roles of young farmers clubs in Kenya. **(2mks)**

14. a) Distinguish between farm planning and farm budgeting**.** **(1mk)**

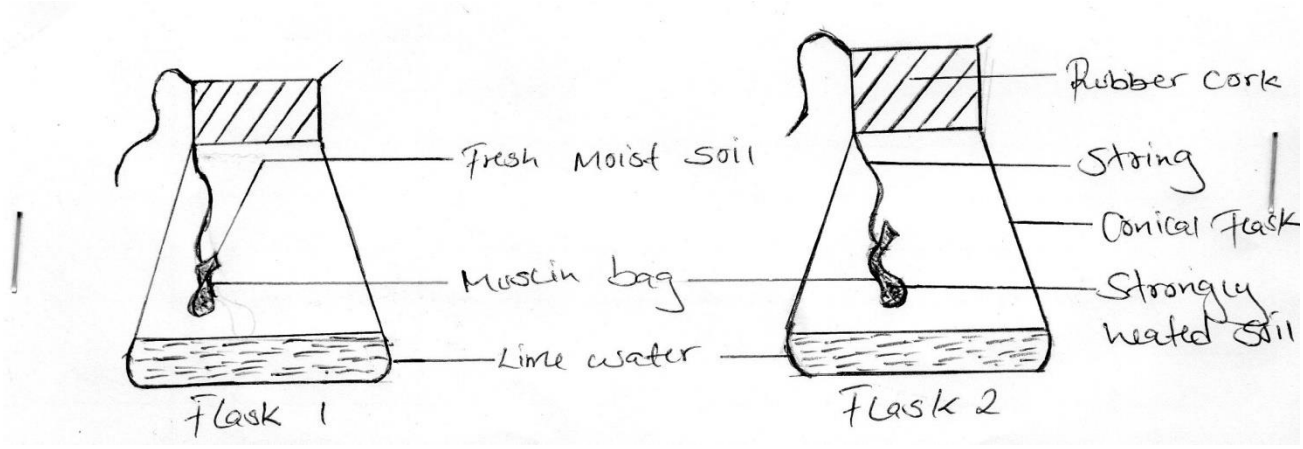
b) Name two sources of capital in the farm. **(1mk)**

15. State four advantages of budding. **(2mks)**

SECTION B: (20MKS)

Answer all questions in this section.

16. The diagrams below show an experiment that was carried out by Mwatate agriculture students. Study it carefully and answer the questions that follow.



a) What was the aim of the experiment. **(1mk)**

b) What observation did the students make in the two flasks at the end of the experiment. **(2mks)**

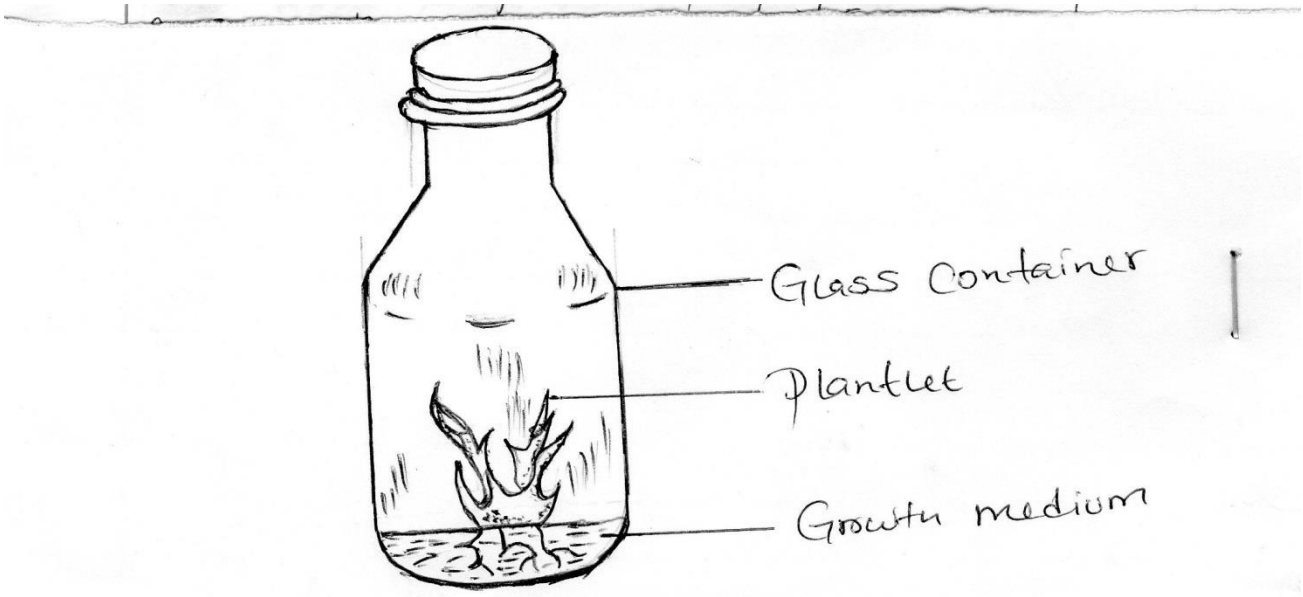
Flask 1……..

Flask 2……..

c) Give a reason for the observation made in flask 1 **(1mk)**

d) Why did the students heat the garden soil in flask 2 strongly? **(1mk)**

17. The diagram below illustrate materials, and a method of vegetative propagation. Study it and answer the questions that follow.

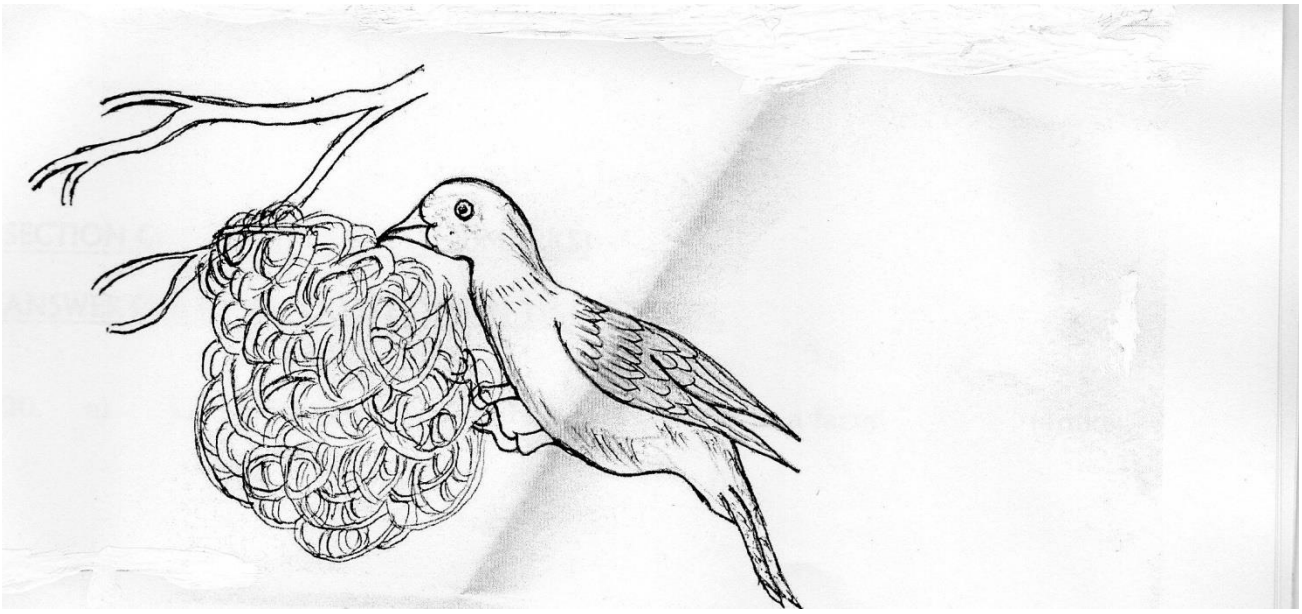


i) Identify the method of propagation illustrated above. **(1mk)**

ii) Name a common crop propagated through the method**.** **(1mk)**

iii) Give three disadvantages of this method of propagation. **(3mks)**

18. The diagram below shows a bird which is a field crop. Study it and answer the question that follow.



a) Identify the pest **(1mk)**

b) State two damages caused to crops by the pest. **(2mks)**

c) Give two methods which can be used to control the pest. **(2mks)**

19. **a)**Given that the spacing of coffee is 2.7m by 2.7m, calculate the plant population in 1 hectare (Ha) of land **(2mks)**

b)Give three reasons why crops should be planted at the correct spacing **(3mks)**

SECTION C: (40MARKS)

ANSWER ONLY TWO QUESTIONS IN THIS SECTION.

20. **a)** List various methods of harvesting water in a farm. **(4mks)**

b) Outline farming activities which may encourage soil erosion**.** **(6mks)**

c) Explain five farming practices that would help to conserve soil**.** **(10mks)**

21. Describe the field production of tomato under the following sub – headings

i) Seedbed preparation **(3mks)**

ii) Transplanting **(5mks)**

iii) Fertilizer application **(2mks)**

iv) Pruning **(2mks)**

b) Explain how various field practices carried out in crop production would help to control diseases. **(6mks)**

22. Maboya farm started the year on and as at 31/12/2018 had following transactions.

Sale of poultry	5,000.00
Opening valuation	10,000.00
Purchase of seeds	2,800.00
Purchase of fertilizer	2,000.00
Sale of beans	1,200.00
Sale of vegetables	500.00
Closing valuations	15,000.00
Casual labourers (wages)	2,500.00
Depreciation (tractors)	500.00
Interest (borrowed laon)	400.00
Purchase of day old chicks	800.00
Sale of milk	6,000.00
Purchase of calves	10,000.00
Miscellaneous expenses	1,000.00

a) Prepare a profit and loss account for Maboga farm**.** **(10mks)**

b) Did the farm qualify for credit? Give one reason for your answer. **(2mks)**

c) Explain four roles of agriculture in national development **(8mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 6 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

Instructions to Candidates:

a) Write your name and index number in the spaces provided above.
b) Sign and write the date of examination in space provided.
c) This paper consists of three sections; A, B and C.
d) Answer all the questions in section A and B.
e) Answer any two questions in section C.

FOR EXAMINER'S USE ONLY

SECTION	Question	Maximum score	Candidates score
A	1 - 15	30	
B	16 - 19	20	
C		20	
		20	
	Total score	**90**	

SECTION A: (30MKS)

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

1. Give four categories of infections diseases in livestock. **(2mks)**

2. **a)** Name 4 methods of identification used by livestock farmers**.** **(2mks)**

b) State 4 reasons for carrying out identification of animals. **(2mks)**

3. Distinguish between the following breeds of livestock. **(2mks)**

a) Large white and landrace

b) Newzeland white and California white

4. a) Define the term digestability. **(1mk)**

b)State two factors that determine the amount of food given to an animal **(1mk)**

5. State 4 causes of vices in poultry **(2mks)**

6. Name 4 notifiable diseases in cattle. **(2mks)**

7. State 4 a routes through which disease causing micro – organisms enter the animals body. **(2mks)**

8. State 4 structural features of ideal calf pen. **(2mks)**

9. Name three types of lubrication systems. **(1 ½ mks)**

10. Name the tool required for each of the following operation. **(2mks)**

i) Cutting wool from sheep

ii) Castrating piglet

iii) Cutting threads of metallic pipes

iv) placing mortar between construction stones.

11. State 4 effects of external parasite attack to livestock. **(2mks)**

12. **a)** Name two causes of chicken laying soft – shelled eggs or eggs without Shells. **(1mk)**

b) How can the above problem be overcomed in birds. **(1 ½ mk)**

13. Name four qualities of clean milk. **(2mks)**

14. Give three methods used in selection of livestock. **(1 ½ mks)**

15. State the functions of the following in a petrol engine. **(1 ½ mks)**

i) Carburetor

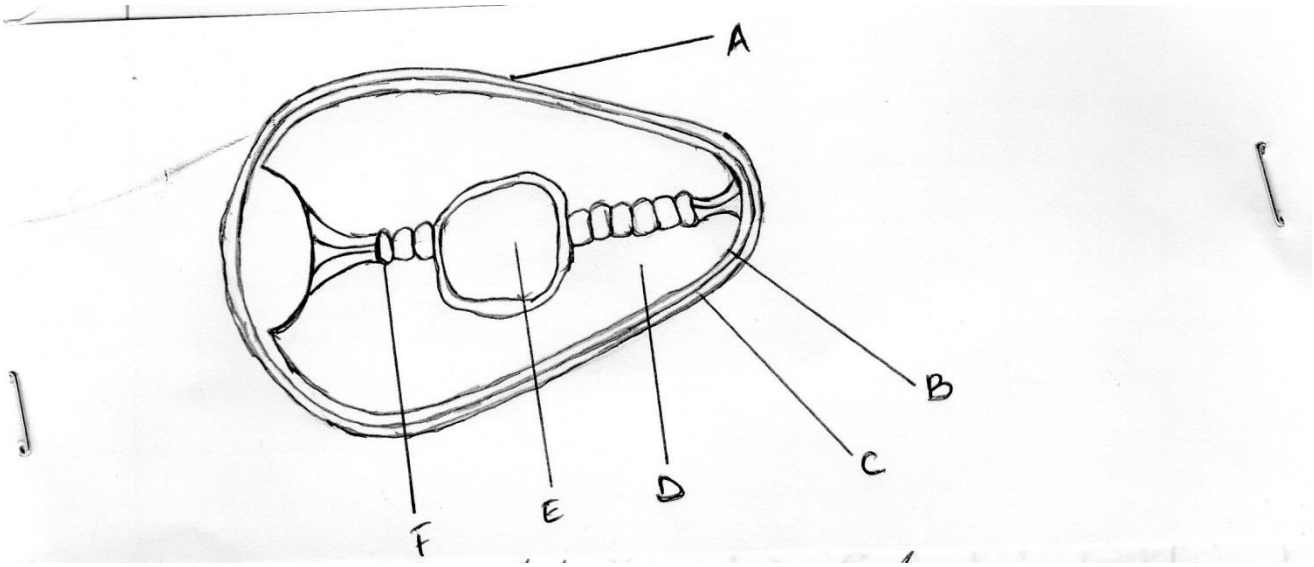
ii) radiator

iii) thermostat

SECTION B:(20MKS)

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

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



a) Name the parts labellled B, C, D and F **(2mks)**

B

C

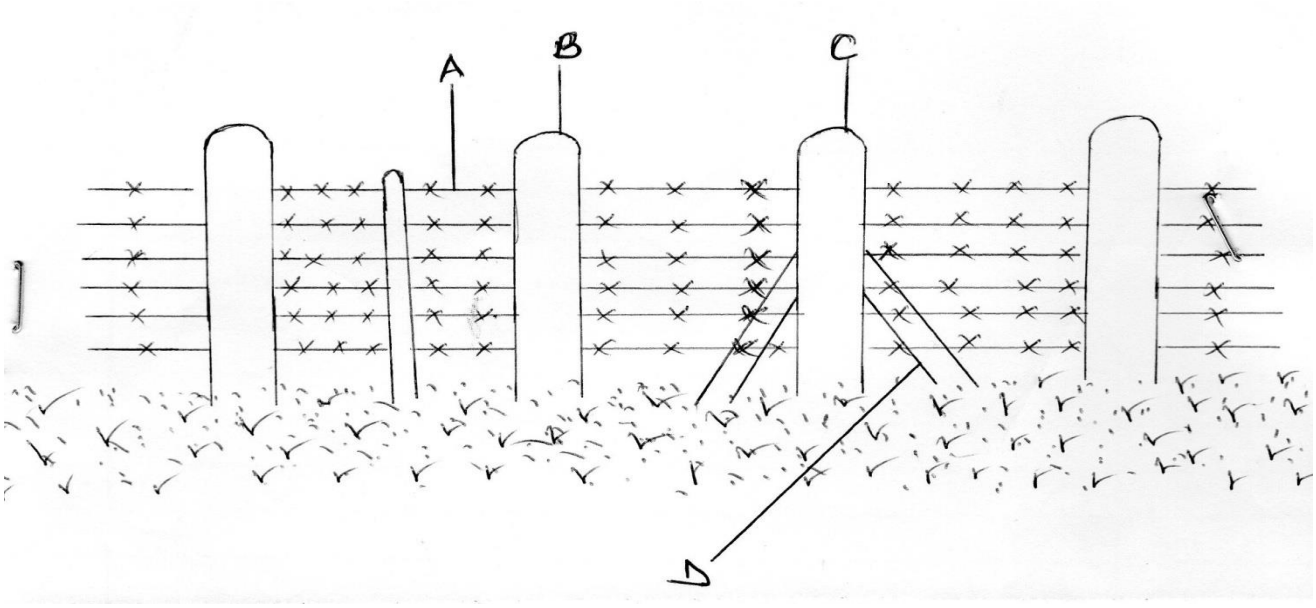
D

F

b) State two qualities of the part labeled A that should be considered when selecting eggs for incubation. **(2mks)**

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

17. The diagram below represents an important farm structure study it and answer the questions that follow.



i) Identify the farm structure. **(1mk)**

ii) label the parts A, B, C, D **(2mks)**

A

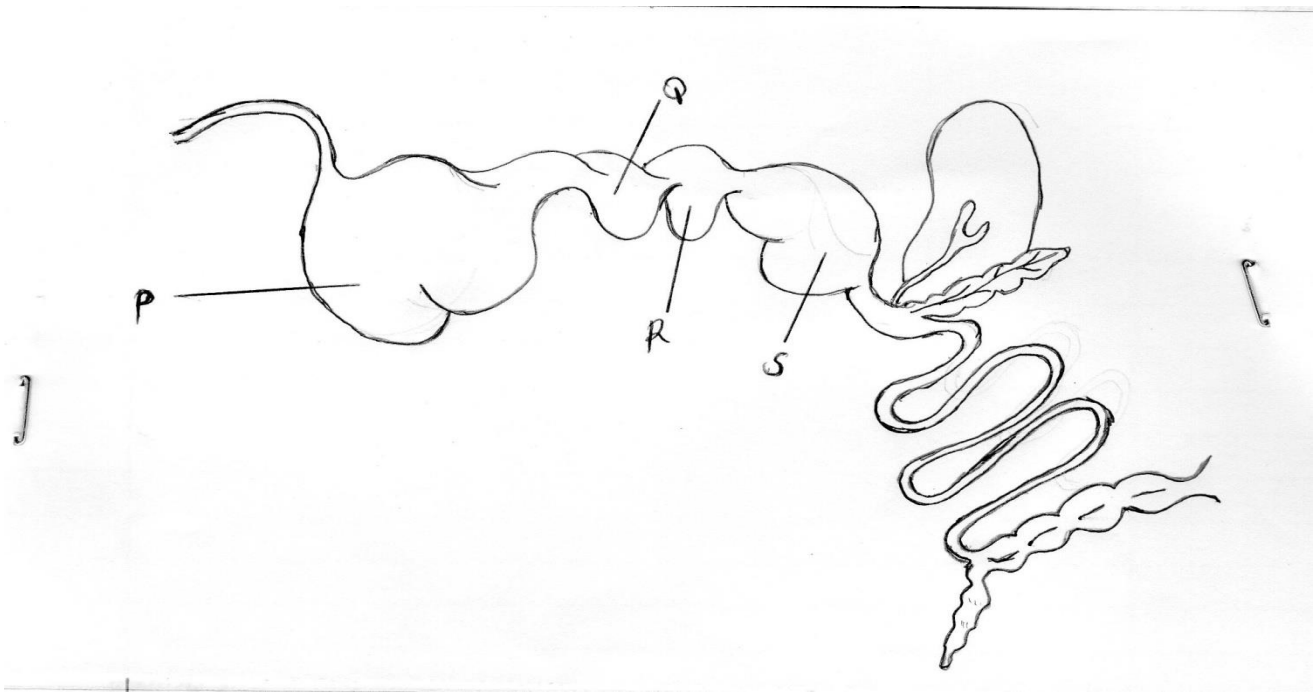
B

C

D

iii) State two maintenance practices carried out in the structure above **(2mks)**

18. Study the diagram of the digestive system of a farm animal shown below and answer the question that follow.



a) Name the parts labelled **(2mks)**

P

Q

R

S

b) State the function of the part labelled R **(1mk)**

c) Give two reasons why livestock with the above parts are able to digest cellulose food material. **(1mk)**

d) In which part would nylon paper be found if fed on by an animal with the above digestive system. **((1mk)**

19. a) A dairy cow weighing 400kg live weight requires 3% of its body weight dry matter (Dm per day). However the cow only gets 50% of its daily Dm requirements from grazing field. How much concentrates (80% dm) should the farmer supplement to its dairy requirements. Show your workings. **(3mks)**

b) Give two effects of overstocking in pasture management . **(2mks)**

SECTION C :(40 MARKS)

Answer any two questions in this section.

20. a) Explain five factors to consider when selecting a breeding stock. **(10mks)**

b) Describe the general methods of disease control in livestock. **(10mks)**

21. a) Discuss foot and mouth disease under the following headings:

i) Casual organisms **(1mk)**

ii) Livestock species attacked **(2mks)**

iii) Sympotms of attack **(4mks)**

iv) Control measures **(3mks)**

b) Describe the life cycle of one host tick. **(10mks)**

22. a) Differentiate between Disc plough and mould board plough. **(5mks)**

b) State five disadvantages of animal – drawn implements as compared to tractor – drawn implements. **(5mks)**

c) Explain five reasons for maintaining farm tools and equipments. **(10mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 7 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER 1

TIME: 2HRS

INSTRUCTIONS TO ALL CANDIDATES:

a) *Write your name and admission number in the spaces provided.*
b) *This paper consists of section A, B and C.*
c) *Answer all questions in section A and B and any TWO questions in section C in the spaces provided.*

FOR EXAMINER USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1-17	30	
B	18-21	20	
C	22-24	40	
	TOTAL	90	

SECTION A (30 MKS).

ANSWER ALL QUESTIONS IN THE SPACES PROVIDED

1. Give four benefits of practicing organic farming. **(2mks)**

2. Give four reasons why land should be prepared early in readiness for planting. **(2mks)**

3. List three particulars of the land owner which are included in the land title deed. **(1 ½ mks**

4. Name three ways of carrying out overhead irrigation in the farm. **(1 ½ mks)**

5. Outline four indicators of well rotten compost manure. **(2mks)**

6. Give four advantages of rotational grazing. **(2mks)**

7. List four ways through which soil PH influences crop production**.** **(2mks)**

8. Give two reasons for carrying out each of the following operations in the land.

a) Rolling **(1mk)**

b) Levelling **(1mk)**

9. Give four characteristics of variable inputs. **(2mks)**

10. State three ways by which plant nutrients may be lost from the soil. **(1 ½ mks)**

11. Give two activities carried out during hardening off tomato seedlings. **(1mk)**

12. List down four types of financial books farmers should keep. **(2mks)**

13. Outline four factors that affect the effectiveness of a pesticide. **(2mks)**

14. Give four factors that affect the quality of silage. **(2mks)**

15. Differentiate between soil texture and soil structure. **(1mk)**

16. Give three reasons why seed selection is important in the establishment of crops. **(1 ½ mks)**

17. State four factors that affect elasticity of demand. **(2mks)**

SECTION B (20MKS)

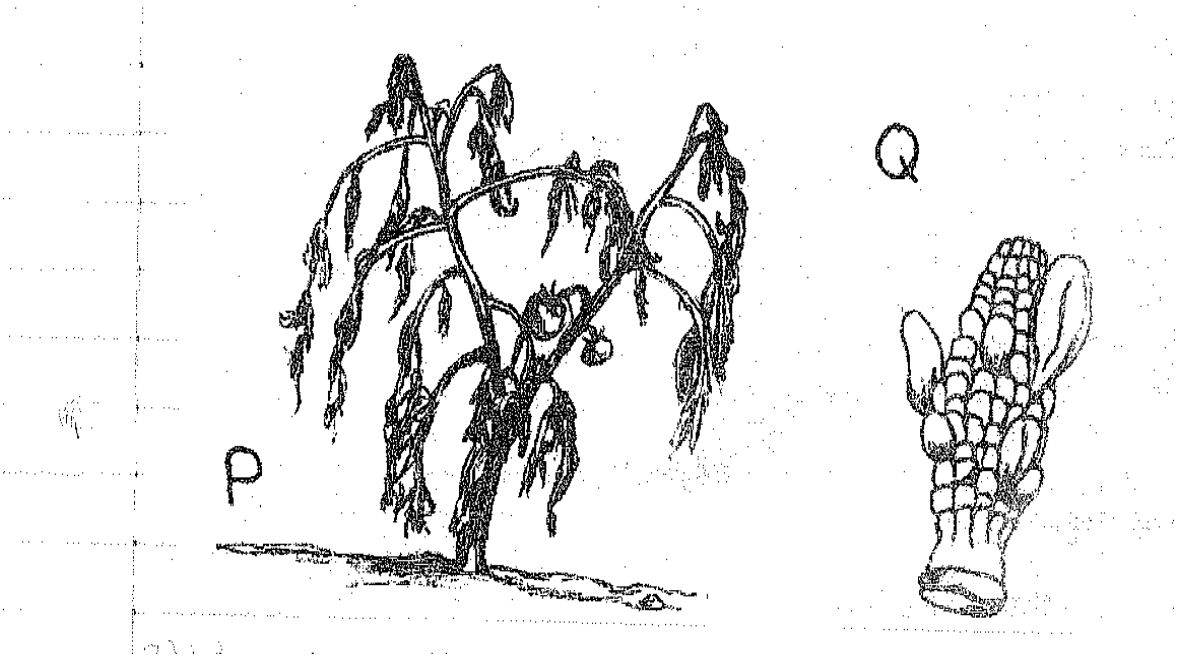
. ANSWER ALL QUESTIONS IN THE SPACES PROVIDED.

18. The transaction below shows Mr Mukindias financial position in his farm business for the year 2004.

	Ksh
Purchase of pesticides	3,000
Milk sales -	8,000
Sale of goats	5,000
Closing valuation	16,000
Interest payable	1,750
Veterinary bills	1,400
Opening valuation	12,000
Wages	10,000
Depreciation of machinery	3,000
Sale of one heifer	1,000

Prepare a profit and loss account for Mr Mukindia'a farm. **(5mks)**

19. The diagram below illustrates crop diseases, study the diagrams carefully and answer the questions that follow.



a) Identify the crop disease illustrate in the diagrams.

P:_____(1mk)

Q:_____(1mk)

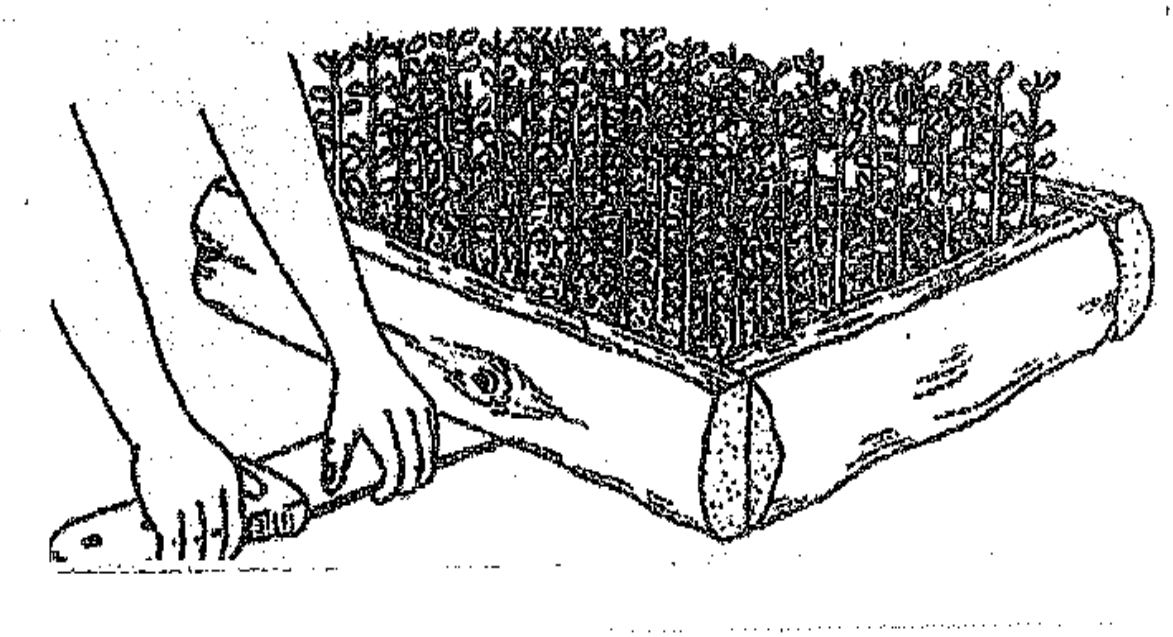
b) Give the causative agent for each of the diseases illustrated above.

P_____(1mk)

Q_____ (1mk)

c) State one cultural method used in the control of disease illustrated by Q.(1mk)

20.Below is an illustration of an activity carried out in agroforestry.

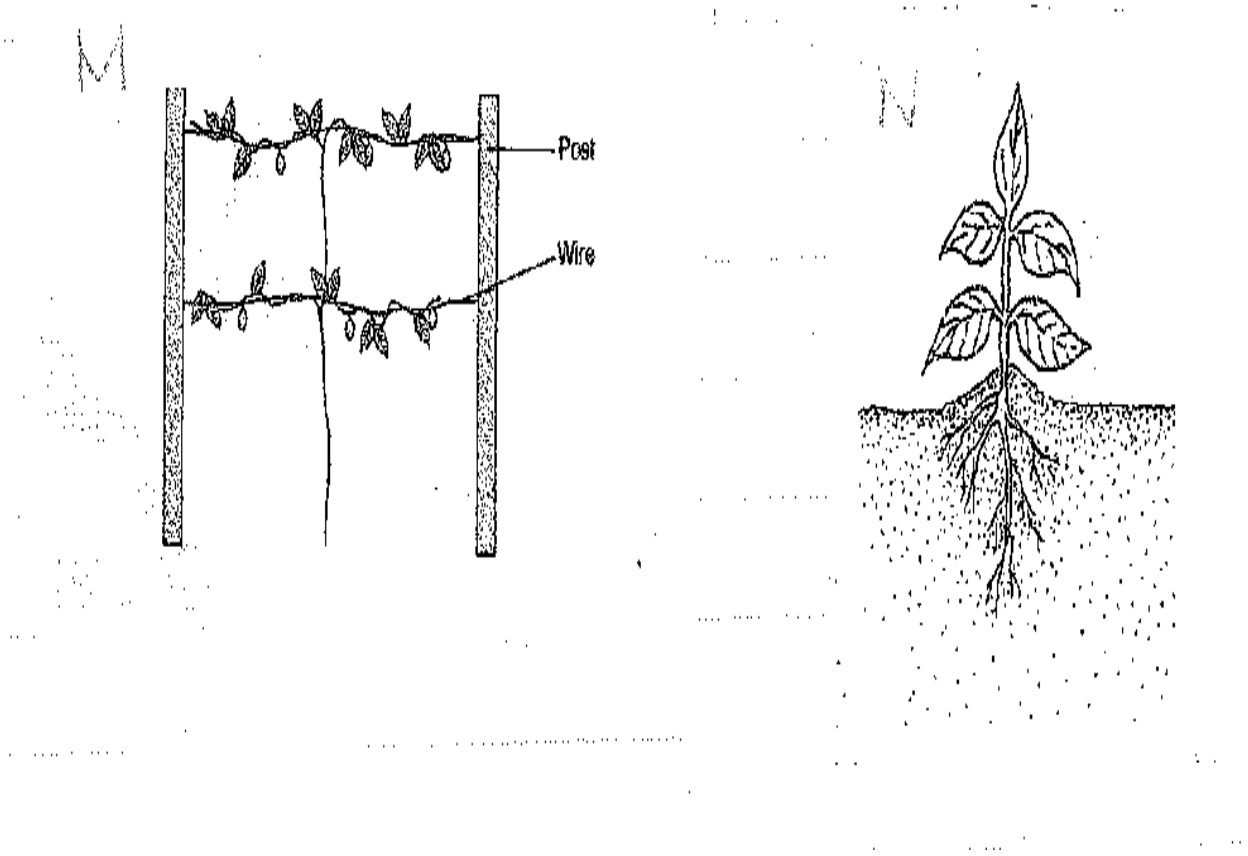


a) Identify the activity being carried out in the above diagram**.** **(1mk)**

b) State two reasons for carrying out the activity identified above **.(2mks)**

c) Name two tools that may be used to carry out the activity in (a) above**.** **(2mks)**

21. The diagrams below illustrate field management practices. Study them carefully and answer the questions that follow.



a) Identify the field practices.

M_____ (1mk)

N_____(1mk)

b) Name a crop that can be managed using management (M) above. **(1mk)**

c) Give one reason for carrying out each of the management practices above**. (2mks)**

M_____

N_____

SECTION C (40MKS)

ANSWER ANY TWO QUESTIONS IN THE SPACES PROVIDED.

22a) State and explain any five cultural method of controlling weeds**.** **(10mks)**

b) Outline six ways in which wind negatively affects agricultural production**. (6mks)**

c) Explain four factors that influence the depth of planting crops. **(4mks)**

23a) Explain eight factors that encourage soil erosion. **(8mks)**

b) Describe seven management practices that should be carried out on a vegetable nursery after sowing until the seedlings are ready for transplanting. **(7mks)**

c) Describe the harvesting of sugarcane. **(5mks)**

24a) Outline the characteristics of ideal agro-forestry tree species**.** **(6mks)**

b) Describe the establishment of cabbages under the following subheadings.

i)Land preparation **(3mks)**

ii)Transplanting **(7mks)**

c) Explain the harvesting of bulb onions**.** **(4mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 7 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2HRS

INSTRUCTIONS TO ALL CANDIDATES:

- ***a)*** *Write your name and admission number in the spaces provided.*
- ***b)*** *This paper consists of section A, B and C.*
- ***c)*** *Answer all questions in section A and B and any TWO questions in section C in the spaces provided.*

FOR EXAMINER USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1-17	30	
B	18-21	20	
C	22-24	40	
	TOTAL	90	

SECTION A (30 MKS)

Answer All Questions In The Spaces Provided.

1. State three harmful effects of ticks on a cow. **(1½mks)**

2. Outline four ways which farmers can control mastitis in a herd of dairy animals.

(2mks)

3. Name three channels through which Kenyan beef farmers can market their products.

(1½ mks)

4. Differentiate between drift lambing and pen lambing in sheep management.**(2mks)**

5. a) Outline two factors that lower the quality of concrete. **(1mk)**

b) Give two reasons for treating timber for construction of a farm building. **(1mk)**

6. A student from Macmillan Academy saw a brown cow with a white patch on the face, leg, parts below the knees and hocks, tail switch and flanks. Identify the breed of the cow.

(1 ½ mks)

7. Give three functions of the rumen in food digestion in cattle. **(1 ½ mks)**

8. Name four tools that are used when laying foundation of a farm building. **(2mks)**

9. State four factors considered when sitting a fish pond. **(2mks)**

10. State the functional difference between a cold chisel and tin snip. **(1mk)**

11. Give four benefits a farmer gets by dehorning his cattle. **(2mks)**

12. State four characteristics of the African wild bee.(Apis mellifera adansonii) **(2mks)**

13. State four factors considered in selecting a gilt for breeding stock. (**2mks)**

14. Name four methods of identification in livestock. **(2mks)**

15. Distinguish between crutching and ringing as used in sheep management. **(2mks**)

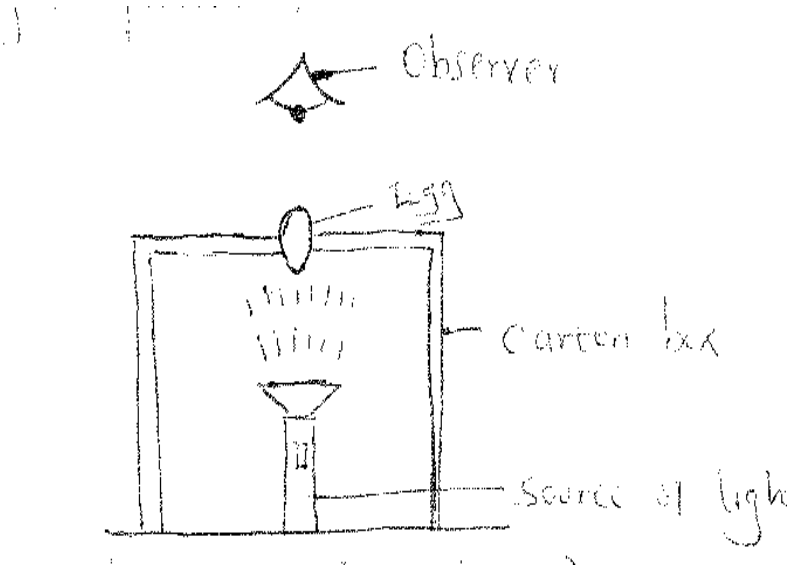
16. State four factors affecting digestibility in livestock. **(2mks)**

17. Outline four details that should be included a pig breeding record. **(2mks)**

SECTION B (20MKS)

ANSWER ALL QUEESTIONS IN THE SPACES PROVIDED.

18. The diagram below shows a practice carried out in poultry production.

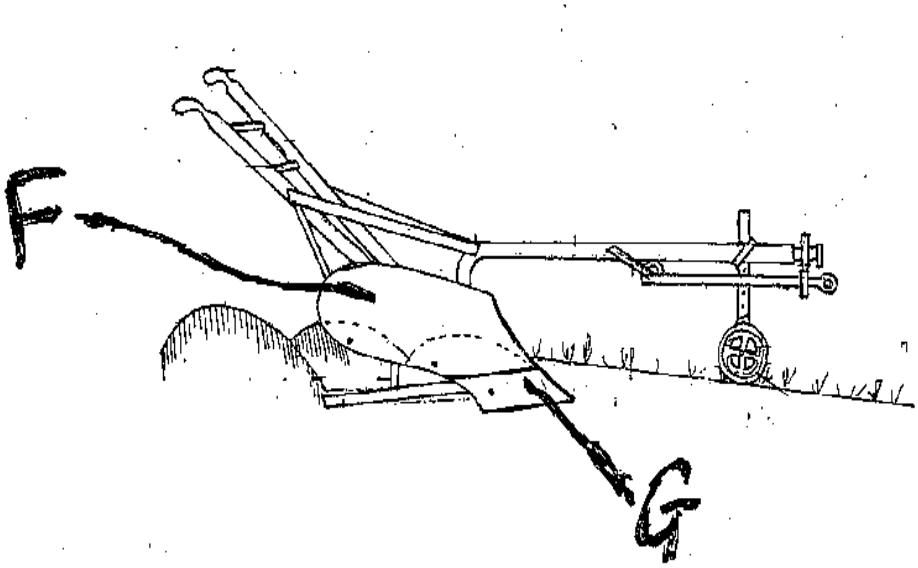


a) Identify the practice. **(1mk)**

b) Give two abnormalities in an egg that can be observed when using the practice **(2mks)**

c) Give two observations of a fertile egg that can be observed after seven days when using the practice above. **(2mks)**

19. The following is an illustration of an ox-plough, use it to answer the questions that follow



a) Name the parts labeled F and G

F _____ ½ mks

G _____ ½ mks

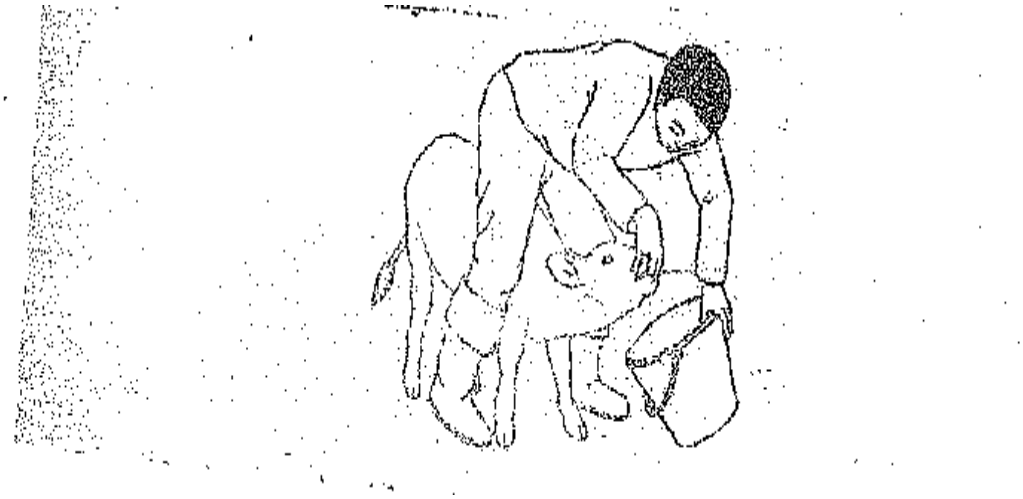
b) State the function of the parts labeled F and G

F _____ 1mk

G _____1mk

c)List two situations in which the above implement would be more useful than a tractor. **(2mks)**

20. The diagram below illustrates a calf rearing practice.

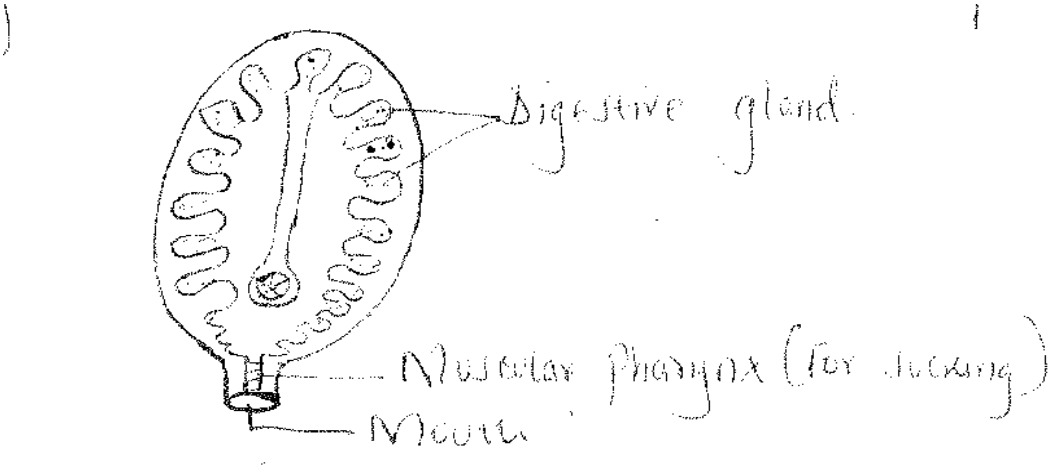


a) Identify the practice illustrated above. **(1mk)**

b) Give one precaution taken while using the rearing practice stated in (a) above. **(1mk)**

c) Enumerate three advantages of carrying out above practice. **(3mks)**

21. The following is a illustration of an internal parasite.



a) Identify the parasite**.** **(1mk)**

b) Name the final host of the above parasite**.** **(1mk)**

c) Describe the control measures of the above parasites. **(3mks)**

SECTION C (40MKS)

Answer Any Two Questions In This Section In The Space Provided.

22. a) Explain the problems that affect dairy farming in Kenya**.** **(6mks)**

b) Describe five management practices that ensure clean milk production in a dairy farm. **(5mks)**

c) Describe milk fever disease under the following subheadings.

i) Animals attacked. **(2mks)**

ii) Symptoms **(4mks)**

iii) Control measures **(3mks)**

23. a) Describe causes of egg eating in a flock of layers**.** **(6mks)**

c) Describe the maintenance practices carried out on a tractor before it is put to daily use. **(6mks)**

c) Explain the uses of farm fences. **(6mks)**

d) Explain the following observation; Tough muscles in the gizzard of poultry. **(2mks)**

24. a) Describe the life cycle of a one host tick. **(7mks)**

b) Write short notes on Friesian breed of dairy cattle under the following sub-headings.

i) Origin **(1mk)**

ii) Characteristics **(4mks)**

c) Describe the procedure of wool shearing in sheep. **(8mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 8 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO…….……

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER 1

TIME: 2HRS

INSTRUCTIONS TO ALL CANDIDATES:

a) Write your name and admission number in the spaces provided.

b) This paper consists of section A, B and C.

c) Answer all questions in section A and B and any TWO questions in section C in the spaces provided.

FOR EXAMINER USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1-17	30	
B	18-21	20	
C	22-24	40	
	TOTAL	90	

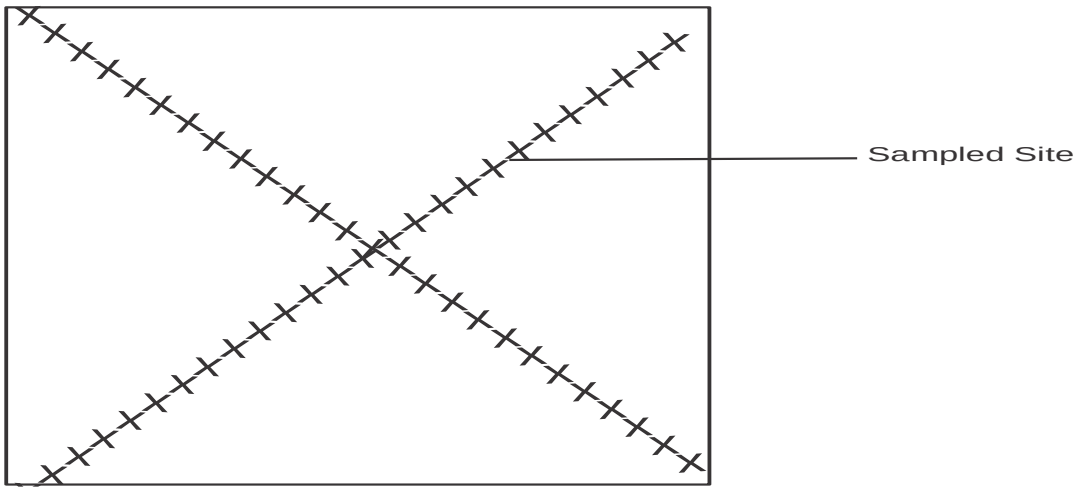
QUESTIONS

1. List **four** characteristics of large scale farming sytems **(2mks)**
2. State **four** activities that may be undertaken in organic farming **(2mks)**
3. List **four** physical agents of weathering **(2mks)**
4. Give **three** reasons for controlling weeds in pastures **($1\frac{1}{2}$mk)**
5. Define the following terms as used in agricultural economics **(2mks)**
   (i) Scarcity
   (ii) Opportunity Cost
6. Outline **three** indicators of well composed manure **($1\frac{1}{2}$mks)**
7. Give **four** reasons for using certified seeds for planting **(2mks)**
8. State **four** advantages of land consolidation **(2mks)**
9. State **four** effects of HIV/AIDS on agricultural production **(2mks)**
10. Name **one** vegetative material used to propagate each of the following crops **(2mks)**
    (a) Bananas
    (b) Pineapples.....
    (c) Irish Potatoes.....
    (d) Pyrethreum.....
11. Differentiate between the following terms **(1mk)**
    (a) Intercropping and mixed cropping
    (b) Fixed input and variable input. **(1mk)**
12. Outline **four** ways of improving labour efficiency in the farm **(2mks)**
13. State **four** factors that influence the type of irrigation to be used in the farm **(2mks)**
14. State**four** ways in which burning a vegetation may lead to loss of fertility **(2mks)**
15. Name **three** pests that commonly affect beans **($1\frac{1}{2}$mks)**
16. State **three** factors that determine the quality of hay **($1\frac{1}{2}$mks)**

SECTION B (20 MKS)

Answer all questions in this Section

17. The diagram below illustrates a method of collecting soil sample from a field . Study it and answer the question that follows

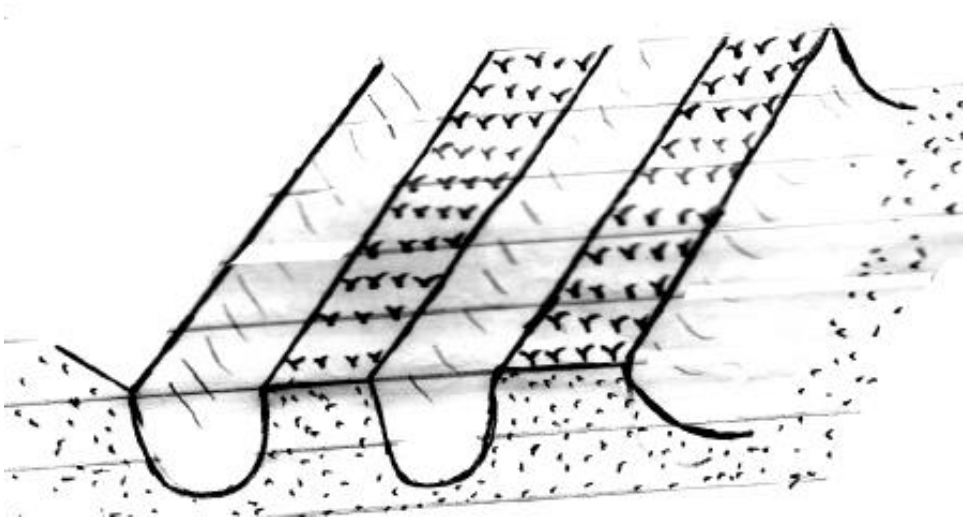


(i) Identify the method illustrated above **(1mk)**

(b) Name **three** areas on the farm that should be avoided during soil sampling ?
(3mks)

(c) Name **two** pieces of information that a composite soil sample should have before being taken to the laboratory for testing **(2mks)**

18. The diagrams below illustrates a method of drainage used in crop production

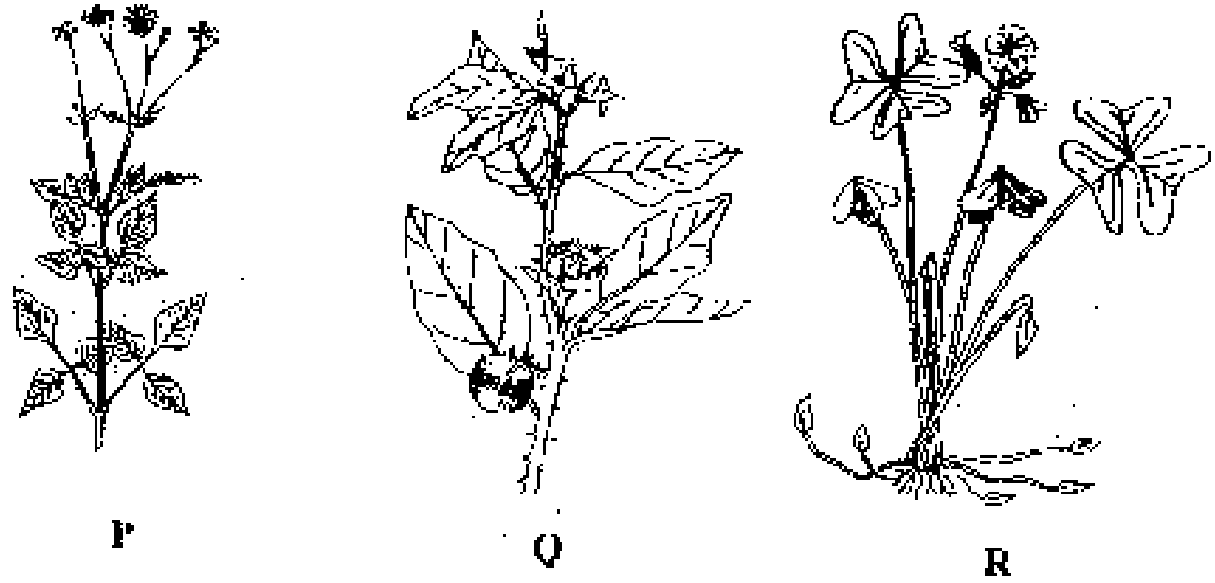


(a) Identify the the method of drainage **(1mk)**

(b) Name **two** other methods of draining a water logged soil **(2mks)**

(c) State **two** reasons why drainage is important as a land reclamation methods **(2mks)**

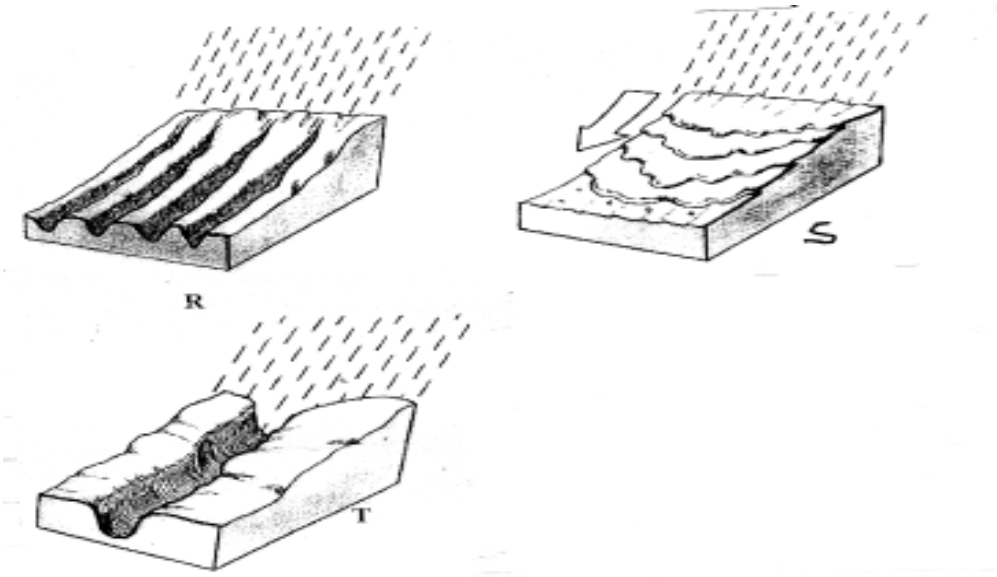
19. The diagrams below illustrate some common weeds



(a) Identify the weeds labelled P, Q and R **(3 mks)**

(b) Give a reason why it is difficult to control weeds labelled R **(1mk)**

20 The diagrams below illustrates types of soil erosion . Study them and answer the questions that follows



(a) Identify the types of erosion labelled R, S, and T

R.....(1mk)

S.....(1mk)

T.....(1mk)

(b) Describe the **four** stages involved the formation of the type of erosion T **(2mks)**

SECTION C (40 MARKS)

(Answer ANY two questions from this section in the spaces provided after question 23)

21. **(a)** Explain the cultural practices carried out in the field to control crop diseases **(8mks)**

(b) Describe **four** ways employed by a farmer in breaking seed dormancy **(4mks)**

(c) Explain the importance of farm accounts to a farmer **(8mks)**

22. **(a)** Describe the production of cabbages seedlings under the following sub-headings

(i) Nursery establishment **(8mks)**

(ii) Management of seedlings up to transplanting **(5mks)**

(b) Explain the problems that face farmers in the marketing of agricultural produce **(7mks)**

23.(a) Explain **five** instances when it is advisable to use herbcides in weed control **(5mks)**

(b) Describe **seven** ways in which biotic factors influence crop production **(7mks)**

(c) Explain why minimum tillage is a recommended practice in crop production **(8mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 8 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2HRS

INSTRUCTIONS TO ALL CANDIDATES:

- ***a)*** *Write your name and admission number in the spaces provided.*
- ***b)*** *This paper consists of section A, B and C.*
- ***c)*** *Answer all questions in section A and B and any TWO questions in section C in the spaces provided.*

FOR EXAMINER USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1-17	30	
B	18-21	20	
C	22-24	40	
	TOTAL	90	

SECTION A

ANSWER ALL QUESTIONS ON THE SPACES PROVIDED

1) Name TWO beef cattle breeds reared in Kenya. **1mk**

2) Name a breed of dairy animal having the following characteristics. Red coat with white markings on the legs, face tail switch and girth. **½ mk**

3) Give two diseases transmitted by brown ear tick. **1mk**

4) Name two species of tapeworms found in livestock. **1mk**

5)List four factors considered when formulating livestock ration. **2mks**

6) State the cause of grass tetany in livestock. **½ mk**

7) Give two precautions taken by farmers to prevent piglet anaemia. **2x ½ = 1mk**

8) Name the type of breeding system represented below.

Aryshire Sire x Boron dam → Heifer x Hereford. **½ mk**

9) List three disadvantages of embryo transplant **3 x ½ = 1 ½ mks**

10) List four causes of sterility in dairy cows. **2mks**

11) Give two signs that would indicate a cow has died of anthrax. **1mk**

12) State for pre-milking activities that should be carried out by a stock man**. 4 x ½ = 2mks**

13) Give four functions of the worker bees in a bee colony. **4x ½ = 2mks**

14)Name four signs of broodiness in poultry . **2mks**

15) State four demerits of live fences. **2mks**

16) Give four advantages of carrying out raddling in sheep management. **2mks**

17) Name two development stages of a liver fluke. **1mk**

18) Name any four farm structures that are necessary for handling dairy animals**. 2mks**

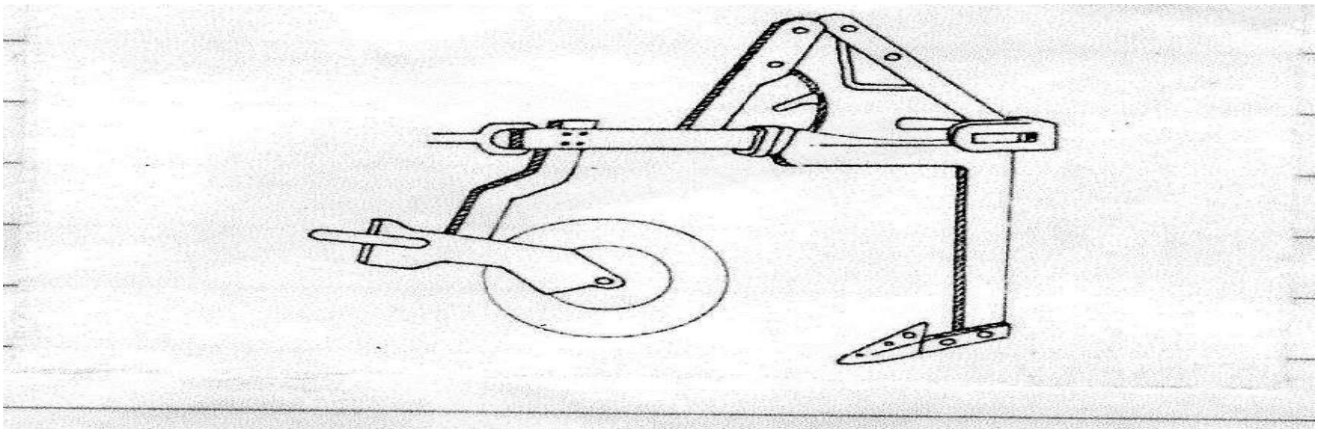
19) List down maintenance practices of a mould board plough **4x ½ = 2mks**

20) List three functions of lubrication systems. **3 x ½ = 1 ½ mk**

21) Name three notifiable diseases in cattle. **1 ½ mks**

SECTION B (20MKS) COMPULSORY

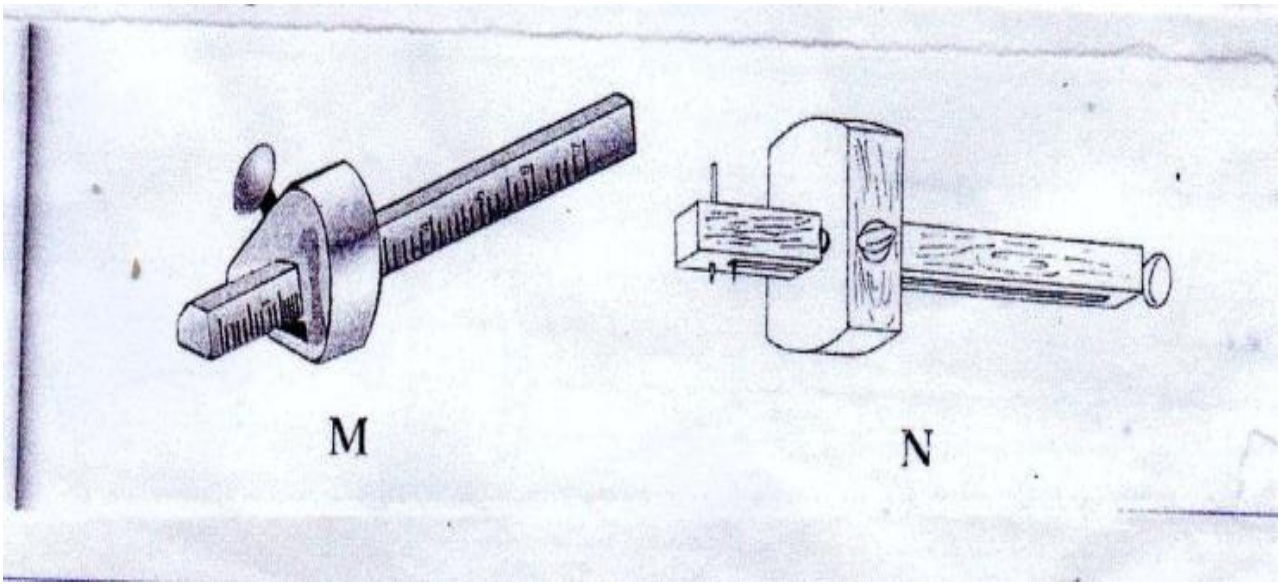
22) Study the diagram below and answer the questions that follow



a) Identify the implement. **1mk**

b) What are the advantages of using the implement**.** **2mks**

23) Study the following tools and use them to answer the questions that follow.



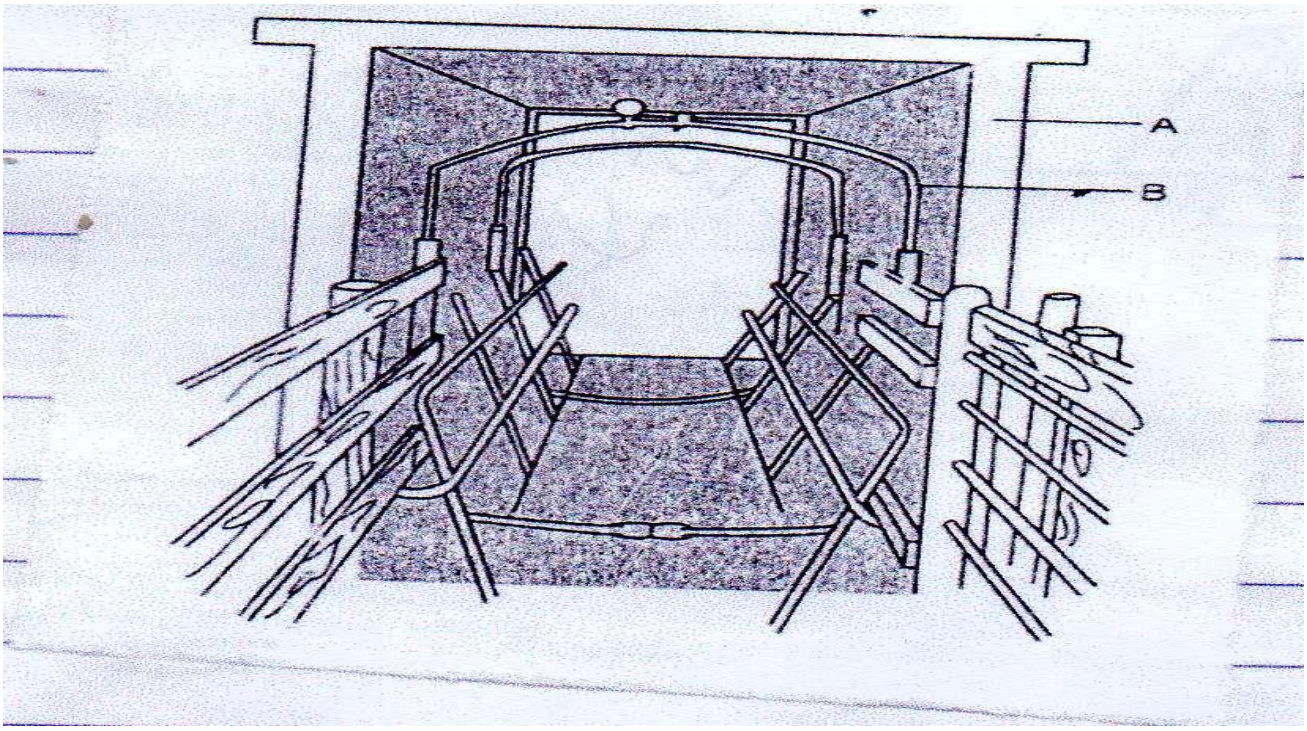
a) Identify the workshop tools shown above. **1mk**

M----

N---------

23b) State the functional /difference between the above tools. **1mk**

24) Below is an illustration of a structure used for tick control in the farm. Study it carefully and answer the questions that follow.



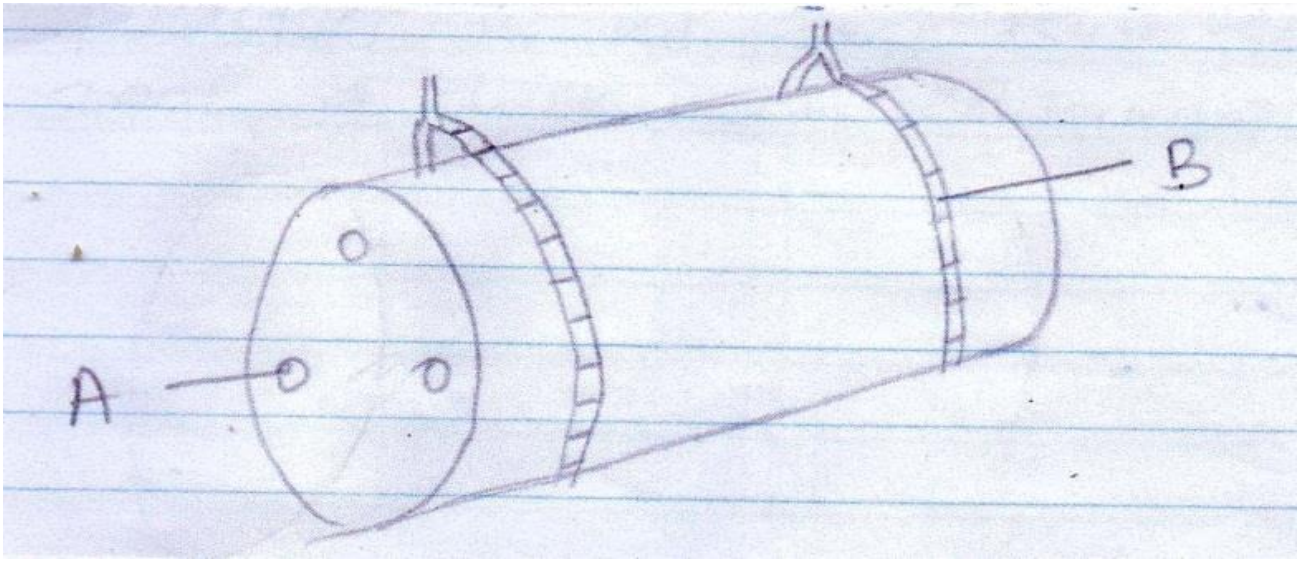
a) Identify the structure. **1mk**

bName the parts labeled A and B **1MK**

c) What is the function of the parts labeled A and B. **1mk**

d) State four advantages of using this structure to control ticks. **2mks**

25) Below is a type of bee hive



i)Name the type of beehive **1mk**

i**i)**Name the parts labeled A and B. **2mks**

iiii) State four advantages of using the Kenya top bar hive (KTBH) over the type of bee hive named in (i) above. **2mks**

26a)If maize meal containing 6% DCP and fish containing 64% DCP calculate the amount of each feedstuff in kilograms required to prepare 200kg of chick mash containing 18% DCP **4mks**

b)Name two other feed ingredients which should be added t**CHOOSE ANY TWO**

QUESTIONS IN THIS SECTION

27a) State four characteristics of effective acaricides. **4mks**

b)Give three methods of applying acaricides on livestock . **3mks**

c)Outline six causes of swarming in bees**.** **6mks**

d)Describe seven differences been a petrol and diesel engine.

28a) Describe the digestive system of poultry under the following sub-heading.

i)crop **2mks**

ii)provintriculus **1mk**

iiii)Gizzard. **3mks**

iv)Duodenum **3mks**

v)Caecum1mk

b)Describe the procedure of constructing a barbed wire fence**.** **5mks**

c)What are the advantages of farm mechanization. **5mks**

29a) Discuss Coccidiosiss disease under the following headings

i)Causal organism. **1mk**

i**i)**Livestock species attacked. **2mks**

iii) Symptom of attack. **4mks**

iv) Control measures. **3mks**

b) Outline five advantages of artificial insemination. **5mks**

c) Explain four economic importance of parasites in livestock production. **5mks**

30a) Explain ten advantages of battery cage system in poultry rearing. **10mks**

b) State five operational differences between a disc and mould board plough. **10mks**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 9 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER 1

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- *Write **your name** and **Index number** and **sign** in the spaces provided above.*
- *Answer **ALL** the questions in section **A** and **B** in the spaces provided in this booklet.*
- *Answer **any two** questions in section **C** in the spaces provided after the last question.*

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1 - 18	30	
B	19 - 22	20	
C	23 - 25	40	
	TOTAL	**90**	

SECTION A (30marks).

Answer all Questions in this section.

1. a) State four characteristics of extensive farming system. **(2mks)**

b) List two disadvantages of small scale farming. **(2mks)**

2. Name two ways in which predators affect agricultural production. **(1mk)**

3. List down four factors that influence formation of soil. **(2mks)**

4. State two farming practices that bring about minimum tillage. **(1mk)**

5. Name the function of each of the following chemicals in water treatment.

a) Alum **(1mk)**

b) Soda ash **(1mk)**

6. State two importance of organic matter in the soil. **(1mk)**

7. State three reasons why green manure is not commonly used in the farms. **(1 ½ mks)**

8. State four uses of farm records. **(2mks)**

9. List three importance of phosphorous in crop growth. **(1 ½ mks)**

10. Name four significance of using seeds as planting materials. **(2mks)**

11. List two importance of tissue culture in propagating crops. **(1mk)**

12. State the difference between the following terms. **(2mks)**

a) Rogueing

b) Gapping

13. State four effects of applying too much nitrogenous fertilizer to crops. **(2mks)**

14. Name four disadvantages of communal land tenure system. **(2mkS)**

15. State four precautions farmers should observe when using agro-chemical for their safety and for environmental safety. **(2mks)**

16. State three harmful effects of pests on crops. **(1 ½ mks)**

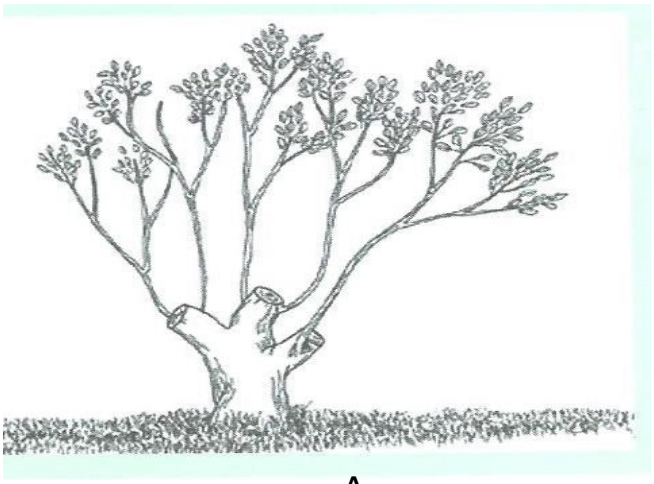
17. State three qualities of a good manager in a farm setting. **(1 ½ mks)**

18. State two factors that influence the demand of a commodity. **(1mk)**

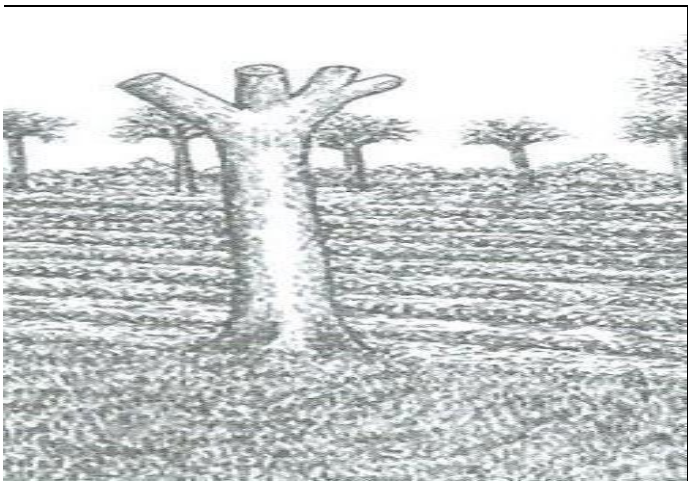
SECTION B (20 MARKS)

Answer all questions in this section.

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



A



B

a) Identify the three harvesting methods shown in the diagrams above. **(2mks)**

b) Name four sites for agroforestry trees in the farm. **(2mks)**

20. The document below was obtained from one of the books of accounts in kimko's farm. Study the document and answer the questions that follow.

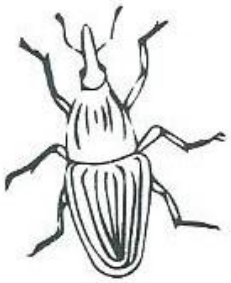
DAIRY CATTLE							
DR							**CR**
Date	**Particulars**	**Folio**	**Amount Sh cts.**	**Date 2003**	**Particulars**	**Folio**	**Amount Sh cts.**
Feb 20th Feb 30th	Bought 2 bags of dairy meal	1	18,000.00	Feb 10th	Sold 2 heifers	1	12,000.00

a) Identify the book from which the above document was obtained. **(1mk)**

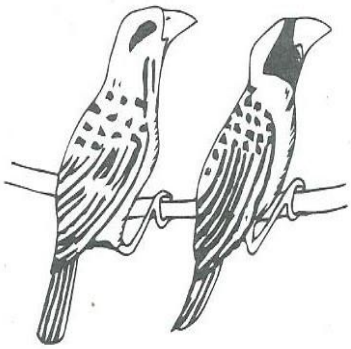
b) State four importance of keeping proper farm account records. **(2mks)**

21. The diagram below shows pests that affect crops when in the field. Study the diagrams and answer the questions that follow.

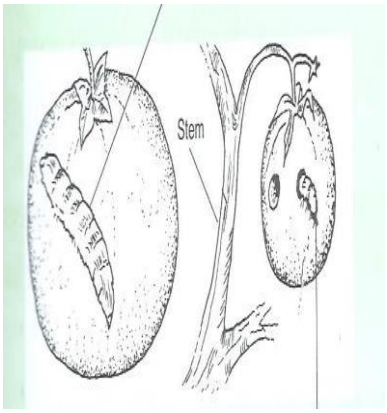
J



K



L

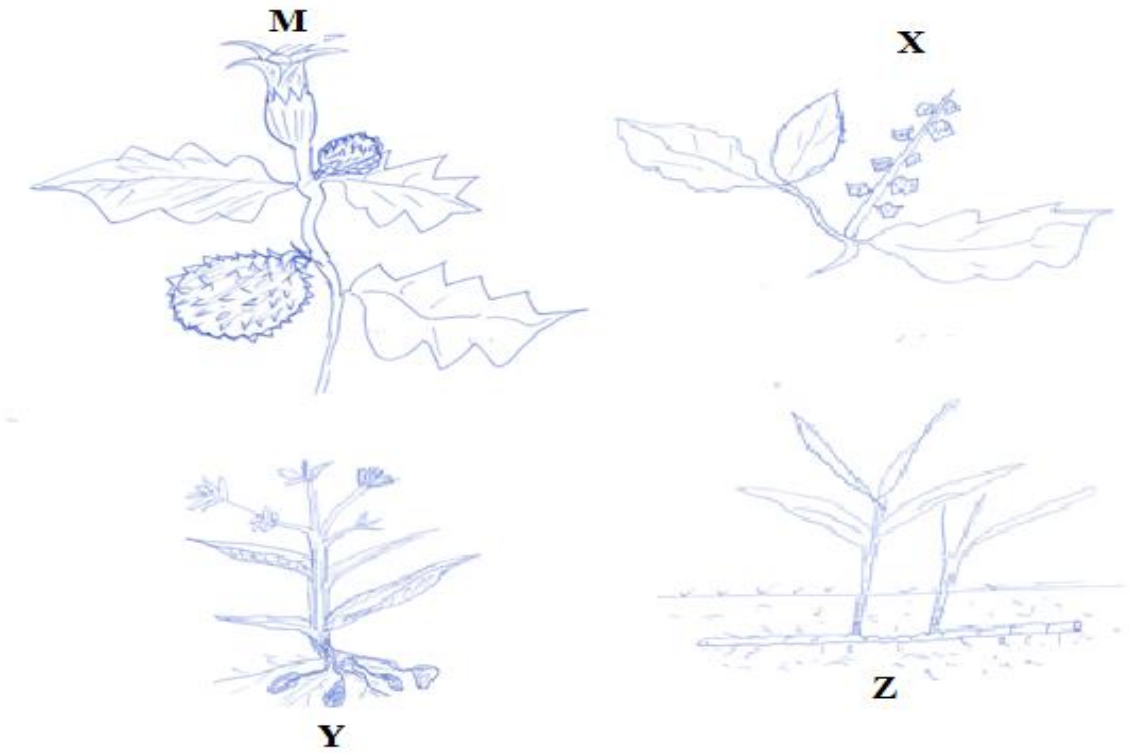


a) Identify the pest J, K and L. **(3mks)**

b) State two ways of controlling the pest labeled L above. **(2mks)**

c) State one crop attacked by the pest labeled J and K above. **(2mks)**

22. The Following weeds were found growing on a maize farm by a form four student. Study the weeds and answer the questions that follow.



a) Name the weeds labeled X, Y and Z above. **(3mks)**

b) State one reason that makes each of the following weeds difficult to control. **(2mks)**

(i) X

(ii) Z

c) State one reason why the weed labeled M should not be allowed to grow in the farm. **(1mk)**

SECTION C (40 marks)

Answer only two questions in this section

23. **a)** Explain five cultural methods a farmer can use to control weeds. **(10mks)**

b) State and explain five factors considered when establishing nursery bed site.**(10mks)**

24. **a)** Describe five ways in which a farmer may adjust to uncertainty and risks in the farm. **(10mks)**

b) Explain five physical methods used to control crop pests in a crop land. **(10mks)**

25. **a)** State five types of information contained in a tittle deed. **(5mks)**

b) State five methods used to control soil and water pollution. **(5mks)**

c) State and explain five ways an entrepreneur can use to improve labour productivity in a farm. **(10mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 9 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- *Write **your name** and **Index number** and **sign** in the spaces provided above.*
- *Answer **ALL** the questions in section **A** and **B** in the spaces provided in this booklet.*
- *Answer **any two** questions in section **C** in the spaces provided after the last question.*

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-18	30	
B	19-21	20	
C	22-24	40	
	TOTAL	**90**	

SECTION A (30MARKS)

Answer all the questions in this section.

1. State two reasons of using farm tools and equipment in the farm. **(2mks)**

2. State three reasons that would make a farmer opt to rear indigenous cattle breeds instead of exotic cattle breeds. **(1 ½ mks)**

3. State three characteristics of Bacterian type of camel. **(1 ½ mks)**

4. Name four factors that influence the pulse rate of an animal. **(2mks)**

5. State three signs of attack by endoparasites a farmer can observe. **(1 ½ mks)**

6. State four factors that determine the amount of food given to an animal. **(2mks)**

7. Name three reasons that would make a farmer use a machakos dip instead of a plunge dip to control ticks. **(1 ½ mks)**

8. State four factors considered when selecting construction materials. **(2mks)**

9. Name three methods a farmer can use when selecting livestock for breeding. **(1 ½ mks)**

10. Mention three signs of heat in a doe. **(1 ½ mks)**

11. Mention four reasons that would make a farmer carry out identification to his herd. **(2mks)**

12. State two diseases that commonly affect bees in bee farming. **(2mks)**

13. State four methods a farmer can use when preserving fish after harvesting. **(2mks)**

14. State four factors that determine the choice of poultry rearing system that a farmer chooses to use. **(2mks)**

15. State one significance of mobile calf pen in calf rearing. **(1mk)**

16. State two disadvantages of a two stroke engine. **(1mk)**

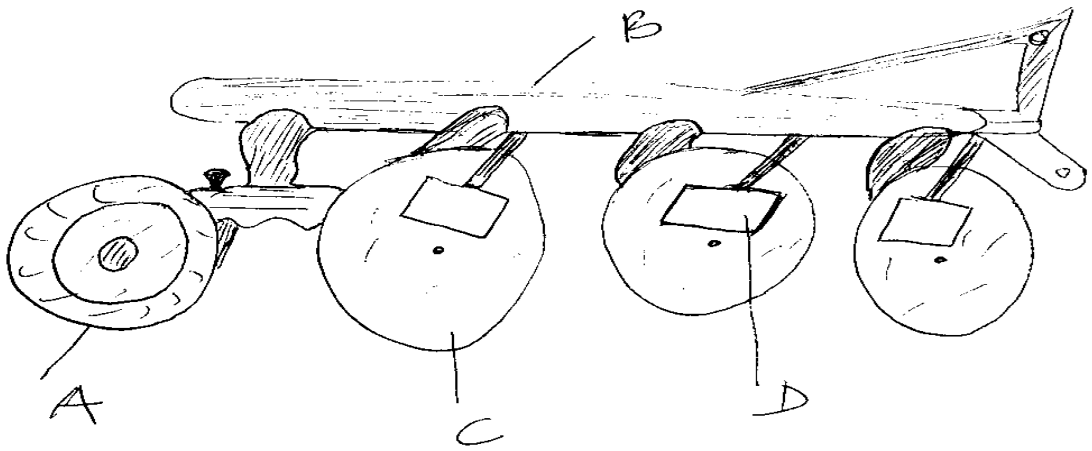
17. State two factors that could cause sudden stopping of a tractor engine. **(1mk)**

18. State four disadvantages of animal drawn implements over tractor drawn implements. **(2mks)**

SECTION B (20MARKS)

Answer all questions in this section.

19. The diagram below shows a tractor drawn implement. Study it and answer the questions that follow.



a) Name the parts A, B, C and D. **(4mks)**

b) State two advantages of using the above implement over mould- board plough. **(2mks)**

c) State the function of the parts labeled. **(2mks)**

i) A

ii) D

20. The diagram below shows livestock parasites. Study the diagrams and answer the questions that follow.



X



Y

a) Identify the parasites X and Y above. **(2mks)**

b) State two effects that are caused by the parasite labeled X on the animal's body. **(2mks)**

c) Name one disease transmitted by parasite labeled X above. **(1mk)**

d) State three measures taken to control the parasite labeled Y above. **(3mks)**

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



a) Identify the livestock equipment marked E above. **(1mk)**

b) State two reasons that make branding be discouraged as a method of livestock identification. **(1mk)**

SECTION C (40 MARKS)

Answer any two questions.

22. **a)** State five factors that predispose livestock to diseases. **(10mks)**

b) State and explain five factors a farmer will consider when siting beehives in the farm. **(10mks)**

23. **a)** Briefly state and explain five equipment a farmer will need when milking and state their uses. **(10mks)**

b) Explain five factors to consider when selecting a breeding stock. **(10mks)**

24. **a)** State and explain four materials collected by bees. **(8mks)**

b) State and explain the use of four equipments a honey harvester would require to have when harvesting honey. **(8mks)**

c) List four main reasons that make fish farming popular. **(4mks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 10 PAPER 1

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/1

AGRICULTURE

PAPER 1

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- *Write **your name** and **Index number** and **sign** in the spaces provided above.*
- *Answer **ALL** the questions in section **A** and **B** in the spaces provided in this booklet.*
- *Answer **any two** questions in section **C** in the spaces provided after the last question.*

For Examiner's Use Only:

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-18	30	
B	19-21	20	
C	22-24	40	
	TOTAL	**90**	

SECTION A (30 Marks)

*Answer **all** Questions in the spaces provided.*

1. State **four** advantages of organic farming. **(2marks)**

2. Give **four** factors that can increase seed rates in crop production. **(2marks)**

3. State **four** roles of organic matter in sandy soils. **(2marks)**

4. State **four** reasons for practicing minimum tillage. **(2marks)**

5. What is meant by each of the following in crop production?

a) Crop rotation **(1mark)**

b) Mulching **(1mark)**

6. Give **four** reasons for inverting soil (furrow) slices during primary cultivation. **(2marks)**

7. State **four** cultural ways of controlling couch grass *Digitaria scalarum.* **(2marks)**

8. a) Name **three** vegetative parts that can be used to propagate pineapples. **(1½marks)**

b) State **three** disadvantages of vegetatively propagating pineapples. (1½marks)

9. Name **three** sources of underground water **(1½marks)**

10. What is meant by each of the following in agro-forestry?

a) Pollarding **(1mark)**

b) Coppicing **(1mark)**

c) Lopping **(1mark)**

11. State the **information** included in a sales receipt when a farmer is selling eggs **(2½marks)**

12. State **two** reasons for practicing agro-forestry on a;

a) River bank **(1mark)**

b) Steep slope **(1 mark)**

13. State **three** disadvantages of using plastic pipes to convey water. **(1½marks)**

14. State **three** causes of Blossom End Rot in tomatoes. **(1½marks)**

15. What is **meant** by the term preference and choice as used in agricultural economics?

(1mark)

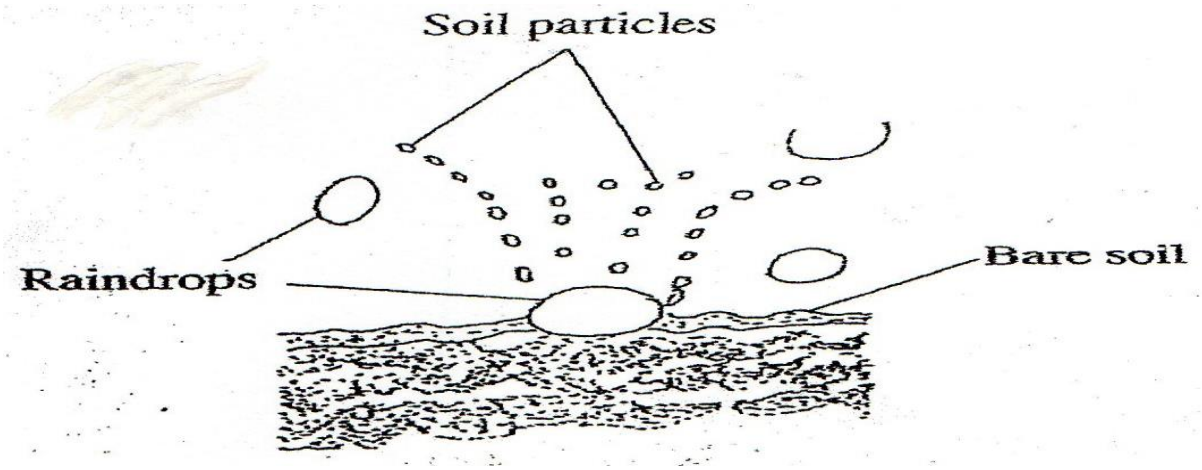
SECTION B (20 Marks)

*Answer **all** the Questions in the spaces provided.*

16.a) **Distinguish** between straight and compound fertilizers. **(1 mark)**

b) A farmer applied **200kg** of CAN (**20% N**) per hectare on his **five** hectares maize crop. Calculate the **amount of nitrogen** the farmer applied on his crop. Show your working. **(4 marks)**

17. The diagram below illustrates a type of soil erosion.



a) Identify the **type** of soil erosion **(1 mark)**

b) How does the type of erosion shown above **occur**? **(2marks)**

c) How does **cover cropping** help to control the type of erosion shown above? **(2marks)**

18. The table below shows the population and gross domestic products of countries A and B

Country	Gross Domestic Product (million Ksh)	Population (million)
A	1800	36
B	1200	15

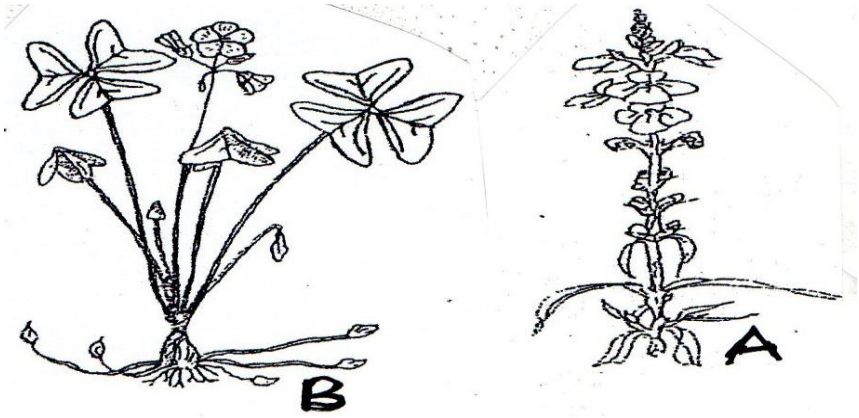
a) Calculate the **per capita** income for each country. Show your working. **(2marks)**

b) Which of the two countries is **more developed** economically? **(1mark)**

c) Give a **reason** for your answer in (b) above. **(1mark)**

d) How can **agriculture** increase the gross domestic product of an economy? **(1mark)**

19. The diagrams below show weeds **A** and **B.**



a) Identify weed **A** **(1mark)**

b) State one reason why weed **A** is referred to as a parasitic weed. **(1mark)**

c) Give a reason why it is **difficul**t to control weed **B.** **(1mark)**

d) Which **category** of herbicide will be most suitable for controlling weed B.?**(1mark)**

e) Name a disease that weed **B** can transmit to cereal crops. **(1mark)**

SECTION C (40 marks)

Answer any two Questions from this section in the spaces provided after Question 22.

20. a) **Describe** the various risks and uncertainties in crop farming. **(10 marks)**

b) **State** the functions of young farmers clubs in Kenya. **(5 marks)**

c) **Give** the reasons for land registration in Kenya. **(5 marks)**

21. a) **Explain five** ways in which the Kenyan government can improve maize production to ensure food security in the country. **(10 marks)**

b) **Why** is pruning done in crop production? **(10 marks)**

22. a) The table below gives information on the supply and demand schedules for tomatoes on a market.

Table 1: Prices and Quantities of tomatoes supplied.

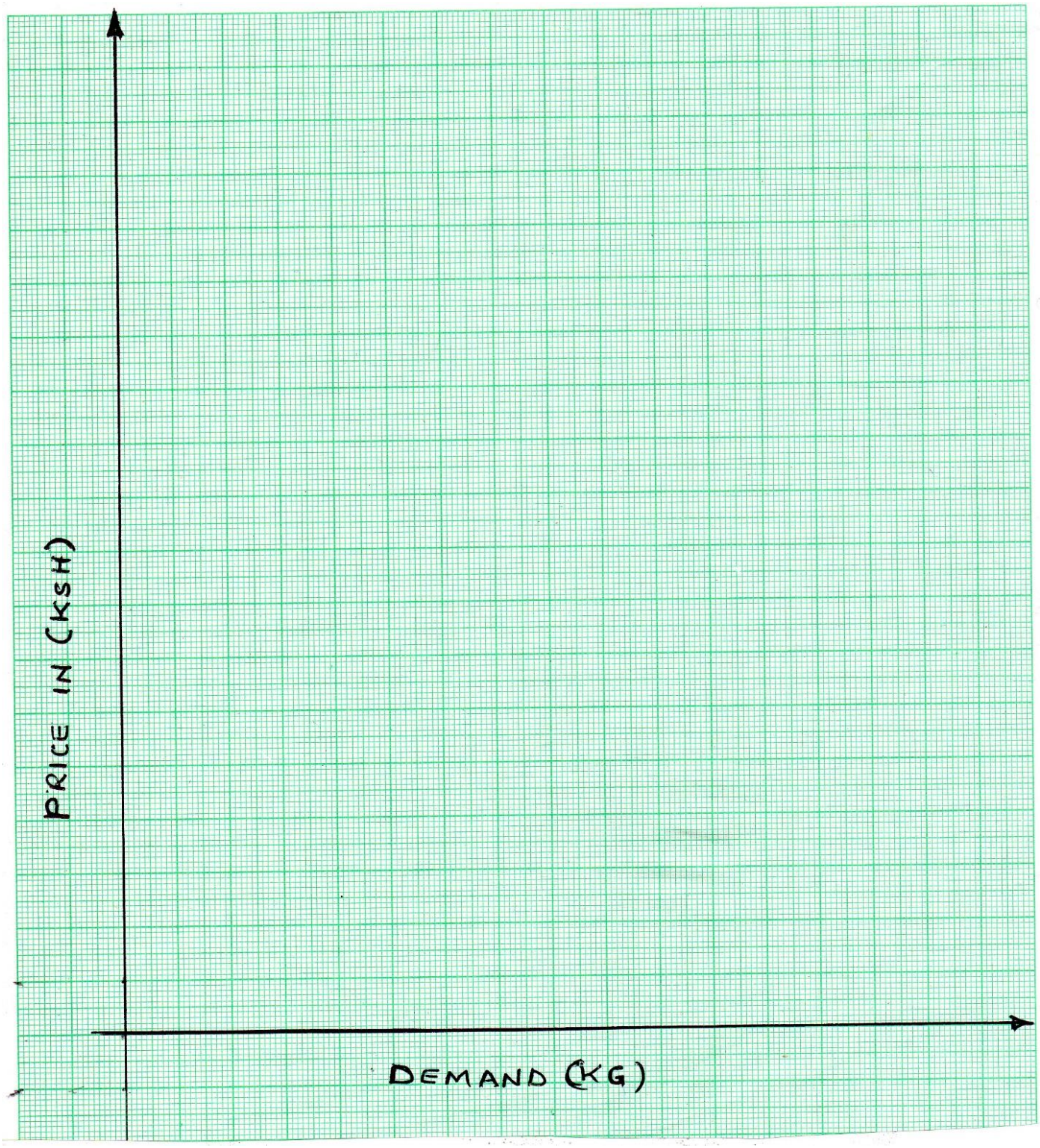
Tomatoes (Kg)	**Price per Kg (Ksh)**
150	16.00
130	14.20
125	13.80

112	13.00
106	12.70
85	11.80
50	10.60
42	10.40
30	10.20
25	10.10

Table 2: Prices and Quantities of tomatoes demanded.

Tomatoes (Kg)	**Price per Kg (Ksh)**
80	18.00
87	16.70
101	15.50
119	14.10
135	13.20
155	12.40
171	11.80
185	11.30
191	11.10
205	10.84

i. Using the above data, **plot supply and demand curves** on the same axes. The axes have been labelled for you. **(7mks)**



ii.

iii. Determine the price at which **120kg** of tomatoes were supplied on the market.**(1mark)**

iv. How many kilograms of tomatoes were bought at the market price of **Ksh13.00?**

(1mark)

v. What was the **equilibrium price** for tomatoes on the market? **(1mark)**

b) Describe the production of **maize** under the following subheadings:

i. Seedbed preparation **(4marks)**

ii. Planting **(3marks)**

iii. Harvesting **(3marks)**

TOP SCHOOLS MOCKS

AGRICULTURE

TRIAL 10 PAPER 2

TIME: 2 HOURS

NAME…… INDEX NO……..…

SCHOOL……... SIGN……...….

DATE…….

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- *Write **your name** and **Index number** and **sign** in the spaces provided above.*
- *Answer **ALL** the questions in section **A** and **B** in the spaces provided in this booklet.*
- *Answer **any two** questions in section **C** in the spaces provided after the last question.*

For Examiner's Use Only:

For Examiner's use only

Section	Question	Maximum Score	Candidate's Score
A	1-20	30	
B	21-24	20	
C		20	
		20	
Total Score		90	

SECTION A (30 Marks)

*Answer **all** Questions in the spaces provided.*

1. Name **two** livestock tools that are used together as a pair. **(1mk)**

2. Name **three** sources of water in animals body. **(1½mk)**

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

4. List **two** ways through which a vaccine can be administered to poultry. **(1mk)**

5. Identify the **main** use of a queen excluder in a Kenyan top bar hire. **(1mk)**

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

7. State the importance of the following parts an egg.

a) Chalaza **(1mk)**

b) Air space **(1mk)**

8. Name **three** maintenance practices carried out on a tractor battery. **(1½mk)**

9. State **two** advantages of using animals' power in a farm. **(2mks)**

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

11. Distinguish between mothering ability and prolificacy. **(2mks)**

12. Name **four** tools that are sued when laying concrete blocks during construction of a wall. **(2mks)**

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

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

15. State **four** factors considered when siting a fish pond in a farm. **(2mks)**

16. State **four** causes of cannibalism in poultry production. **(2mks)**

17. Name **two** hormones that control milk let down in a dairy cow. **(1mk)**

18. Give **two** reasons why walls of dairy shed should be white washed instead of painting with oil paints. **(1mk)**

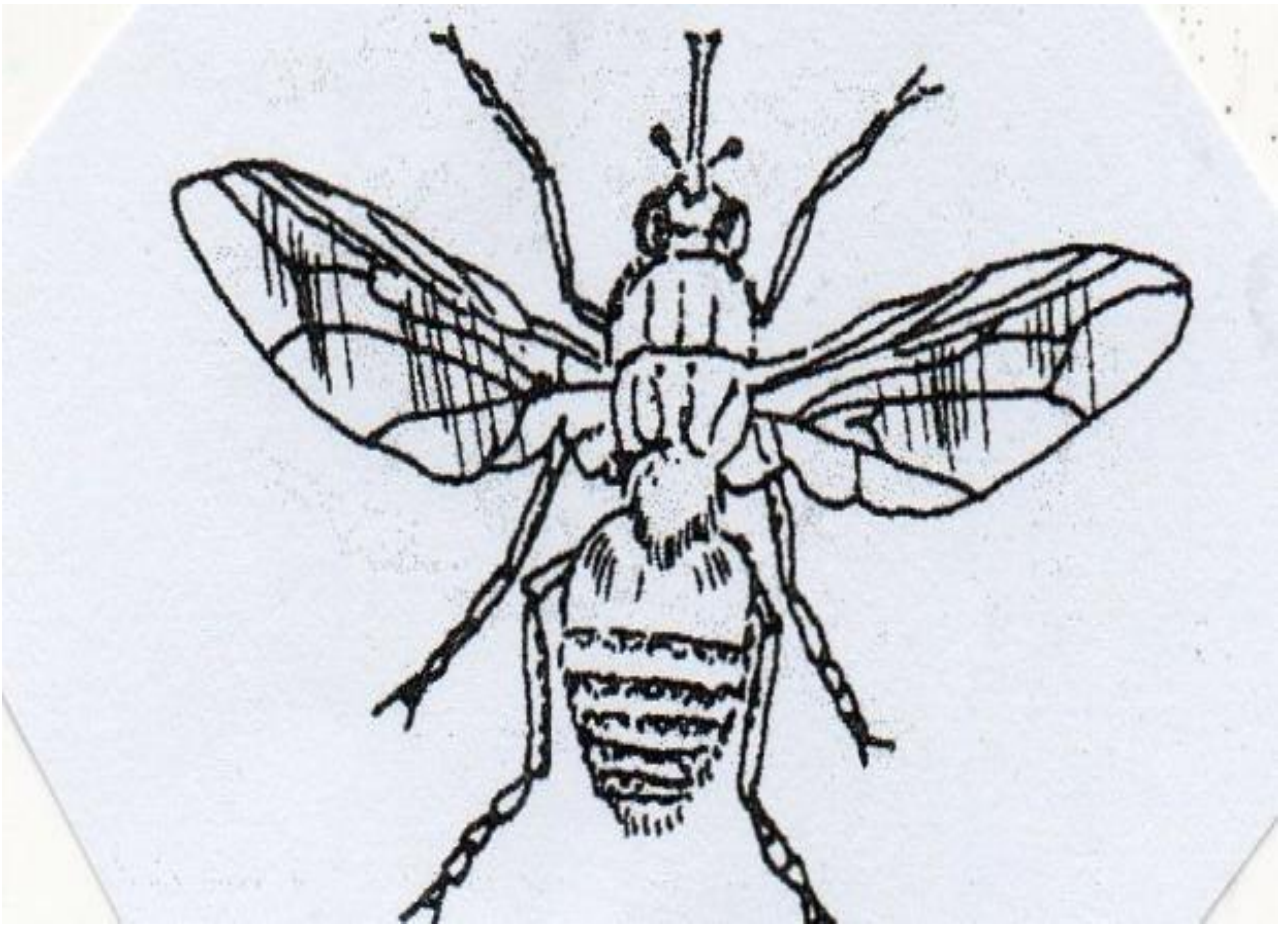
19. List **two** functions of proteins in livestock. **(1mk)**

20. Gives **two** uses of litter in a poultry house. **(1mk)**

SECTION B (20 marks)

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

21. The diagram below shows a livestock parasite.



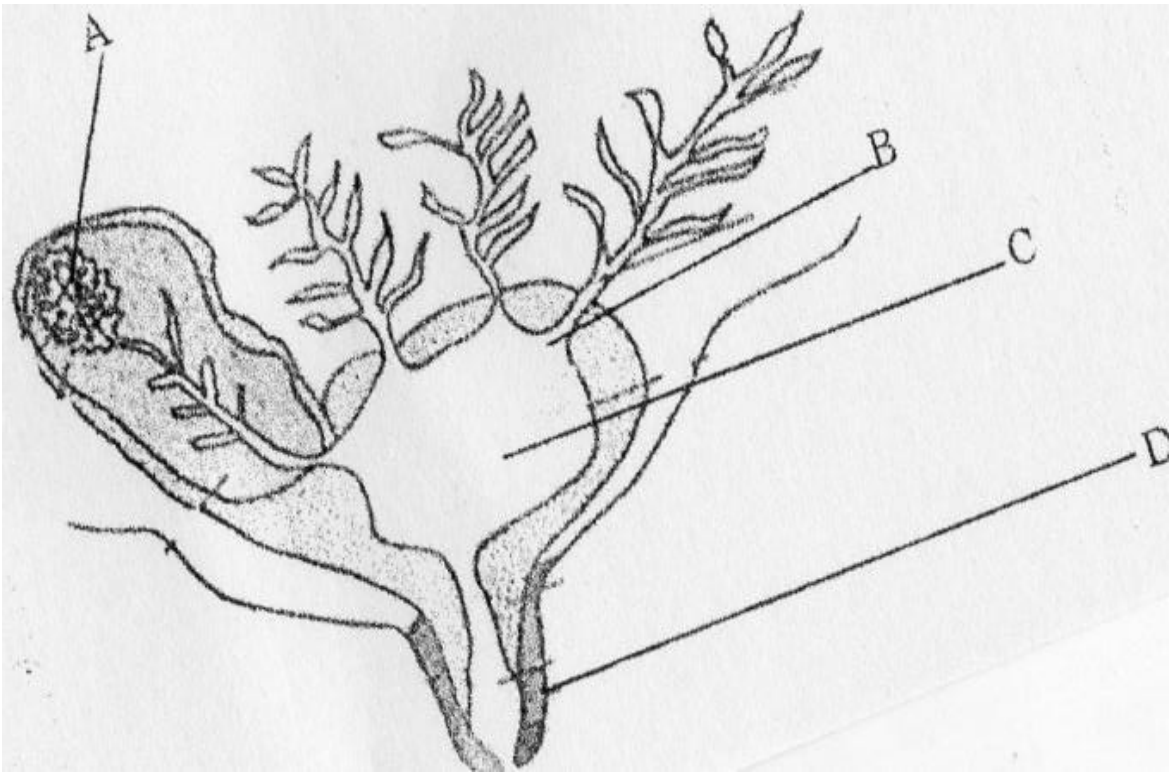
a) Identify the parasite shown above. **(1mk)**

b) State **two** harmful effects of the above parasite on livestock. **(1mk)**

c) Explain any **two** methods used in the control of the above parasite. **(2mks)**

22. The diagram below represents the structure of a quarter of the cow's udder. Study it and answer the questions that follow.

a) Name the parts labelled B and C.



(2mks)

B –

C –

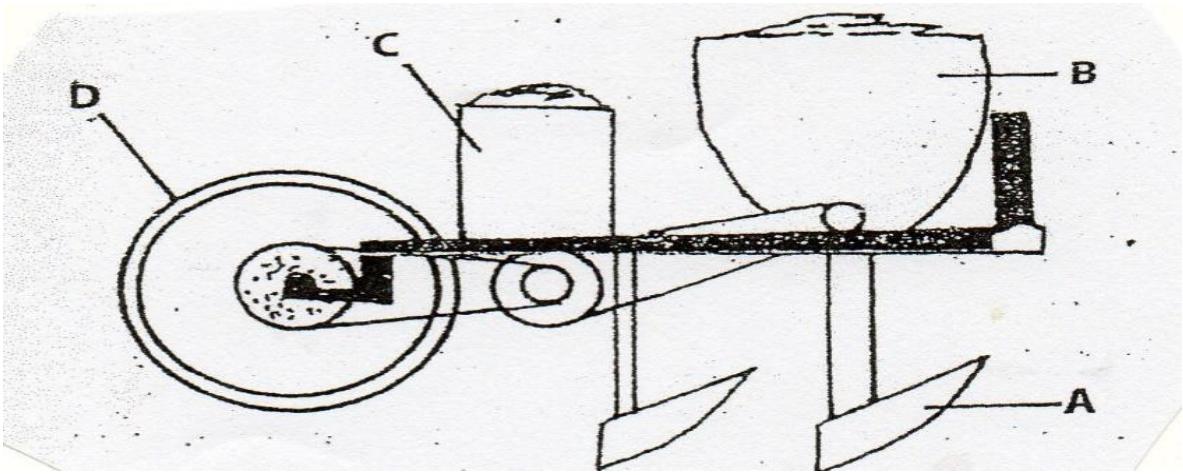
b) Name the process that takes place in the part labelled A and the hormone that controls it

Process –

Hormone –

c) State the function of the part labelled D. **(1mk)**

23. Below is a farm implement. Study it keenly and answer the questions that follow.



a) Name the farm implement drawn above. **(1mk)**

b) Identify the parts labelled A, B, C and D **(2mks)**

A

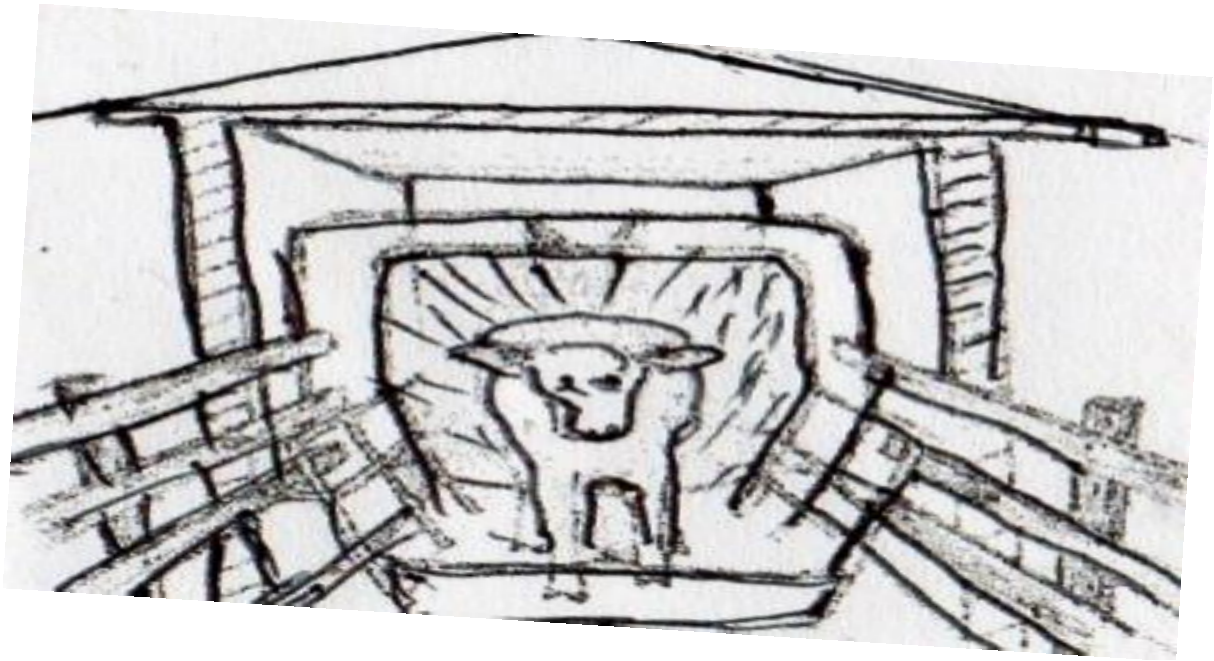
B

C

D

c) State two maintenance practices carried out on the implement **(2mks)**

24. The diagram below shows a routine practice being carried out on an animals. Study it and answer questions that follow.



a) Identify the practice. **(1mk)**

b) Name the structure in which the practice is being carried out. **1mk)**

c) Give **three** advantages of using the above structure instead of a plunge dip.

(3mks)

SECTION C (40 MARKS)

Answer ANY two questions from this section in the spaces provided after question 27

25. a) 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)**

26. a) Describe Anthrax under the following subheadings.

i) Causal organism. **(1mk)**

ii) Signs of infection/symptoms. **(6mks)**

iii) Control measures. **(3mks)**

B) i) State and explain condition necessary for artificial incubation. **(8mks)**

ii) State **two** advantages of artificial incubation. **(2mks)**

27. a) State the differences between digestion in ruminants and non-ruminants. **(5mks)**

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

c) Explain the procedure of establishing wire fence. **(5mks)**

- ✓ FOR MARKING SCHEMES
- ✓ KCSE REVISION MATERIALS
- ✓ KCSE MOCKS EXAMS
- ✓ KCSE PASTPAPERS
- ✓ PRIMARY RESOURCES
- ✓ POSTMOCKS
- ✓ PREMOCKS
- ✓ SETBOOKS GUIDES
- ✓ VIDEOS
- ✓ TERMLY EXAMS
- ✓ ONLINE CLASSES

CONTACT MWALIMU AGENCY

MR ISABOKE 0746 222 000