KCSE 2025 FINAL PREDICTION

AGRICULTURE

(KCSE PREDICTIONS 1-10)

This collection features well-organized, detailed, and comprehensive prediction questions tailored for KCSE 2025. Designed to mirror actual exam formats, covers key topics, enhancing student preparedness. It offers insightful, exam-focused questions to build confidence, improve performance, and ensure academic success.

QUESTIONS TO EXPECT IN KCSE 2025 EXAMS!

CONFIDENTIAL!

For Marking Schemes

Mr Isaboke 0746 222 000 / 0742 999 000

SECRET TO SUCCESS!

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 1)

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

1. *Write your name, Admission number and date in the spaces provided.*
2. *This paper consists of three sections; A, B and C.*
3. *Answer **All** questions in Section A and B in the spaces provided.*
4. *Answer any **two** questions in Section C in the spaces provided.*

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
A	1-16	30	
B	17-20	20	
C	21-23	40	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION A (30 marks)

Answer All Questions in This Section

1. State **four** reasons for practicing grafting in citrus production **(2mks)**
2. Mention **four** types of soil erosion by water **(2mks)**
3. Differentiate between coppicing and pinching out **(2mks)**
4. Give **four** benefits of possessing certificate of land ownership **(2mks)**
5. Give **one** reason why each of the following nursery management practices are carried out. **(2mks)**

(i) Hardening off

(ii) Watering before transporting seedlings from the nursery bed

6. Name **four** effects of excessive nitrogenous fertilizer application on tomatoes **(2mks)**
7. State **four** early maturing varieties of cabbages **(2mks)**
8. State **four** ways by which Agriculture contributes to national development **(2mks)**
9. List **four** methods of land acquisition **(2mks)**
10. State **four** roles of trees in soil and water conservation **(2mks)**
11. State any **four** types of livestock farming **(2mks)**
12. **a)** State **two** ways by which a soil of pH 3 can be raised to pH 5 **(1 mk)**

b) Name any **two** types of soil structures **(1mk)**

13. State four factors that determine the number of secondary cultivation to be done on a seedbed **(2mks)**
14. Mention any **four** factors that should be considered when selecting site for making compost manure **(2mks)**
15. **a**) Define the following terms:

i)Opportunity cost **($\frac{1}{2}$ mk)**

ii)Agricultural economics **($\frac{1}{2}$mk)**

b) Give **two** types of farm records that a large scale farmer should keep **(1mk)**

SECTION B (20 marks)

Answer All Questions In This Section

16. **The** diagram below shows a method of irrigation



a) Identify the method **(1 mrk)**

b) State **two** advantages of the irrigation system named in (a) above**.** **(2mks)**

c) State any **two** factors to be considered when choosing the method of irrigation to use in an area **(2mks)**

17. The diagram below is a tool used to harvest crops in the farm. Use it to answer the questions that follow



a) Identify the tool represented above **(1 mark)**

b) Name the crop harvested by use of the tool above. **(1 mark)**

c) Name the part labeled A on the tool **(1 mark)**

d) Give **<u>one</u>** reason why the crop named in (b) above should be cut at ground level **(1 mark)**

e) Give a reason why the leaves of the crop should be removed after cutting **(1 mark)**

18. An agronomist recommends application of 130kg N, 55kg P_2O_5 and 65kg K_2O after testing a soil sample. Calculate the amount of urea (46%N), Single super phosphate (20% P_2O_5) and Potassium chloride (50% K_2O) that should be applied on the land. **(5mks)**

19. The diagram below illustrates a weed



a) Identify the weed **(1 mark)**

b) State **one** competitive ability of the weed illustrated above. **(1 mark)**

c) State **two** mechanical control measures for the weed above **(2mks)**

d) Classify the weed above according to plant morphology **(1 mark)**

SECTION C (40 MARKS)

ATTEMPT ANY TWO QUESTIONS IN THE SPACE PROVIDED

20. a) Describe **five** qualities of mother plant that should be considered when selecting vegetative materials for planting **(5 marks)**

b) List **seven** benefits of using organic matter for mulching **(7 marks)**

c) Describe the field production of nappier grass under the following sub-headings

i) Planting **(3 marks)**

ii) Fertilizer and manure application **(3 marks)**

iii) Utilization **(2marks)**

21. a) Describe the procedure of silage making **(8 marks)**

b) State and explain four factors that determine the depth of planting **(8 marks)**

c) Outline **four** roles of Agriculture in Kenya's economy **(4 marks)**

22. a) Outline **seven** effects of land fragmentation and subdivision **(7 marks)**

b) State and explain three methods of pruning **(6 marks)**

c) Describe the establishment of vegetative propagation nurseries **(7 marks)**

For Marking Schemes Contact 0746-222-000 / 0742-999-000

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 1)

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

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B	16-19	20	
C		20	
		20	
		20	
TOTAL		**90**	

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SECTION A (30 MARKS)

1. Give **four** ways in which diseases can spread can spread from one animal to the other within the farm. **(2mks)**
2. State **four** reasons why proteins should be included in animal rations. **(2mks)**
3. a) Give **four** advantages of artificial calf rearing. **(2mks)**
   b) Differentiate between milk secretion and milk let-down**.** **(1mk)**
4. State **four** instances when a bee keeper may handle bees. **(2mks)**
5. State **four** measures that help to control egg eating in a deep litter system**.** **(2mks)**
6. Name **four** equipment used when harvesting honey from the Kenya top bar hive. **(2mks)**
7. State **two** types of internal combustion engines as categorized on the basis of their working mechanism. **(1mk)**
8. State **four** practices that immediately come after complete milking in a milking shed. **(2mks)**
9. State **four** practices that should be carried out on wooden fencing posts to make them stronger. **(2mks)**
10. State **four** advantages of artificial incubation in poultry. **(2mks)**
11. State **four** factors that necessitate culling of birds in poultry rearing. **(2mks)**
12. State **four** reasons why daily maintenance of a tractor is important. **(2mks)**
13. State **four** reasons why wind power is not reliable enough to be used in the farm. **(2mks)**
14. Give **four** requirements of an artificial brooder. **(2mks)**
15. State **four** disadvantages of using live fences on the farm**.** **(2mks)**

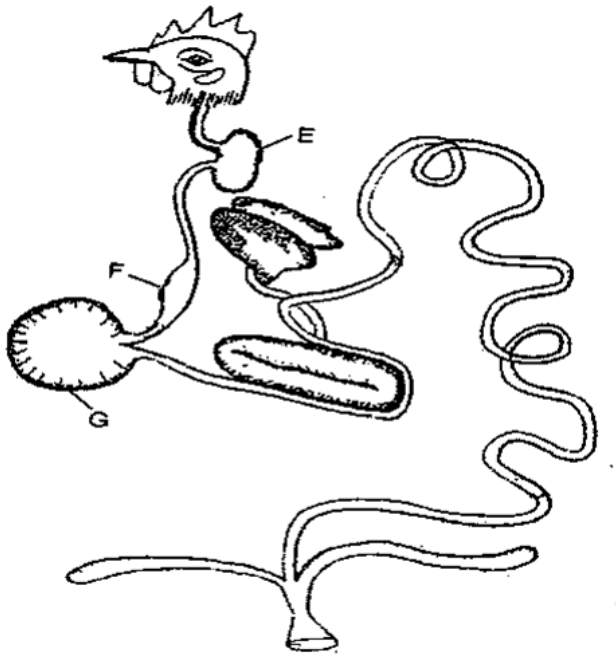
SECTION B (20 MARKS)

16. The following illustration shows the behaviors of chicks at different temperatures of the brooder. Study it and answer questions that follow.



a) Explain the temperature conditions on each of the four diagrams A, B, C and D. **(2mks)**
b) Give **one** other method of assessing the temperatures in the brooder**.** **(1mk)**
c) Identify the part labelled X in the illustration above**.** **(1mk)**
d) Give the function of the part labelled X. **(1mk)**

17. The illustration below represents the digestive system of poultry. Study it and answer questions that follow.



a) Name the parts labelled E, F and G. **(1 $\frac{1}{2}$ mks)**

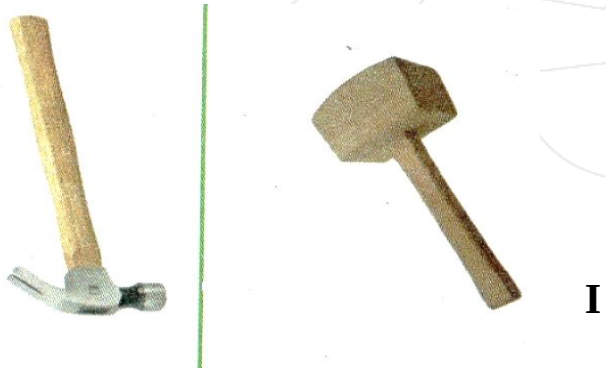
b) State the function of the parts labelled F and G. **(2mks)**

FGive **one** way in which the part labelled G is adapted to its function. **(1mk)**

c) Which of the parts labelled E, F and G is referred to as the true stomach. **($\frac{1}{2}$ mk)**

18. Study the illustration of the workshop tools below and answer questions that follow.

H



I

a) Identify the workshop tools labelled H and I. **(2mks)**

b) State the use of each of the tools illustrated above. **(2mks)**

c) Give **one** precaution taken when using tool H. **(1mk)**

19. The illustration below represents a practice carried out in sheep management. Study it and answer questions that follow.



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

b) Describe the process of carrying out the practice illustrated above. **(3mks)**

c) Name the tool used in carrying out the practice shown above. **(1mk)**

SECTION C (40 MARKS)

20. a) Outline **six** factors considered when selecting construction materials. **(6mks)**

b) Discuss brucellosis disease under the following sub-headings.

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

ii) Symptoms**.** **(4mks)**

iii) Control. **(4mks)**

c) State **four** characteristics of landrace breed of pigs. **(4mks)**

21. a) State **five** maintenance practices carried out in a tractor battery. **(5mks)**

b) State **three** importance of lubrication system. **(3mks)**

c) Describe the procedure followed when carrying out hand spraying in cattle. **(6mks)**

d) Explain **six** essentials of clean milk production**.** **(6mks)**

22. a) State **six** symptoms of roundworm attack in livestock. **(6mks)**

b) Describe **six** characteristics of African wild bee. **(6mks)**

c) State **eight** advantages of artificial insemination. **(8mks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 2)

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name, index number, admission number and class in the spaces provided.*

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

(c) *Answer **all** the questions in section A and B.*

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

(e) *Answers should be written in the spaces provided.*

For Examiner's Use Only

	Question	Maximum Score	Candidate's Score
A	1-16	30	
B	17-20	20	
C	21-23	20	
		20	
Total score		90	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION A. (30 MARKS)

Answer ALL questions in this section in the spaces provided

1. Give ***four*** reason why farmers are encouraged to practice organic farming ***(2mks)***

2. Name the routine filed practice done by;

i. Removal of extra suckers in banana stool ***(½mk)***

Removal of old stems down to level of top foliage in pyrethrum ***(½mk)***

ii. Removal of suckers from coffee bushes ***(½mk)***

3. Distinguish between GDP and GNP ***(2mks)***

4. What meant by the following terms

i) Seed inoculation ***(1mk)***

ii) Seed dressing ***(1mk)***

5. Name ***four*** types of terraces ***(2mks)***

6. State ***three*** characteristics of phosphatic fertilizers ***(½ mk)***

7. Explain the relationship between scarcity and choice as used in agricultural economics ***(2mks)***

8. Outline ***four*** ways by which crop pest are classified ***(2mks)***

9. State ***four*** advantages of land consolidation ***(2mks)***

10. Outline ***four*** benefits derived from trees used in agroforestry ***(2mks)***

11. Give ***four*** advantages of overhead irrigation in crop production ***(2mks)***

12. State ***four*** practices which improve light intensity in crop production ***(2mks)***

13. a) Give ***two*** factors that influence the quality of hay ***(1mk)***

b) Outline ***two*** other methods of conserving forage in the farm ***(1mk)***

14. Give ***four*** varieties of tomatoes grown for processing ***(2mks)***

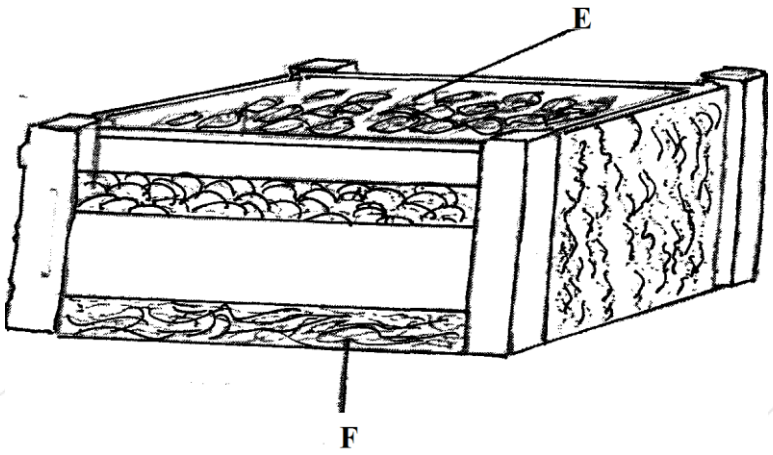
15. Give ***four*** harmful effects of weed on crop production ***(2mks)***

16. State ***four*** factors that influence the number of secondary cultivation in seed bed preparation ***(2mks)***

SECTION B (20MKS)

ANSWER ALL QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED

17. The diagram below represents a method of manure preparation. Study it carefully and answer the questions that follow;

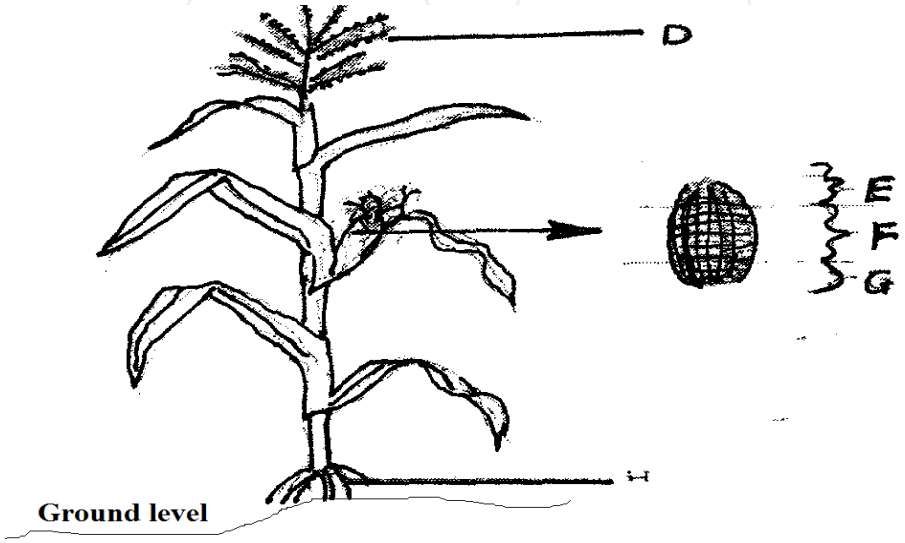


a) Identify the type of manure being prepared *(1mk)*

b) Name the parts labelled E and F *(2mks)*

c) Give ***two*** disadvantages of organic manures *(2mks)*

18. The diagram below illustrates a cereal crop plant and its produce, study the diagram carefully and answer the question that follow;



a) Name ***one*** disease that attack the part labelled D in the diagram *(1mk)*

b) From which section of the produce labelled E, F and G should seed for planting be obtained?

(1mk)

c) Give ***one*** reason for the answer given in (B) above *(1mk)*

d) State ***two*** functions of the part labelled H in the diagram *(2mks)*

19. A farmer wishes to change her enterprise form vegetable production to dairy farming. The costs she incurs on vegetables are as follows;

i) Weeding sh. 200

ii) Harvesting sh. 300

iii) Fertilizer sh. 500

iv) Seeds sh. 400

When she changes per enterprise to dairy she incurs the following costs;

Cost of buying cattle sh. 5000

Disease control – sh 200

Salary for milk person –sh 2000

Fencing – sh. 500

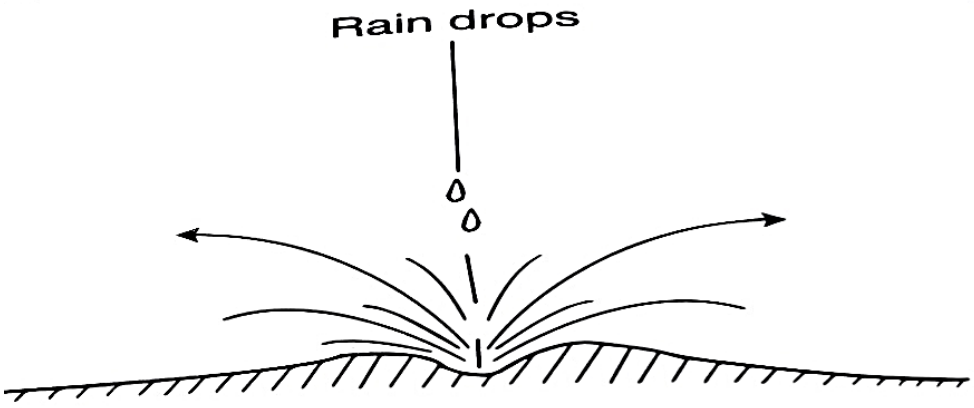
The revenue she gets from vegetable is sh 10,000 while in dairy she gets;

i) Milk sales sh 15,000

ii) Manure sales sh 1000

Draw a partial budget and indicate the effect of the proposed changes. ***(5mks)***

20. The illustration below shows a type of soil erosion. Study it carefully and answer the question that follow:



a) Identify the type of erosion illustrated above; ***(1mk)***

b) Give ***three*** soil factors that influence the rate of soil erosion ***(3mks)***

c) Name one agent of soil erosion ***(1mk)***

SECTION C (40 MARKS)

ANSWER ANY TWO QUESTIONS FROM THIS SECTION

21. a) Describe harvesting of sugar cane ***(4mks)***

b) Study following information which was extracted from juhudi farm record on 31-12- 95 and answer the question below

Loans payable to bank	300,000
Five milking cows	250,000
400 layers	80,000

20 goats		30,000
Debts payable to co-operative		20,000
Buildings/ structures	60,000	
Bonus payable to workers	19,000	
Cattle feed in store	10,000	
Animal drugs in store	4,000	
Debtors receivable	18,000	
Breakages to repair	30,000	
Cash at hand	20,000	
Cash in Bank	30,000	
Spray equipment		12,000

Prepare a balance sheet for Juhudi's farm using the information above; ***(6mks)***

d) Describe the function of agricultural marketing ***(10mks)***

22. a) Describe the procedure of silage making ***(10mks)***

b) State ***five*** effects of winds in crop production ***(5mks)***

c) Explain ***five*** physical methods of pest control ***(5mks)***

23. a) Describe the safety precautions a farmer should take when using herbicides ***(5mks)***

b) Explain ***five*** factors that influence rooting of cutting ***(10mks)***

c) Explain ***five*** ways through which farmers adjust to risks and uncertainties in farming ***(5mks)***

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 2)

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name, index number, admission number and class in the spaces provided.*
(b) *Sign and write the date in the spaces provided above.*
(c) *Answer* ***all*** *the questions in section A and B.*
(d) *Answer any* ***two*** *questions in section C.*
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FOR EXAMINER'S USE ONLY

	Question	Maximum Score	Candidate's Score
A	1-18	30	
B	19-21	20	
C		20	
		20	
Total score		90	

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SECTION A (30MARKS)

Answer all questions in this section

1. State ***FOUR*** factors that determine the strength of concrete in building and construction. **(2mks)**

2. State the factors that a farmer should consider when siting a bee hive to prevent swarming. **(2mks)**

3. Name ***ONE*** livestock disease that is transmitted by the following parasites **(1mks)**

(a) Brown ear tick

(b) Tsetse fly

4. State ***TWO*** factors that enable ruminants to break Fibrous food materials . **(1Mk)**

5. State ***FOUR*** breeds of rabbits. **(2mks)**

6. State ***FOUR*** essentials of clean milk production. **(2mks)**

7. State ***FOUR*** measures that should be taken to control brucellosis in cattle. **(2mks)**

8. State ***FOUR*** ways of restraining cattle **(2mks)**

9. State ***FOUR*** advantages of battery cage system. **(2mks)**

10. State ***FOUR*** maintenance of a Jackplain **(2mks)**

11. State ***TWO*** functions of ventilation in a farm house. **(1mk)**

12. Define the following terms as used in sheep rearing. **(2mks)**

(i) Hogget

(ii) Burling

(iii) Ringing

(iv) Wigging\

13. State ***TWO*** types of selection practiced by livestock farmers. **(1mk)**

14. State ***FOUR*** factors that lead to long calving interval in cattle. **(2mks)**

15. Outline ***THREE*** methods of harnessing tractor power. **(1 ½ mks)**

16. State ***TWO*** causes of small sized eggs in poultry. **(1mk)**

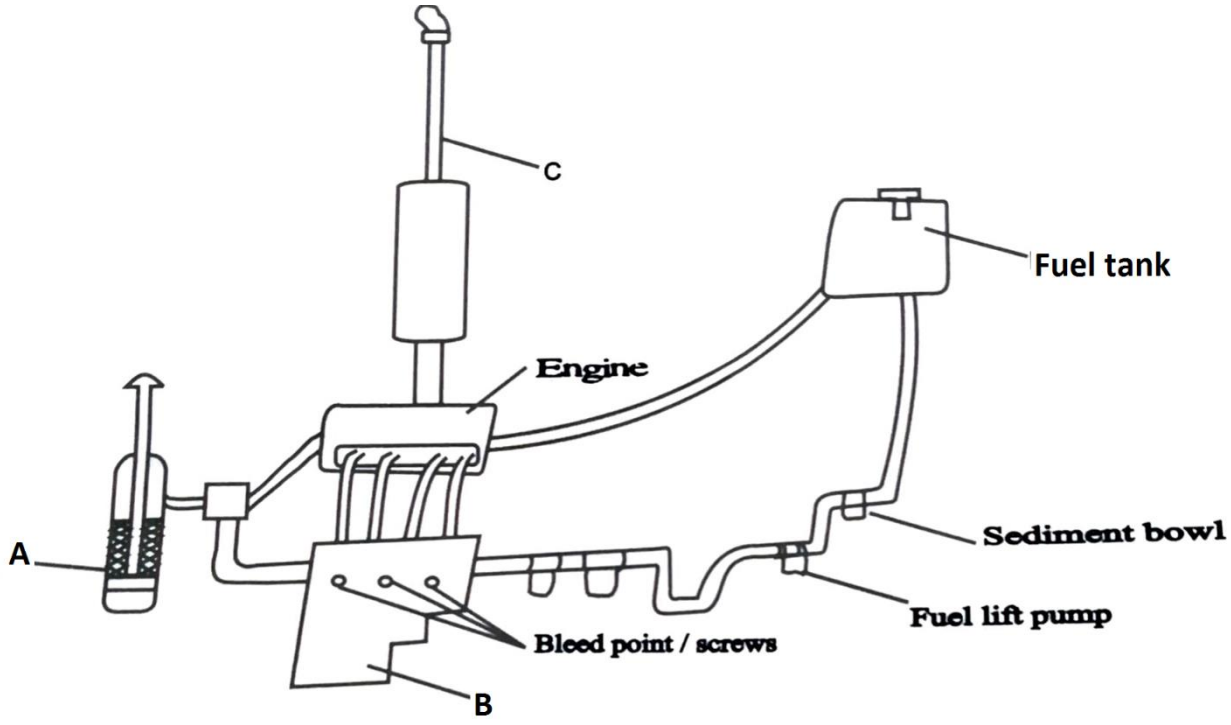
17. State ***FOUR*** functions of the lubricating system in a tractor. **(2mks)**

18. State ***THREE*** qualities considered when selecting a heifer for dairy purposes **(1 ½ mks)**

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION B.

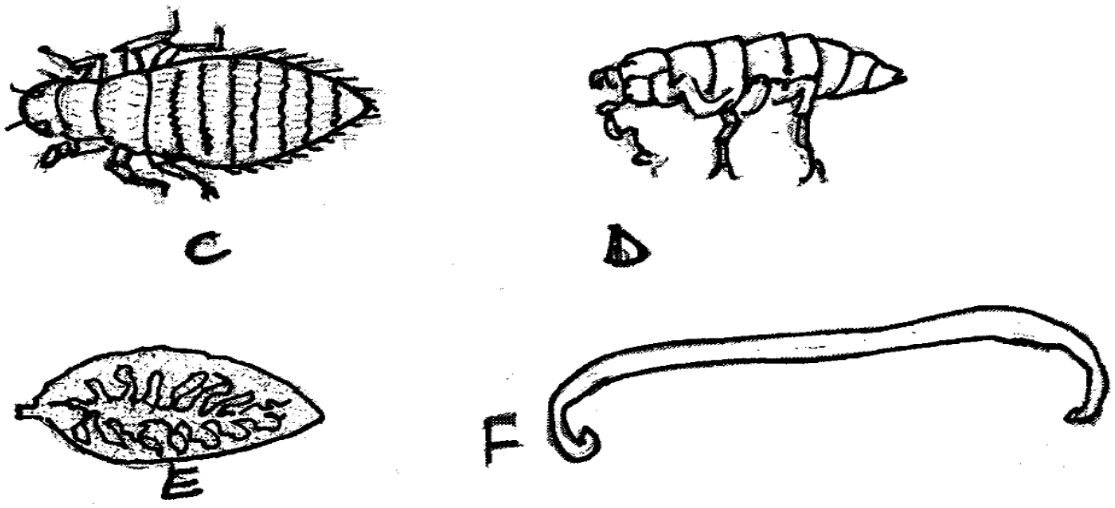
19. Study the diagram below of a diesel fuel system then answer the questions that follow.



a) Identify the parts labelled A, B, C **(3mks)**

b) State ***TWO*** maintenance practices carried out on the system **(2mks)**

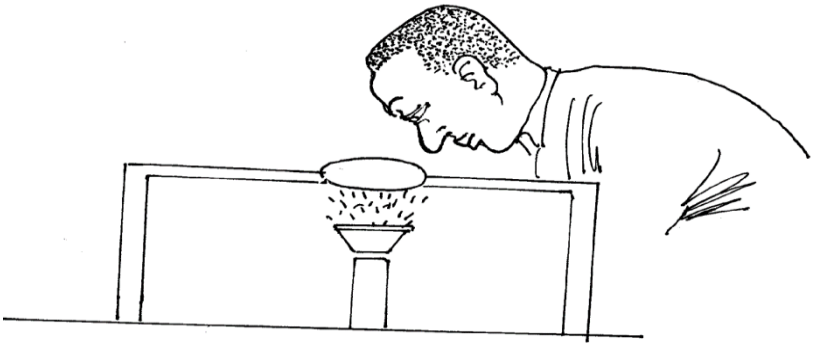
20. Below are diagrams of certain parasites. Study them carefully and answer the questions that follow.



a) Identify parasites C.D and E **(3mks)**

b) State ***TWO*** categories of the parasites above. **(2mks)**

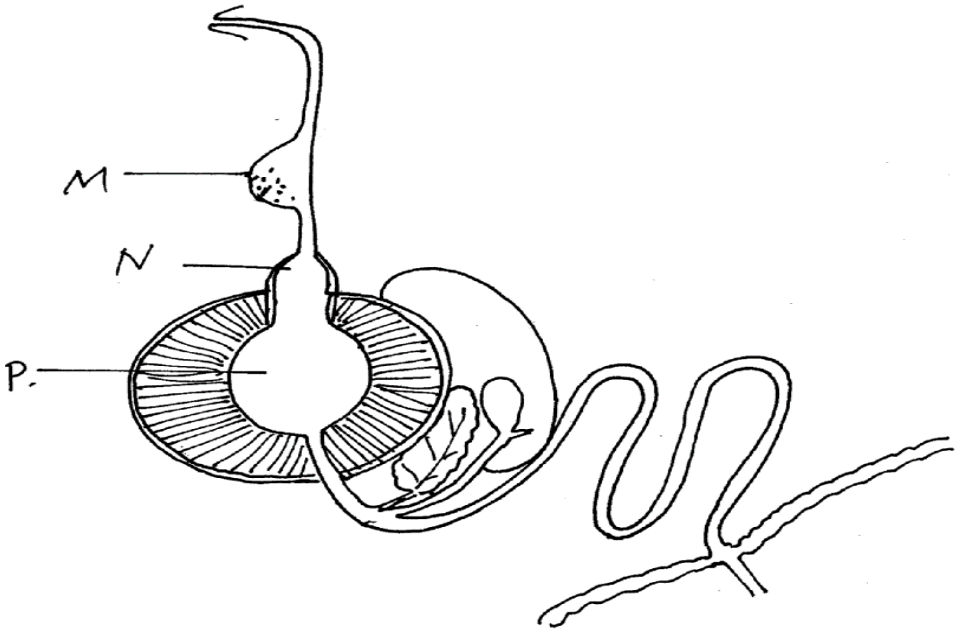
21. Below is an activity carried out in poultry production. Study it carefully then answer the questions that follow.



(a) Identity the practice being carried out/ **(1mk)**

(b) State ***FOUR*** defects that can be detected by this practice. **(4mks)**

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



(a) Name the parts labelled M,N,P **(3mks)**

(b) State ***ONE*** function of parts labelled M & P **(2mks)**

SECTION C (40 MARKS).

INSTRUCTIONS: All Questions have equal; marks. Chose any two.

23.a. Describe advantages of Ai practice in livestock production. **(10mks)**

(b) Differentiate between petrol and diesel engine. **(5mks)**

(c) Describe the components of a spray race **(5mks)**

24.(a)Describe *FIVE* management practices carried out on hedge. **(5mks)**

(b) State the general symptoms of endoparasite attack. **(10mks)**

(c) Describe the uses of various equipments that are used in honey harvesting. **(5mks)**

25. State the maintenance practices of a mouldbord plough/ **(5mks)**

(b) Describe mastitis under the following sub headings.

(i) Animal affected **(2mks)**

(ii) Pre-disposing factors **(5mks)**

(iii) Symptoms of attack **(3mks)**

(c) State ***FIVE*** factors to be considered when selecting construction materials. **(4mks)**

KCSE 25

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 3)

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

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Kenya Certificate of Secondary Education.

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		20	
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SECTION A. (30 MARKS)

Answer ALL questions in this section in the spaces provided

1. Name **four** classes of livestock farming **(2 marks)**

2. State **four** advantages of landlordism and tenancy land tenure system. **(2marks)**

3. Give **four** methods of harvesting agro forestry trees **(2 marks)**

4. State **four** characteristics of a good grain store. **(2 marks)**

5. Give **four** structural soil and water conservation measures. **(2 marks)**

6. Name **two** types of labour records kept by a farmer. **(1 mark)**

7. State **four** methods of land acquisition **(2 marks)**

8. State **four** factors which increases seed rate during planting **(2 marks)**

9. State **four** importance of growing crops under optimum temperature **(2 marks)**

10. Name **four** classes of weeds. **(2 marks)**

11. State **four** factors to consider when siting a nursery bed. **(2 marks)**

12. State **four** contents of a tomato sales receipt **(2 marks)**

13. State **four** factors that determine pesticide efficiency. **(2 marks)**

14. State **four** conditions under which land clearance may be necessary. **(2 marks)**

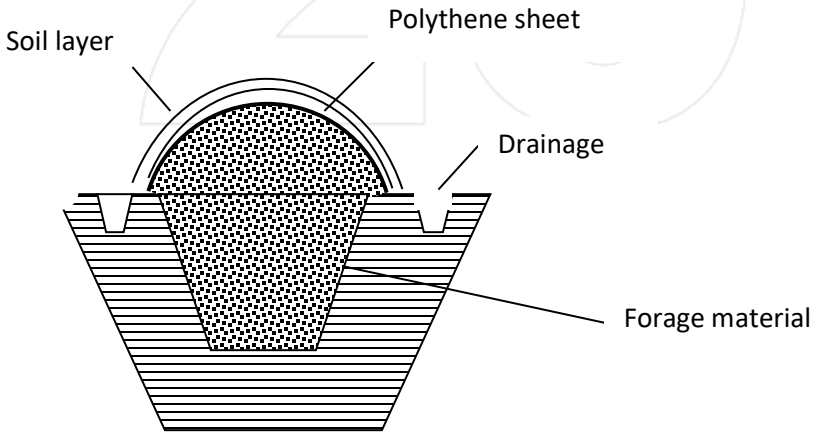
15. Name **two** non-competitive market system **(2 marks)**

16. Name **two** methods of soil sampling. **(1 mark)**

SECTION B (20MARKS)

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

17. The diagram below shows a method of forage conservation



(i) Name the structure illustrated above **(1 mark)**

(ii) Name the form of forage conservation using the above structure. **(1 mark)**

(iii) State **two** factors to consider when siting the structure. **(2 marks)**

(iv) Name other form of forage conservation apart from the one illustrated above. **(1 mark)**

18. Below is a format of a record kept by a farmer. Use it to answer the questions the follow.

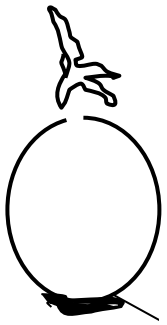
Date	Disease symptom	Animal affected	Drug used	Cost of treatment	Remarks

(i) Name the type of farm records illustrated above. **(1 mark)**

(ii) State two importance of the record to the farmer **(2 marks)**

(iii) Give any two entries on the remark section. **(2 marks)**

19. During harvesting of tomato, a farmer noticed some symptoms at the bottom of the tomato fruit as shown below

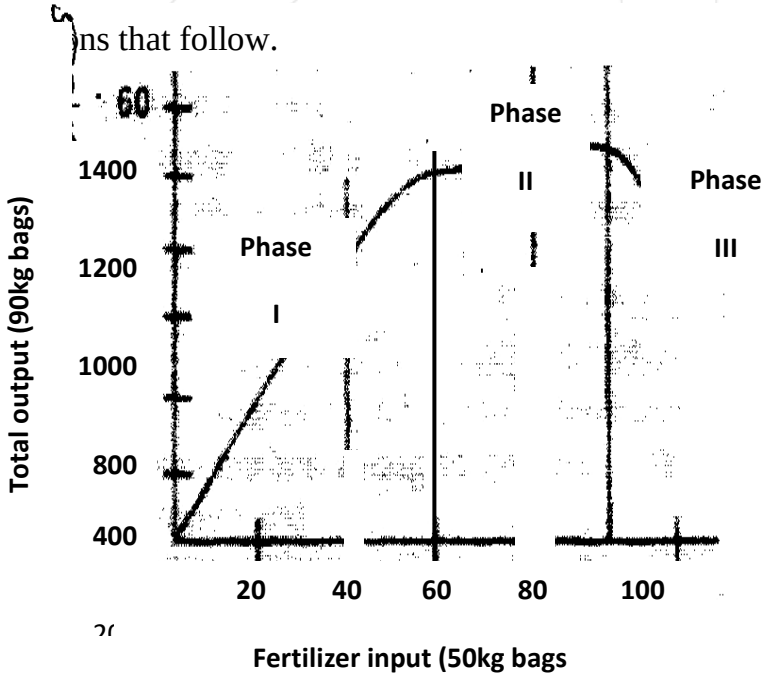


(i) Name the disease whose symptom is illustrated in the tomato (diagram) **(1 mark)**

(ii) State two causes of the disease in the tomato **(2 marks)**

(iii) State two ways of controlling the disease. **(2 marks)**

20. Below is a graphical representation of a law in Agricultural economics. Study the graph carefully and answer the ons that follow.



i) Identify the law represented by the graph. **(1 mark)**

ii) State the law. **(1 mark)**

iii) Explain how each additional unit of fertilizer input relates to total output of maize in the Phases II and III.

Phase II …….. **(1 mark)**

Phase III ……..…….. **(1 mark)**

iv) State the importance of the law identified in (i) above to a maize farmer**.** **(1 mark)**

SECTION C (40 MARKS)

Answer any two questions from this section in the spaces provided

21. i) State five importance of irrigation. **(5 marks)**

ii) State four roles of calcium in crops. **(4 marks)**

iii) State six cultural disease control measures. **(6 marks)**

iv) Describe five factors that may increase the demand of maize in Bondo market. **(5 marks)**

22. i) State five causes of land fragmentation. **(5 marks)**

ii) Describe five ways by which soil looses its fertility. **(5 marks)**

iii) Describe transplanting of tomato seedlings from the nursery bed to a seedbed**.** **(5 marks)**

iv) Describe the management of agro forestry trees. **(5 marks)**

23. i) Describe five ways by which a farmer can overcome risks and uncertainties in maize production. **(5 marks)**

ii) Describe harvesting and precaution taken during harvesting of tea. **(5 marks)**

iii) State four farming practises which may destroy soil structure. **(4 marks)**

iv) State six importance of crop rotation in a farming business. **(6 marks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 3)

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name, index number, admission number and class in the spaces provided.*
(b) *Sign and write the date in the spaces provided above.*
(c) *Answer* ***all*** *the questions in section A and B.*
(d) *Answer any* ***two*** *questions in section C.*
(e) *Answers should be written in the spaces provided.*

FOR EXAMINER'S USE ONLY

	Question	Maximum Score	Candidate's Score
A	**1-18**	**30**	
B	**19-21**	**20**	
C		**20**	
		20	
Total score		**90**	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION A (30MARKS)

Answer all questions in this section

1. Give **two** reasons for docking in sheep production. **(1 mark)**

2. Give **four** ideal qualities of a good calf pen **(2 marks)**

3. Outline **four** characteristics of Romney marsh sheep breed **(2 marks)**

4. (a) State **two** disadvantages of using metal frames in construction of farm buildings (**1 mark)**

(b) Give **two** reasons for seasoning timber **(1 mark)**

5. Outline **four** reasons for swarming of bees **(2 marks)**

6. List **two** methods that can be used to preserve fish **(1 mark)**

7. **(a)** What is a notifiable disease? **(1 mark)**

(b) Name **four** examples of notifiable diseases in livestock. **(2 marks)**

8. Name **two** major physical differences between Bactrian and Dromedary breeds of camel.(**1 mrk)**

9. State **two** characteristics of heavy poultry breeds. **(1 mark)**

10. List **two** maintenance practices of a wood chisel. **(1 mark)**

11. State **four** ways of controlling tsetse flies. **(2 marks)**

12. State **four** characteristics of livestock roughage feedstuff. **(2 marks)**

13. List **two** equipment used in handling cattle during agricultural exhibition. **(1 mark)**

14. State the gestation period of the livestock animals given below

a) Rabbit **(½ mark)**

b) Goat **(½ mark)**

15. State **four** disadvantages of natural mating **(2 marks)**

16. State **one** egg content added to it at the magnum during egg formation process. **(1 mark)**

17. State **four** methods used to control cannibalism in a deep litter system **(2 marks)**

18. (a) Give **three** uses of Biogas in the farm **(1 ½ marks)**

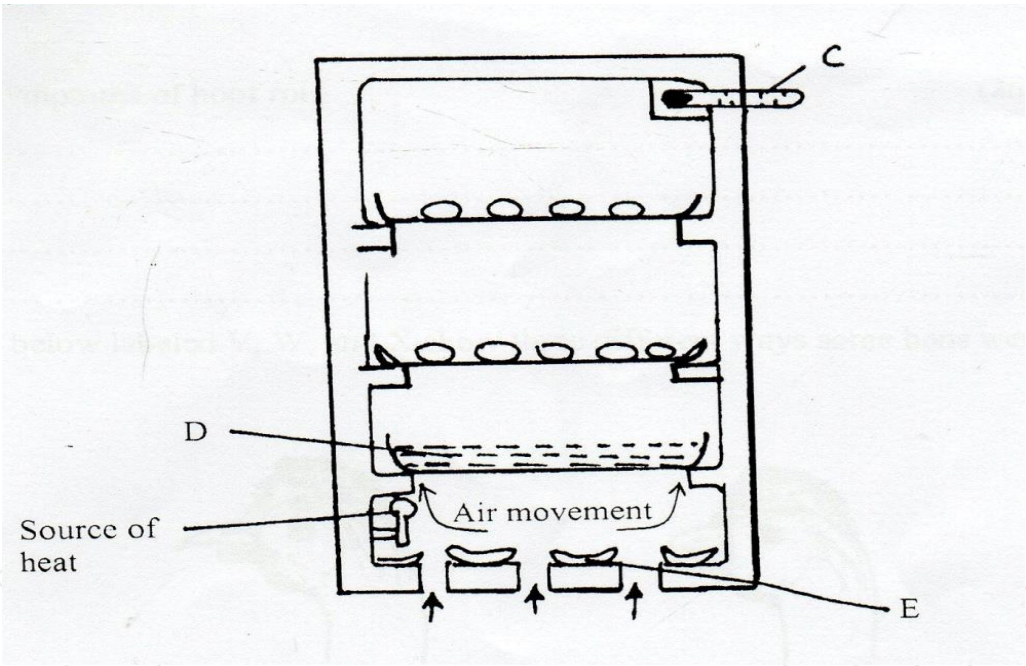
(b) State **three** reasons why the use of wind power on the farm is limited. **(1 ½ marks)**

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION B: (20MARKS)

Answer all questions in this section.

19. (a) The illustration below represents equipment used in poultry production. Study it carefully and answer the questions that follow:



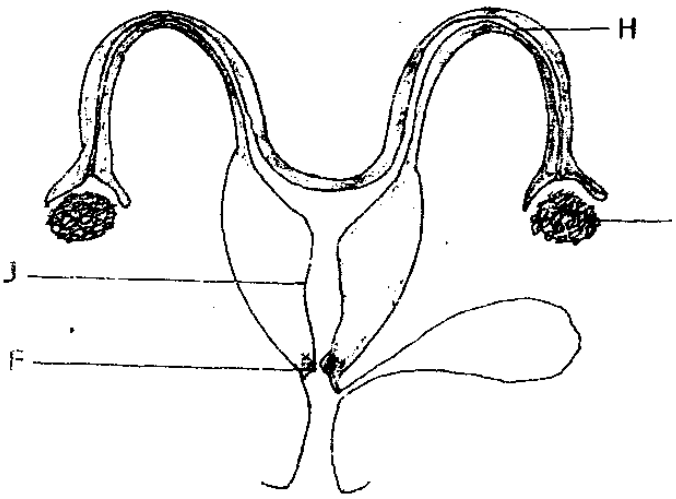
i) Identify the equipment illustrated above. **(1 mark)**

ii) Name the parts labeled C, D and E on the diagram of the equipment illustrated on the equipment in (a) above **(1 ½marks)**

iii) What are the functions of each of the parts labeled C, D and **E** **(3marks)**

iv) Why is it important to turn the eggs around 180 oc every 6- 8 hours? **(1mark)**

b) The diagram bellows shows the reproductive system of a cow. Study it and answer the questions that follow.



(i) Name the parts labeled J, F and H. **(1½ marks)**

(ii) State one function of each of the parts labeled **J and H**

J …….. (1 mark)

H ……..… (1.mark)

(iii) Name three reproductive hormones in dairy cattle **(3 marks)**

20. (a) The illustrations below labeled V, W, and X show three different ways some hens were debeaked.



V W X

i) Which hen was correctly debeaked**?** **(1 mark)**

ii) State two reasons for your choice in (i) above**.** **(1 mark)**

(b) Name any two tools which would be used for debeaking. **(2 marks)**

21. Boran Dam X FRIESIAN SIRE – f1 heifer x charolais

(a) What type of breeding system is shown above? **(1 mark)**

(b) Why would you recommend such a breeding system? **(1 mark)**

(c) What characteristic in the heifer are you improving by using such a breeding system? **(1 mark)**

SECTION C: (40 MARKS)

Answer any two questions

22. (a)Outline ten differences between a tractor drawn mould plough and an ox mouldboard.**(10 mks**

(b) Describe management of growers to point of lay. **(10 marks)**

23. (a) (i) Give three factors considered in siting a farm structure. **(3 marks)**

(ii) Describe the functions of each of the following parts of a plunge dip. **(7 marks)**

(a) Foot bath
(b) Entrance race
(c) Roof
(d) Drainage race
(e) Jump
(f) Dip tank
(g) Exit step

(b) Describe the procedure of constructing a barbed wire fence. **(10 marks)**

24. (a) (i) Give three factors affecting the amount of food given to an animal. **(3 marks)**

(ii) State and explain seven essential of clean milk production. **(7 marks)**

(b) Describe digestion of grass in the rumen of a cow. **(10 marks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 4)

443/1

AGRICULTURE

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name and index 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 sections* ***A*** *and* ***B****.*

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

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1 – 20	30	
B	21 - 26	40	
C	27-29	20	
Total Score		90	

SECTION A

*Answer **ALL** questions from this section*

1. State t**wo** methods which can be used to detect mineral deficiency in crops. **(lmk)**

2. State **two** conditions under which shifting cultivation is favourable. **(lmk)**

3. State t**wo** conditions under which seeds are seeded at a high seed rate. **(2mks)**

4. State **three** ways in which trees improve soil fertility. **(1 ½ mks)**

5. Give **three** causes of hardpans in cultivation. **(1 ½ mks)**

6. Under what **two** conditions does opportunity cost not exist? **(lmk)**

7. Give **two** roles of additives in silage making. **(lmk)**

8. Outline **four** advantages of mixed farming. **(2mks)**

9. Give **three** reasons why bulbils make good planting materials than suckers. **(2mks)**

10. Give **three** reasons why agriculture is defined as a science. **(1 ½ mks)**

11. Give **four** characteristics of large scale farming system. **(2mks)**

12. State **four** farming practices which help to improve soil structure. **(2mks)**

13. Give **four** effects of top dressing on a pasture. **(2mks)**

14. What are the two reasons for innoculating legume seeds before planting . **(1mk)**

15. State **two** advantages of carrying out pruning in banana production. **(1mk)**

16. In maize hybrid 614 what do the following figures stand for? **(1mk)**

(i) 6……

(ii) 4……

17. Give **two** ways in which pastures are classified. **(1mk)**

18. Name **four** practices carried out to improve and maintain permanent pasture. **(2mks)**

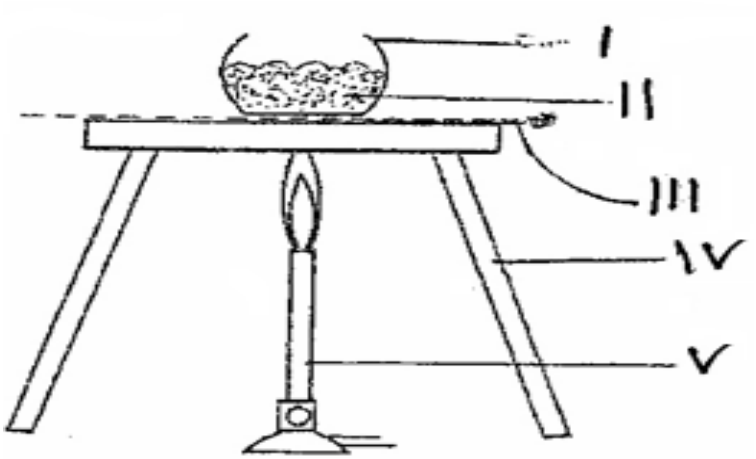
19. Give **four** advantages of tissue culture. **(2mks)**

20. Give **three** stages of controlling devils horsewhip by mechanical means. **(1½ marks)**

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION B

21. The diagram below shows a set up of apparatus for finding the percentage of humus contents in a soil by ignition.



(a) Label the apparatus. **(2 marks)**

I……

II……...

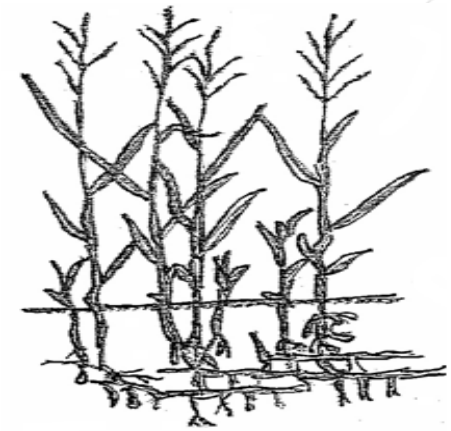
III……..

IV……...

(**b**) Outline the steps followed in carrying out the illustrated experiment. **(3 marks)**

22.

G



H



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

G ……

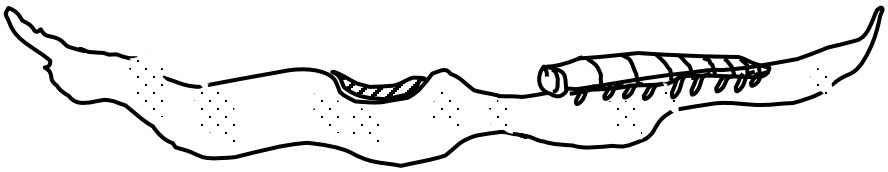
H ……

(ii) State the economic importance of the weed shown in diagram **G**. **(2 marks)**

(iii) Why is it difficult to control weed in diagram **G**? **(1 mark)**

For Marking Schemes Contact 0746-222-000 / 0742-999-000

23. Study the pest below and answer the questions below.



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

(b) State two methods of controlling the pest. **(2 marks)**

(c) Name the crops attacked by the pest. **(2 marks)**

24. The diagram below illustrates a field management practices in tomatoes

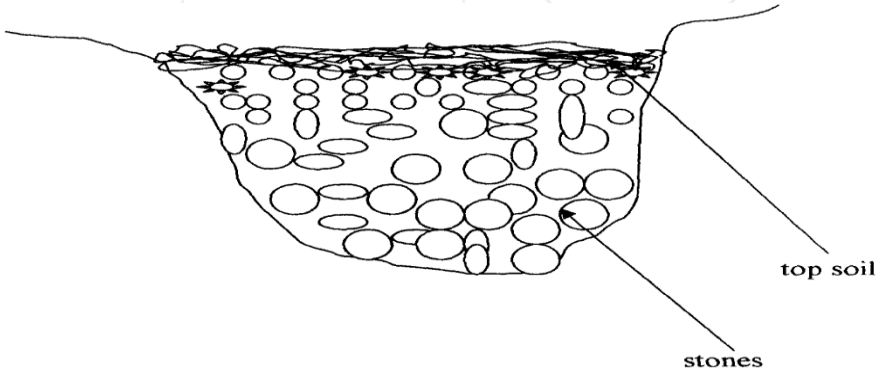


(i) Identify the practice **(1 mark)**

(ii) State three reasons for carrying out the practice. **(3 marks)**

(iii) Give another practice that could be carried out to give the same results. **(1 mark)**

25. Study the diagram below then answer the questions that follow:

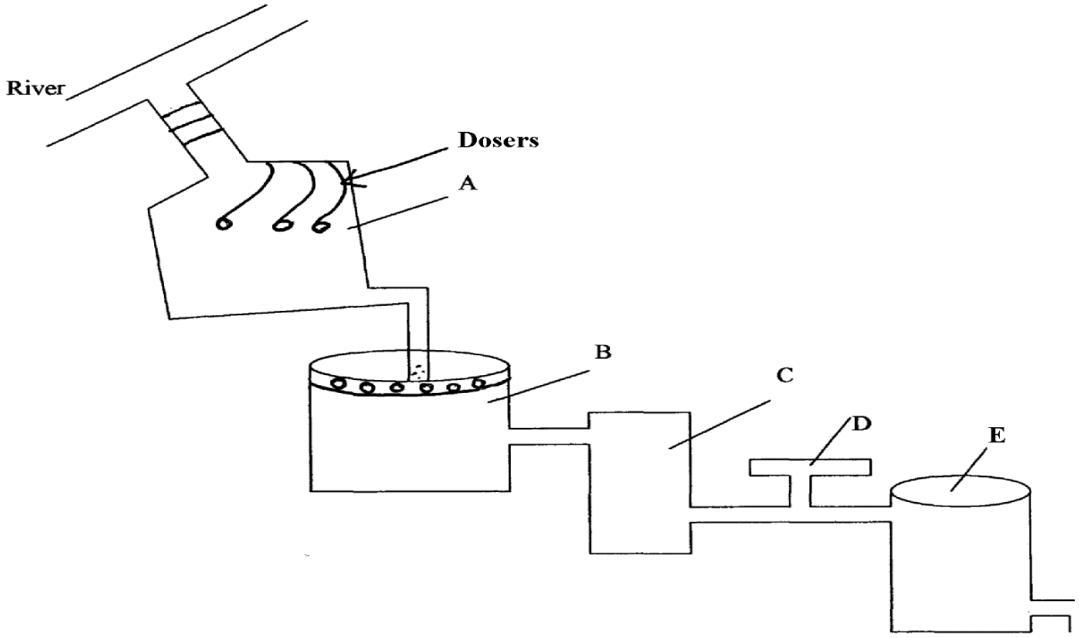


(a) Identify the method of drainage above. **(1mk)**

(b) State other **three** methods used to drain swampy areas. **(3mks)**

(c) Give **four** importance of drainage. **(4mks)**

26. Study the processes of chemical water treatment below and answer the questions that follow:



(a) Identify the parts labeled: **(2mks)**

A…… **C**……

B…… **D**……

(b) State **two** chemical substances added at part labeled B and give their functions. **(2mks)**

(c) State **two** factors which influence the quantity of the chemical used in part labeled D**.(2mks)**

(d) State **three** uses of water in crop production. **(3 mks)**

(e) State **three** types of production functions in agriculture. **(3mks)**

SECTION C (20MKS)

27.(a) Describe the cultural methods of weed control in crop production. **(l0mks)**

(b) Describe the harmful effects of pests on crops **(10mks)**

28.(a)Discuss the human factors which influence agriculture. **(10 marks)**

(b) Explain **five** factors to consider when choosing the planting time. **(10 marks)**

29. Describe the production of carrots under the following sub headings

a) Seedbed preparation **(3 marks)**

b) Harvesting **(4 marks)**

c) Explain five cultural methods of weed control in beans production. **(10 marks)**

d) Outline three roles of sulphur in crop production. **(3 marks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 4)

443/2

AGRICULTURE

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) Write your name and index 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 sections **A** and **B**.*

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

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1 – 29	40	
B	30 - 35	30	
C	36 - 38	20	
Total Score		90	

SECTION A (30 Marks)

*Answer **ALL** questions from this section*

1. What is apiculture? **(1 mark)**

2. Name one livestock disease that is transmitted by the following parasites.

(a) Brown ear tick **(½ mark)**

(b) Tsetse fly **(½ mark)**

3. State the intermediate host for liver fluke Fasciola spp. **(½ mark)**

4. State four breeds of rabbits. **(2 marks)**

5. State two functions of a crop in a digestive system of chicken. **(1 mark)**

6. State three ways of restraining cattle **(1½ marks)**

7. State two livestock diseases caused by virus. **(1 mark)**

8. State two types of selection practiced by livestock farmers **(1 mark)**

9. State three ways of preventing predation in a fish pond **(1mark)**

10. State four functions of feed additives in livestock production. **(2 marks)**

11. State two types of calf pens. **(1 mark)**

12. State advantages of embryo transplant. **(2 marks).**

13. State two roles of testis in male reproductive system. **(1 mark)**

14. Differentiate between mothering ability and prolificacy **(2 marks)**

15. State three ways in which feeding contributes to disease control. **(1½ marks)**

16. State two functional differences between rumen and abomasums. **(2marks)**

17. Name four practices carried out in the crush **(2 mks)**

18. Give three dual purpose cattle breeds **(1½ mks)**

19. Give three terms used to describe the following: - **(1½ mks)**

(i) Mature male pig**.....**

(ii) Sterilised birds **.....**

(iii) Mature female goat **.....**

20. State four reasons for identifying farm animals **(2mks)**

21. State two factors that determine the quality of honey **(1mk)**

22. Give four categories of livestock diseases **(2 mks)**

23. Name three tools used for plumbing **(1½ mks)**

24. State two maintenance practices carried out on an ox-drawn plough **(1 mk)**

25. List two sources of farm's power which are environmental friendly **(1 mk)**

26. State four functions of the lubricating system in a tractor **(2mks)**

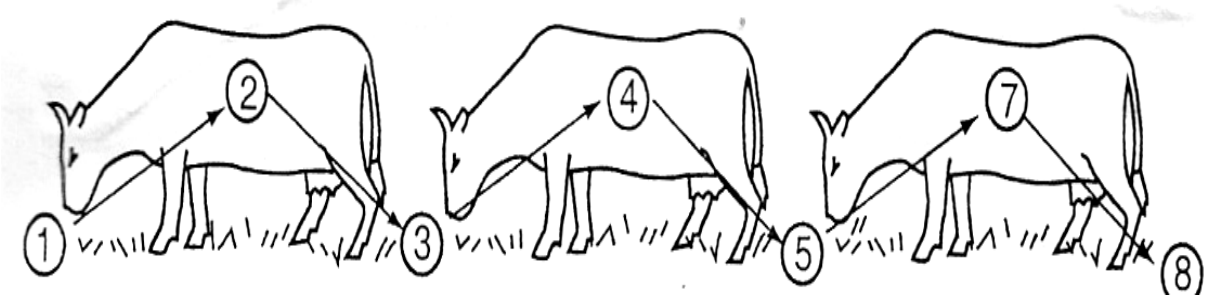
27. State two conditions under which a farmer would prefer to use an ox-cart instead of a tractor-drawn trailer **(1mks)**

28. State four qualities considered when selecting a heifer for dairy purposes **(1mks)**

29. Give one role of a damp proof course in the foundation of a farm building **(1mk)**

SECTION B (30MKS)

30. The illustrations below represents the stages of development of a three –host tick. Study it carefully and then answer the questions that follow:



(a) Briefly explain what is happening in the following stages **(4 marks)**

1……

4……

5……

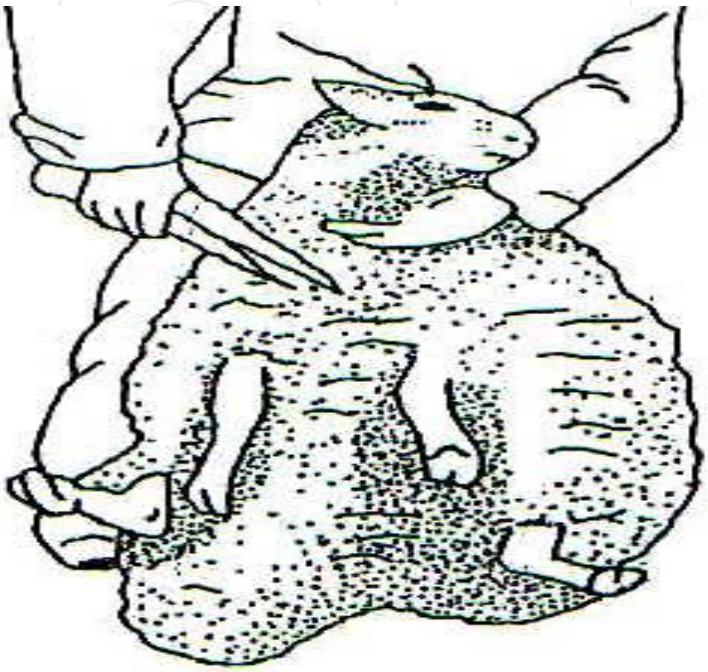
7……

(b) Why do you think that tick control is difficult using acaricides? **(1 mark)**

(c) Name the most common sites the tick can be found on the body of an animal**.** **(2 marks)**

(d) Give **two** examples of a three host tick **(1mark)**

31. The diagram below illustrates a certain practice carried out in sheep management. Study carefully and answer the questions that follow



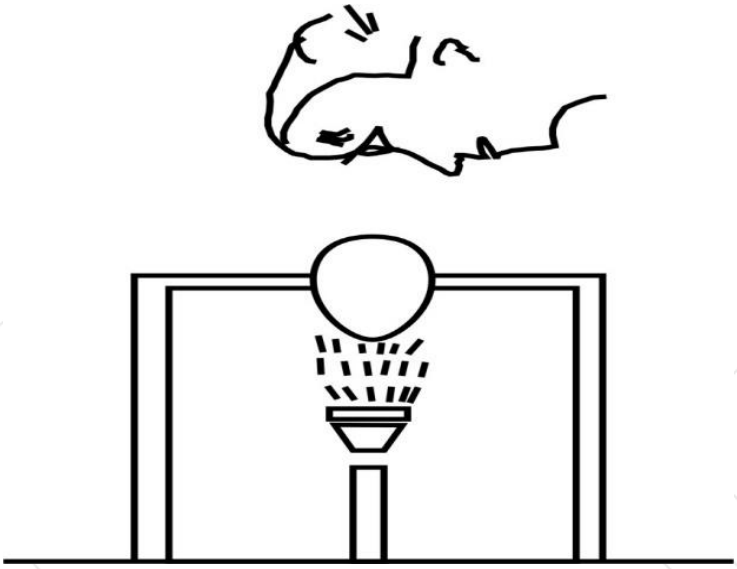
(i) Identify the practice illustrated above **(1mark)**

(ii) State two precautions a farmer should put into consideration when carrying out this practice.

(2marks)

(iii) How often should the practice be carried out? **(1mark)**

32. Below in an activity carried out in poultry production. Study it carefully then answer the questions that follow.

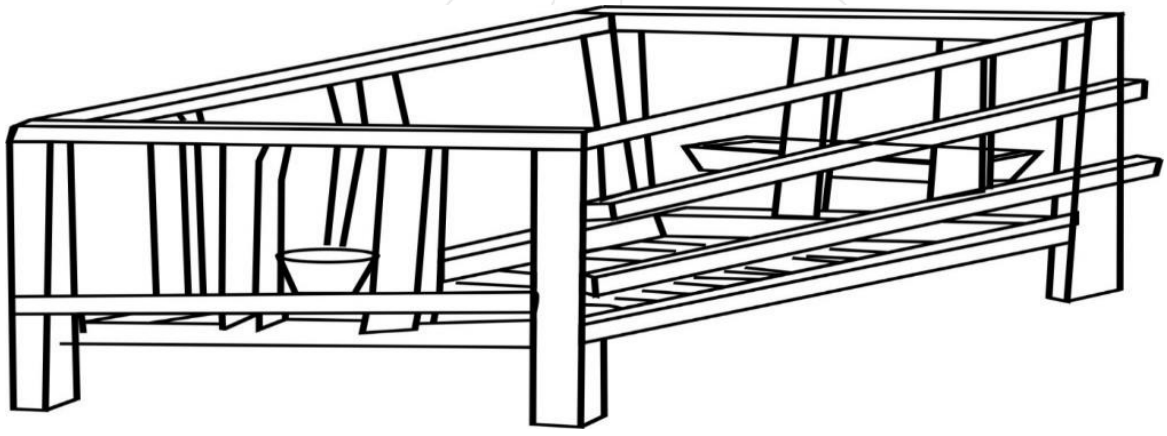


a) Identify the practice being carried out**.....** **(1 mk)**

b) State three defects that can be detected by this practice **(3 mks)**

c) State two disadvantages of artificial incubation. **(2 mks)**

33. Use the above diagram of a calf pen to answer the questions that follow.

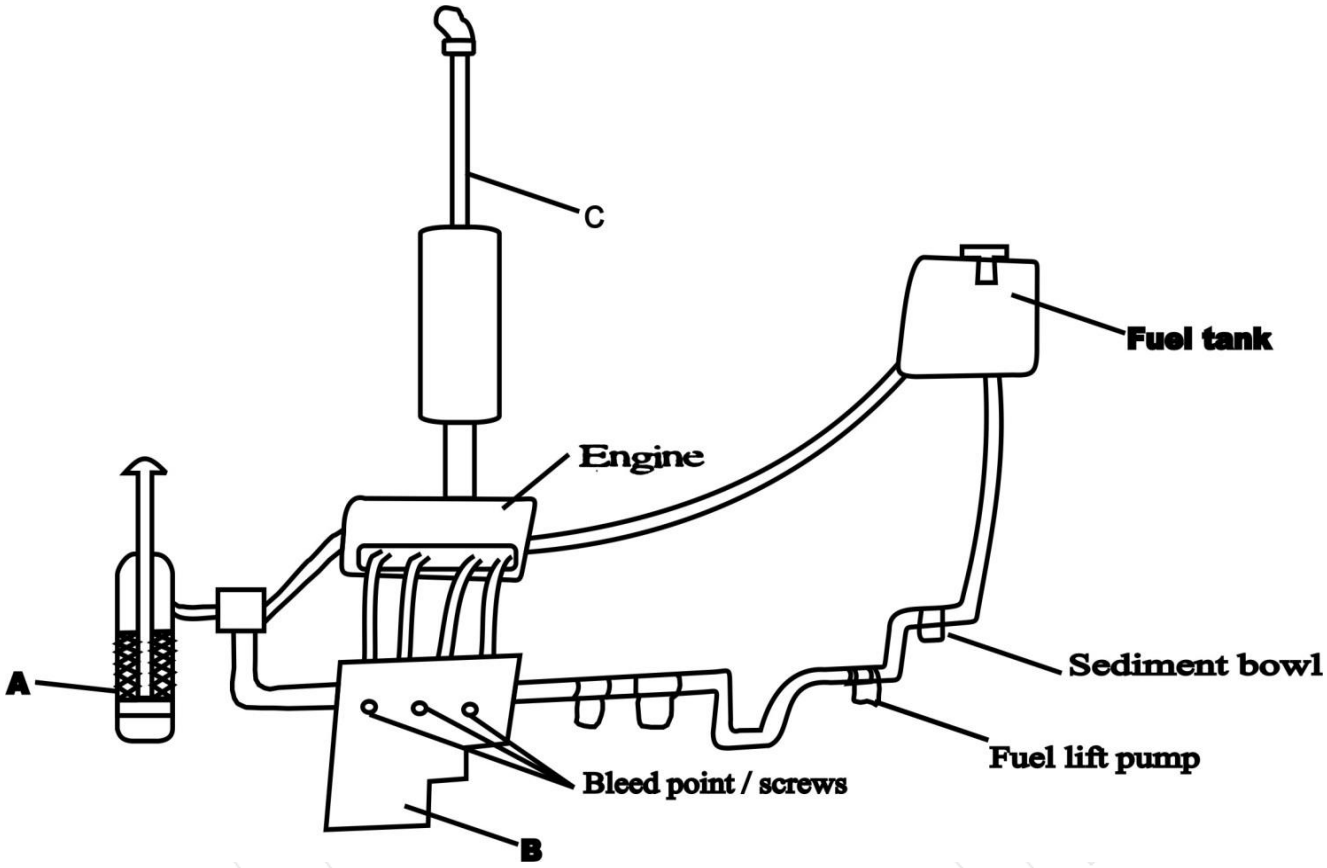


a) How high should the calf pen be raised from the ground **(1mk)**

b) Give any two reasons why calves are housed singly **(2mks)**

c) Why should the calf pen be near the milking parlour? **(2mks)**

34. Study the diagram below of a diesel fuel system then answer the questions that follow.



a) Identify the parts labelled A, B, C **(3 mks)**

b) State three maintenance practices carried out on the system **(2mks)**

35. Outline the procedure of proper milking technique **(3 mks)**

SECTION C (20MKS)

36. a) Outline five signs of heat in a cow **(5 mks)**

b) Outline five causes of stress in poultry and describe their control **(10mks)**

c) Using Pearson's square compute a ration with 20% DCP from oats which contains 10% DCP and simsim seedcake containing 60% DCP. (show your working) **(5mks)**

37. a) Outline the daily maintenance practices that should be carried out on a farm tractor **(8 mks)**

b) Outline twelve general symptoms of endoparasite attack in livestock. **(12 mks)**

38. a) State four advantages of using a sub soiler in seedbed preparation **(4mks)**

b) Give five advantages of artificial insemination in cattle **management** **(5mks)**

c) State five function of water in animal's body **(5mks)**

d) Describe control measures for tape worm in livestock **(6mks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 5)

AGRICULTURE

443/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

a) *Write your name and Admission number in the spaces provided at the top of this page*
b) *This paper consists of three sections: A , B and C*
c) *Answer all questions in sections A and B*
d) *Answer any two questions in section C*
e) *All answers should be written in the spaces provided*
f) *Candidate should answer the questions in English*

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1-21	30	
B	22-25	20	
C		20	
		20	
	TOTAL SCORE	**90**	

SECTION A (30 Marks)

Answer all questions in this section on the spaces provided

1. Suggest **three** factors that determine the choice of a method of farming **(1½ marks)**

2. Outline **three** effects of soil organisms which benefit crop growth **(1½ marks)**

3. State the soil component that determines **(1mark)**

Soil Structure class

Soil Structure grade

4. State **four** effects of hard pans in the soil **(2 marks)**

5. State **four** factors that determine the number of secondary operations carried out on land in the formation of a seedbed **(2marks)**

6. State **four** factors that are hinder access of enough and clean water to most Kenyans communities **(2marks)**

7. Name **three** causes of water logging in arable land **(1½ marks)**

8. What is the difference between compost manure prepared in drier areas and one prepared in wet areas? **(1 mark)**

9. State **two** methods used to test the PH of the soil **(1 mark)**

10. Differentiate between stem and root tubers **(1 mark)**

11. The average spacing of Arabica coffee is 2.7 m by 2.7 m. Calculate the plant population in one hectare (1Ha) of land (***Show your working***) **(2marks)**

12. State any **two** practices carried out during hardening of seedlings in the production of tomatoes **(1mark)**

13. Name the **three** types of suckers that are supposed to be left in each banana stool after removal or pruning of the extra suckers. **(1½ marks)**

14. State **four** types of information contained in a land title deed **(2 marks)**

15. Explain **two** ways in which grass strips help to conserve the soil **(1 mark)**

16. State **four** disadvantages of tillage as a method of weed control **(2 marks)**

17. Explain the difference between pests economic injury level and integrated pest management **(1mark)**

18. Name the **three** grades of coffee obtained after sorting out the picked berries **(1½ marks)**

19. What is topping in pasture management **(½ mark)**

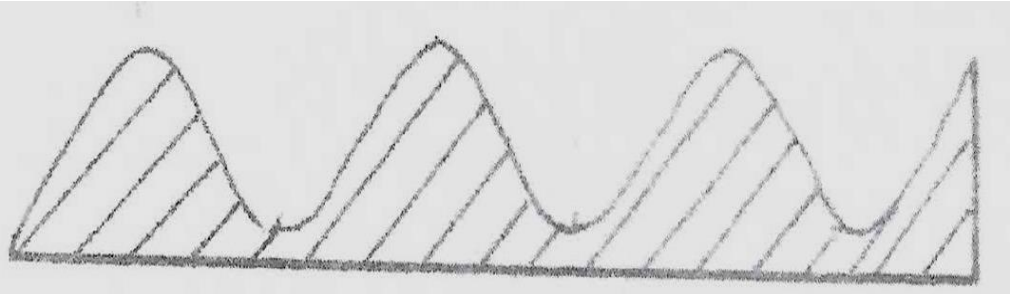
20. State **three** ways in which labour productivity can be improved **(1½ marks)**

21. State **three** roles of agricultural co-operatives in Kenya **(1½ marks)**

SECTION B (20 Marks)

Answer ALL questions in this section on the spaces provided

22. Below is a diagram of a tertiary land operation. Study it and answer the questions that follow



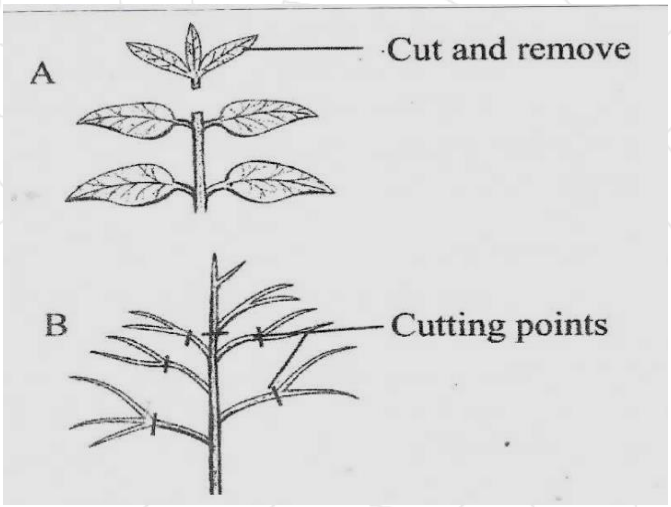
a) Name the tertiary land operation **(1 mark)**

b) Explain the process of performing the tertiary land operation **(1 mark)**

c) Name the tractor implement that can be used to achieve the operation **(1 mark)**

d) State the importance of carrying out the tertiary operation **(2 marks)**

23. Below are diagrams of two methods of pruning. Study them carefully and answer the questions that follow.



i. Identify the pruning methods shown below **(2 marks)**

Method **A** …….

Method **B** ……..

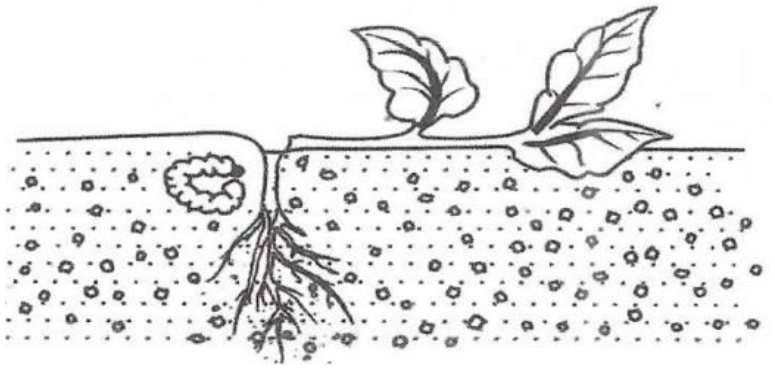
ii. When would it be necessary to carry out the type of pruning illustrated in both cases (**2 marks)**

Method **A** ……..

Method **B** ……..

iii. Give **two** advantages of carrying method of pruning in tomatoes **(1mark)**

24. Below is a diagram of a cabbage pest. Study it carefully and answer the questions that follow



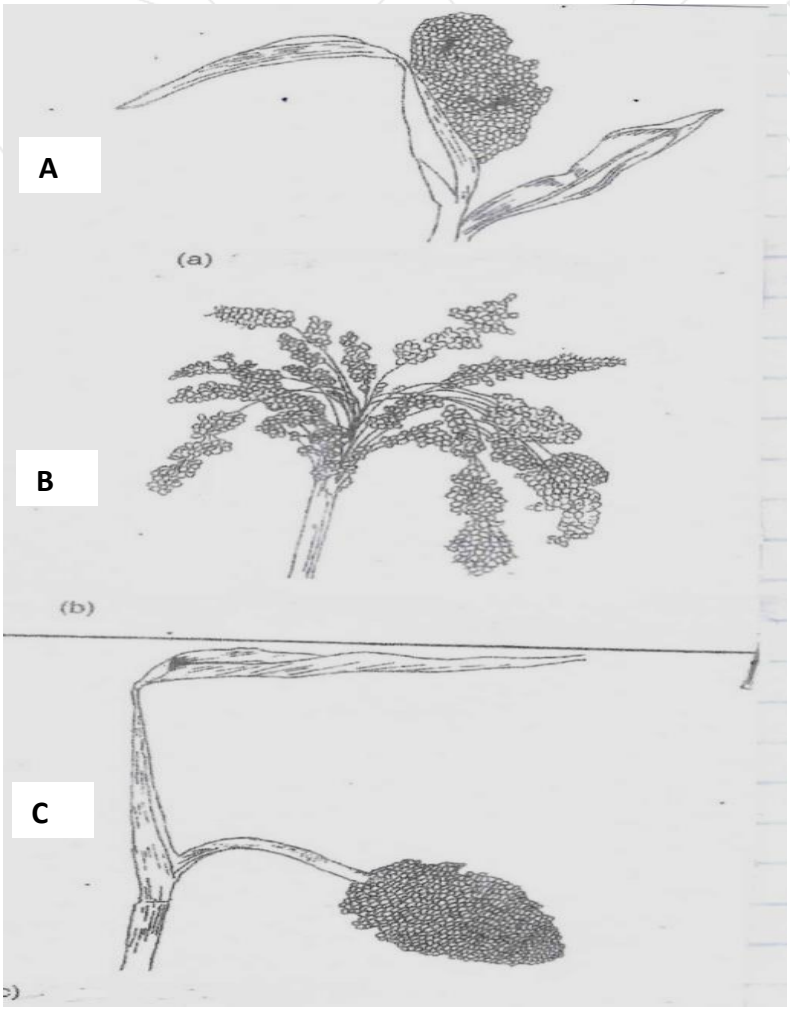
a) Identify the cabbage pest shown above **(1 mark)**

b) In which category of pests does the pest you named in (a) above belong **(1mark)**

c) What kind of mouth part does the pest named in (a) above possess? **(1 mark)**

d) Suggest **two** control measures for the pest named in (a) above **(2 marks)**

25. Below are diagrams of different varieties of sorghum. Study them and answer the questions that follow



i. Identify the different varieties A, B, C **(3 marks)**

ii. State **one** advantage of the variety labeled C over the other varieties **(1 mark**

iii. Name **two** common pests of sorghum **(1 mark)**

SECTION C (40 Marks)

Answer any TWO questions in this section in the spaces provided after question 28.

26. a) State and explain **four** ways in which biological agents may enhance soil formation**(6 marks)**

b) Discuss **six** reasons on the importance of keeping good and up to date farm accounts in the farm **(6 marks)**

c) Discuss why liming is a recommended practice in crop production **(4 marks)**

d) Explain the roles of irrigation water in rice production **(4 marks)**

27. a) Outline the procedure undertaken in inheriting a registered land upon death of the owner **(8 marks)**

b) State the **three** harvesting practices of maize **(3 marks)**

c) Discuss the processes of large scale chemical treatment of water **(9 marks)**

28. The following information was obtained from Keheo farm. Study the information and prepare a balance sheet for the farm for the year ended **31st JULY/AUG 2023**

Payable tax	-	16,000
Interest on loan	-	24,000
Payable debts	-	14,000
Two year bank loan	-	120,000
Wages	-	24,000
Buildings	-	84,000
Receivable debts	-	12,000
Livestock	-	124,000
Feeds in store	-	12,000
Maize in store	-	42,000
Cash at hand	-	22,000
Movers	-	5,500
Cash in bank	-	52,000

7 marks

ii) Was Keheo farm solvent or insolvent? **(1 mark)**

b) State **six** advantages of mixed cropping **(6 marks)**

c) Name the **three** zones of the production function and explain what happens in each of the production zone **(6 marks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 5)

AGRICULTURE

443/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

a) *Write your name and Admission number in the spaces provided at the top of this page*
b) *This paper consists of **three** sections: **A, B and C***
c) *Answer all questions in sections **A and B***
d) *Answer any two questions in section **C***
e) *All answers should be written in the spaces provided*

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1 – 17	30	
B	18 – 21	20	
C		20	
		20	
	TOTAL SCORE	**90**	

SECTION A (30 MARKS)

Answer ALL Questions in the spaces provided

1. **(a)** Name a breed of sheep with a lambing percentage of above 125 % and whose fleece maybe inferior due to black features. **(½ mark)**

(b) Name a goat breed which can be used for production of mohair **(½ mark)**

2. Name two tools in each case in a workshop that are used for:

(a) Assembling **(1 mark)**

(b) Holding **(1 mark)**

3. List two equipment used in handling cattle during Agricultural exhibition**.** **(1 mark)**

4. State **four** methods of maintaining good health in livestock. **(2 marks)**

5. (a) State **four** desirable qualities of milk. **(2 marks)**

(b) State **four** major dairy processors and distributors in Kenya. **(2 marks)**

6. State **four** characteristics of livestock succulent roughage feedstuff. **(2 marks)**

7. State **four** common bacterial diseases that affect livestock in the farm**.** **(2 marks)**

8. State **four** advantages of using corrugated iron sheets for roofing. **(2 marks)**

9. Give **two** reasons for spreading a damp proof coarse of PVC on the top of foundation.**(1 mark)**

10. (a) State **four** roles played by engine oil in a tractor engine. **(2 marks)**

(b) State **four** practices through which a farmer would ensure that no engine knock occurs in a tractor **(2 marks)**

11. State **two** factors that influence the respiration rate in animals **(1 mark)**

12. State **four** practices that ensure maximum harvest of fish from a fish pond**.** **(2 marks)**

13. State **two** difference between dromedary species of camel and Bactrian**.** **(1 mark)**

14. State **one** farm implement which can be used in both primary and secondary operations**(½ mk)**

15. Give a reason why Irish potatoes should not be fed to ruminant **animals** **(½ mark)**

16. List **four** routes through which pathogens can enter the body of an animal **(2 marks)**

17. State **four** reasons why farmers give milk to kids using artificial method. **(2 marks)**

SECTION B (20 MARKS)

Answer all questions in this section in the spaces provided

18. The pictures below show some of the farm tools, observe them and answer the questions that follow.



W



D



Y



Z

(a) Identify each of the tools shown above W,D,Y,Z **(4 marks)**

(b) State the use of the tool labeled Z and W **(1 marks)**

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

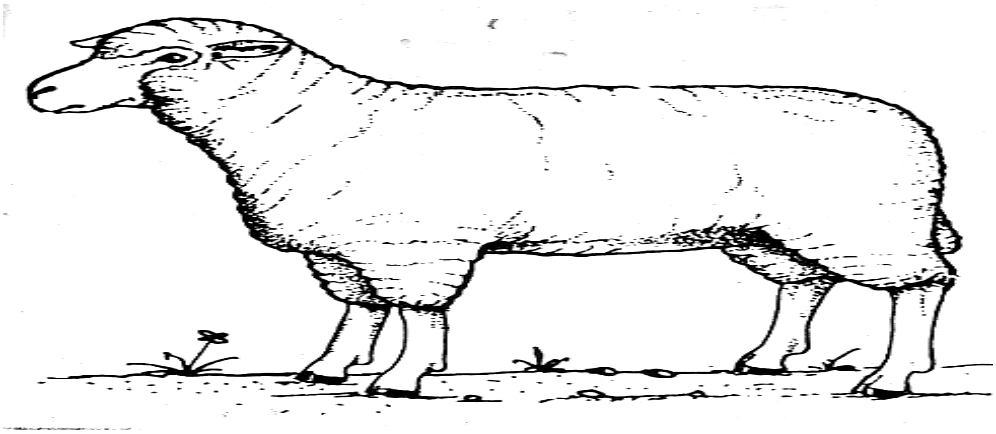


(a) Identify the practice **(1 mark)**

(b) Outline **three** management practices that are usually carried out after restraining an animal **(3 marks)**

(c) Name one precaution observed when carrying out the practice **(1 mark)**

20. Study the diagram below and answer the questions that follows.



(a) Outline **two** reasons for raddling **(2 marks)**

(b) Using letter R, indicate on the diagram the site of ringing **(1 mark)**

(c) Using letter C, show the position of breeding chutes **(1 mark)**

(c) Give the function of fitting canvas apron/sire sine harness on the underside of rams **(1 mark)**

21. Below is a photograph of an artificial method of rearing chicks. Answer the questions below.



(a) Identify the structure **(1 mark)**

(b) Give reason why

(i) Newspapers are spread on the floor **(2 marks)**

(ii) The structure has to be round

(c) Outline **two** important practices that should be done before the arrival of the chicks **(2 marks)**

SECTION C

*Answer Any **TWO** questions in this section in the spaces provided after question 24.*

22. a) State **five** conditions that help in observing the disease symptoms in livestock **(5 marks)**

b) State and explain why farmers keeping livestock. **(8 marks)**

c) Describe the typical life cycle of a tapeworm **(7 marks)**

23. a) Describe the reasons why bees swarm **(6 marks)**

b) Describe feeding of a dairy calf from birth to weaning. **(8 marks)**

c) State **six** advantages of farm mechanization **(6 marks)**

24. a) Discuss the farming in a fish pond under the following subheadings

i) Stocking **(4 marks)**

ii) Harvesting **(5 marks)**

iii) Practice carried out before fish preservation **(4 marks)**

b) Explain the causes of cannibalism in a flock of layers **(7 marks)**

KCSE 25

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 6)

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

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

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

d) *Answer* ***ALL*** *questions in section A and B and any* ***two*** *questions from section C*

e) *Candidates must answer the questions in English.*

f) *All answers should be written in the spaces provided.*

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-17		
B	18-21		
C	22-24		

SECTION A (30 MARKS)

Answer ALL Questions in this section

1. List three aspects of light a farmer should consider when deciding on a crop to grow. **(1½mks)**

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

3. Give **four** reasons why it is advantageous to use farm yard manure instead of straight fertilizer. **(2mks)**

4. State **four** methods of reclamation farmers can carry out. **(2mks)**

5. State **four** benefits of land consolidation. **(2mks)**

6. State **four** factors that determine the spacing of maize crops. **(2mks)**

7. State **four** factors which may affect the quality of hay. **(2mks)**

8. State **four** factors that affect the effectiveness of a pesticide. **(2mks)**

9. List any **four** types of records a crop farmer should keep. **(2mks)**

10. State **four** importance of practicing agroforestry. **(2mks)**

11. State **four** characteristics of a good site for a nursery bed. **(2mks)**

12. Name **four** methods of farming. **(2mks)**

13. Name **four** natural factors that may influence soil erosion. **(2mks)**

14. State **two** conditions that should be observed when harvesting to ensure that cotton picked is of high quality. **(2mks)**

15. State **four** uses of water on the farm. **(2mks)**

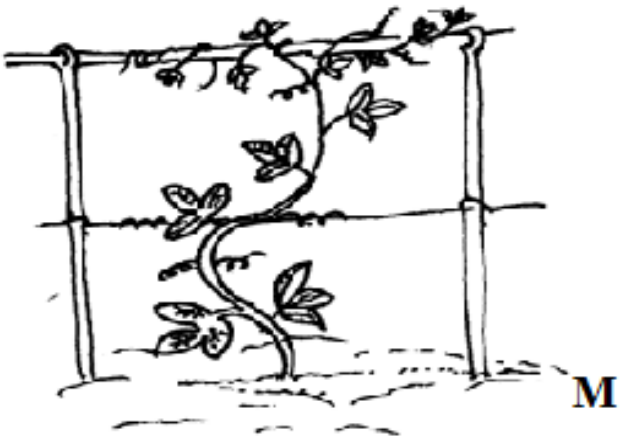
16. List **three** types of surface irrigation in crop production. **(1½mks)**

17. Differentiate between coppicing and pollarding as used in Agroforestry. **(1mk)**

SECTION B (20MARKS)

Answer ALL questions in this section

18. Below are filed practices. Study them carefully and answer the questions that follow.



M

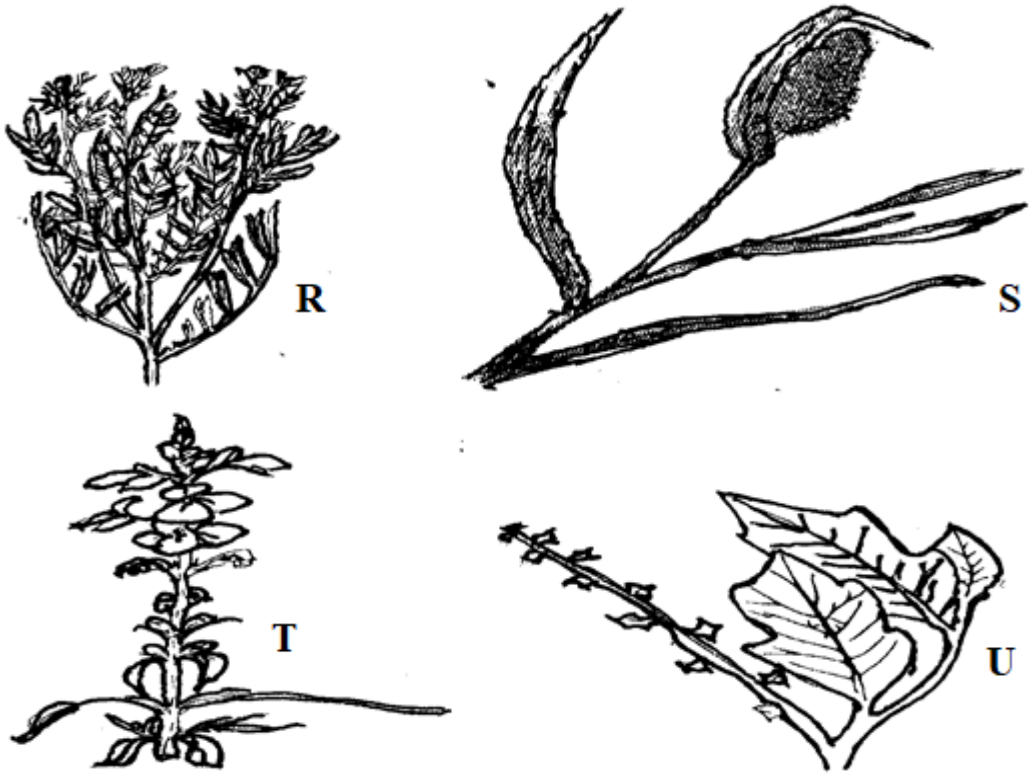


N

a) Identify the above practices. **(2mks)**

b) State **three** reasons for carrying out practice M. **(3mks)**

19. Below are common weeds found on the farm. Use them to answer the questions that follow.



a) Identify the weeds R, S, T, U. **(2mks)**

b) State the reason why S and U are difficult to control. **(2mks)**

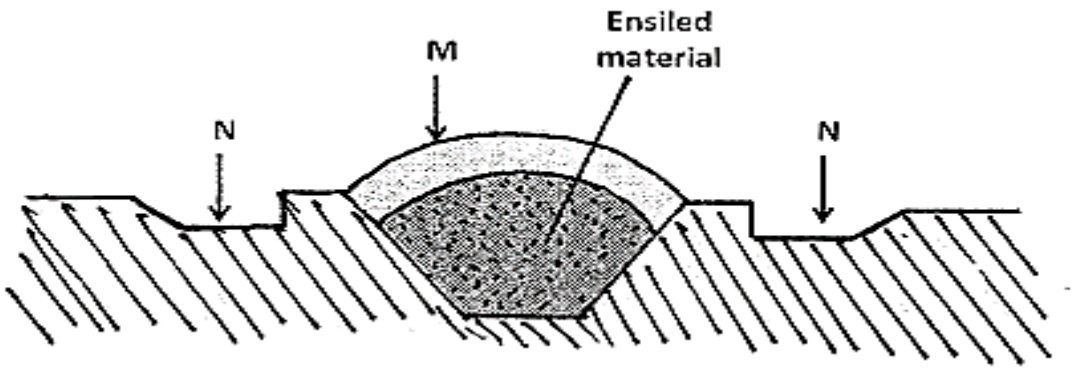
S

U

c) Why is weed R not suitable on dairy animals. **(½mk)**

d) Which weed is parasitic to cereals? **(½mk)**

20. The diagram below shows a silo. Study it carefully and answer the questions that follow.



a) Identify the type of silo shown on the diagram. **(1mk)**

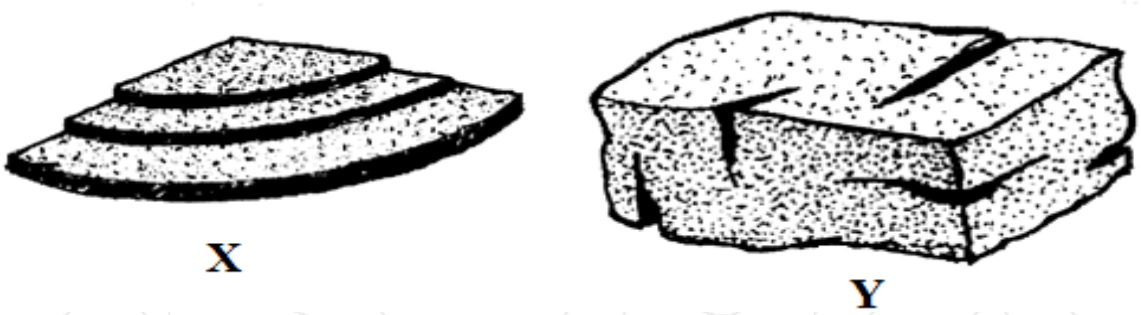
b) State the use of the part labelled M and N. **(2mks)**

M

N

c) Give two ways of ensuring that anaerobic conditions are achieved during silage making process. **(2mks)**

21. The illustrations below represents types of soil structures. Study them carefully and answer the questions that follow.



X **Y**

a) Identify the soil structures X and Y shown above. **(2mks)**

X

Y

b) Which of the soil structure you have named above is not suitable for growing maize. **(1mk)**

c) Give **<u>two</u>** methods of improving the soil structure you have mentioned in (ii) above. **(2mks)**

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

<u>Answer any two questions from this section</u>

22. a) Explain how farmers overcome risks and uncertainties in a farming business. **(5mks)**

b) Explain how various practices carried out in the field help to control crop diseases. **(8mks)**

c) Transplanting of seedlings. **(7mks)**

23. Study the following information which was extracted from Mr. Rono's farm record on 31st December 2022 and answer the questions below.

Item	
Debts receivable	18,000
Loans payable to bank	300,000
Cows	250,000
Chicken	80,000
Goats	30,000
Debts payable to cooperative	20,000

Buildings and structures	600,000
Wages payable to workers	19,000
Cattle feed in store	10,000
Animal drugs in store	4,000
Breakages to repair	30,000
Cash at hand	20,000
Cash in bank	30,000
Farm equipment	12,000

a) Prepare a balance sheet for Rono's farm using the information above. **(10mks)**

b) Describe the properties of nitrogenous fertilizers. **(15mks)**

c) Describe **five** problems farmers face in marketing of water melon. **(5mks)**

24. a) Describe cabbage production under the following sub-headings.

i) Ecological requirements. **(2mks)**

ii) Field management practices. **(3mks)**

b) State **five** advantages of using seeds as planting material. **(5mks)**

c) Describe process of chemical water treatment before storage. **(10mks)**

KCSE 25

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 6)

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

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

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

d) *Answer* ***ALL*** *questions in section A and B and any* ***two*** *questions from section C*

e) *Candidates must answer the questions in English.*

f) *All answers should be written in the spaces provided.*

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-17	30	
B	18-21	20	
C		20 20	
TOTAL SCORE		**90**	

SECTION A. (30MARKS)

1. State **four** methods of identification in livestock production. **(2mks)**

2. Explain the meaning of the following terms as used in livestock health.

i) A notifiable disease. **(1mk)**

ii) Prophylatics. **(1mk)**

3. Give **two** reasons for including roughages in diet of non-ruminants. **(1mk)**

4. State **four** equalities of a good grain store. **(2mks)**

5. Give **four** ways a farmer would adopt to improve production in indigenous cattle. **(2mks)**

6. State two factors to consider when formulating livestock ration. **(2mks)**

7. State **three** importance of farm buildings. **(1½mks)**

8. State **four** symptoms of new castle disease in poultry. **(2mks)**

9. What is creep feeding in pig production? **(1mk)**

10. State the use of each of the following tools and equipment. **(2mks)**

i) Routers

ii) Tinsnips

iii) Wood rasp

iv) Chipping hammer

11. State **three** methods of treating timber for building construction. **(1½mks)**

12. State **two** ways in which feed additives are important in animal nutrition. **(2mks)**

13. State **four** predisposing factors for mastitis in dairy cattle. **(2mks)**

14. Give **two** examples of a three host tick. **(1mk)**

15. State **four** general uses of solar energy. **(2mks)**

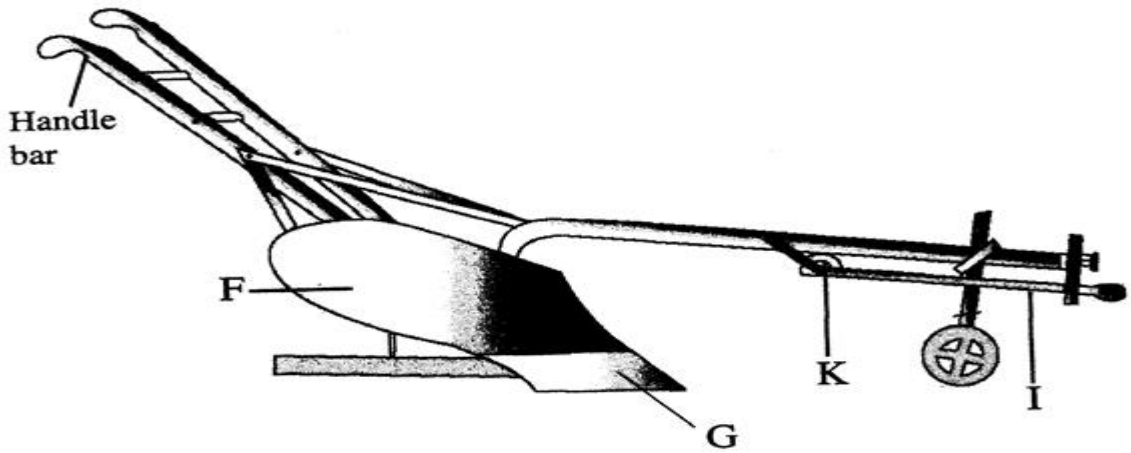
16. Name **two** causes of bloat in farm animals. **(2mks)**

17. Name **two** light breeds of poultry. **(1mk)**

SECTION B (20MARKS)

Answer ALL questions in this section

18. Study the diagram below of an ox-plough and use it to answer the questions that follow.



a) Give the functions of parts **G and F** **(1mark)**

G

F **(1mark)**

b) Name the parts labelled K and I

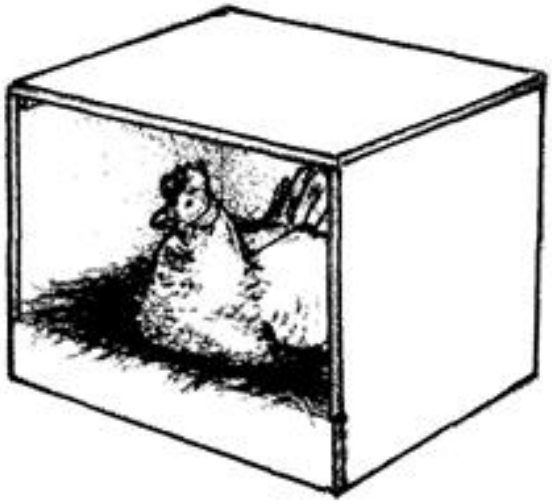
K **(1mark)**

I **(1mark)**

c) Mark on the diagram using letters M and N the two parts used to adjust the depth of ploughing.

(1mark)

19. The diagram below shows a hen sitting on eggs. Use it to answer the questions that follow.

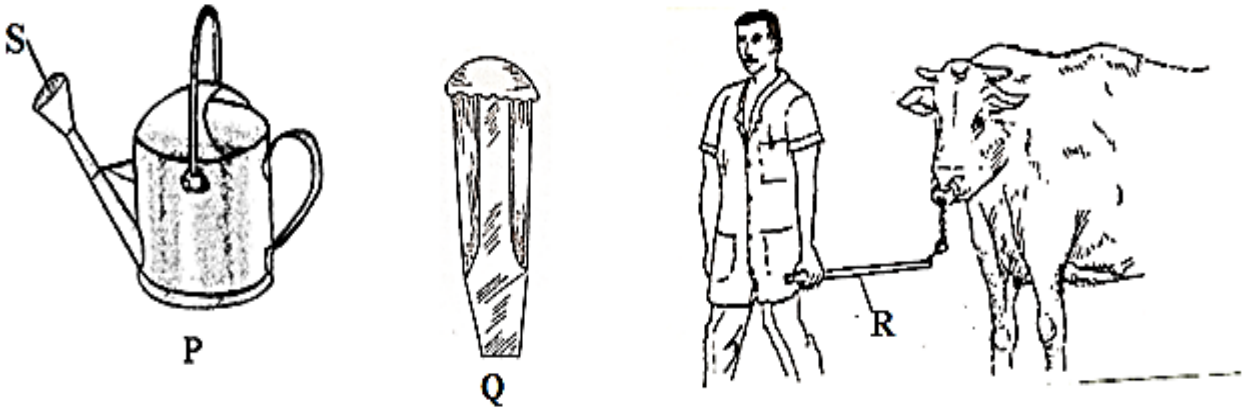


a) Name the method of incubation illustrated above. **(1mark)**

b) Give **<u>two</u>** signs that may show that the hen is ready to sit on the eggs. **(2marks)**

c) State **<u>two</u>** problems of using the above method to hatch chicks. **(2marks)**

20.



a) Give the identity of tools **P and Q.**

P **(1mark)**

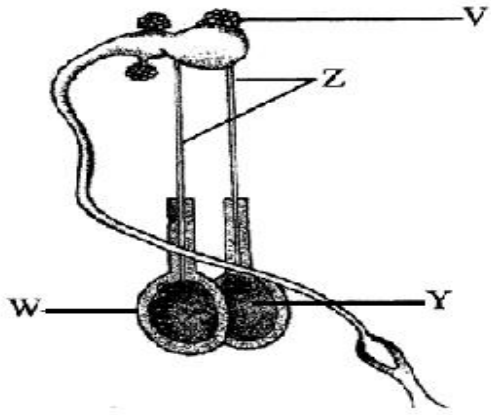
Q **(1mark)**

b) What is the role of part labelled S on diagram P. **(1mark)**

c) Name another tool used in conjunction with tool R. **(1mark)**

d) Give **one** maintenance practice for tool Q. **(1mark)**

21. The diagram below shows the male reproductive system in cattle. Use it to answer the questions that follow.



a) Name the parts labelled **Z and W** **(2mark)**

b) State the function of each part labelled V and Y **(2mark)**

c) How is part W adapted to its function? **(1mark)**

SECTION C (40MARKS)

22. a) Describe short term tractor servicing. **8marks)**

b) Explain the procedure of establishing a fish pond. **(5mks)**

c) Outline preventive measures for livestock diseases. **7mks)**

23. a) Describe brucellosis under the following subheadings:

i) Causal organism **(1mark)**

ii) Transmission **(1mark)**

iii) Symptoms **(4mks)**

iv) Control measures **(4mks)**

b) State the function of any five parts of a zero grazing unit in dairy farming. **(5mks)**

c) Explain **five** factors that should be considered when choosing tools and equipment to use in the farm. **(5mks)**

24. a) Explain **eight** qualities of an ideal broader for a day old chick. **(8mks)**

b) Describe **seven** factors that a farmer should consider when sitting a bee hive to prevent swarming of bees. **(7mks)**

c) State **five** functions of water in nutrition. **(5mks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 7)

AGRICULTURE

443/1

PAPER 1 (Theory)

TIME: 2 HRS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

Instructions to students

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

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

c) *Answer all questions in sections A and B.*

d) *Answer any two questions in section C.*

e) *All answers should be written in the spaces provided.*

For Examiner's Use Only

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-19	30	
B	20-22	20	
C	23	20	
	24	20	
	25	20	
	TOTAL SCORE	90	

SECTION A (30 MARKS)

Answer all the questions in this section.

1. Name two field practices that are carried out to obtain optimum plant population in a crop field. **(1 Mark)**

2. List four post-harvest practices that are carried out in maize production. **(2 Marks)**

3. State two effects of high rainfall intensity to farming. **(1 Mark)**

4. State four ways in which a farmer can improve the structure of water logged clay soil. **(2 Marks)**

5. List four factors that determine the type of irrigation used in crop production**.** **(2 Marks)**

6. State four symptoms of potassium deficiency in crops**.** **(2 Marks)**

7. State any four disadvantages of using non capped multiple stem pruning in coffee. **(2 Marks)**

8. State two practices which are carried out during hardening off in seedlings. **(1 Mark)**

9. Give two conditions in economics when opportunity cost is zero. **(1 Mark)**

10. State four advantages of organic farming**.** **(2 Marks)**

11. State four disadvantages of organic mulch in crop production**.** **(2 Marks)**

12. State four problems that may be brought up by hardpan in crop land**.** **(2 Marks)**

13. State four pieces of information contained in land title deed. **(2 Marks)**

14. Differentiate between seedbed and a seedling bed. **(2 Marks)**

15. Give four reasons why it is difficult to control Sodom apple weed in crop fields. **(2 Marks)**

16. Give two reasons for imposing quarantine on imported planting materials. **(1 Marks)**

17. Give four benefits of top dressing in management of grass pasture**.** **(1 Marks)**

18. Define the following terms as used in crop production. **(1 Mark)**

(a) trellishing

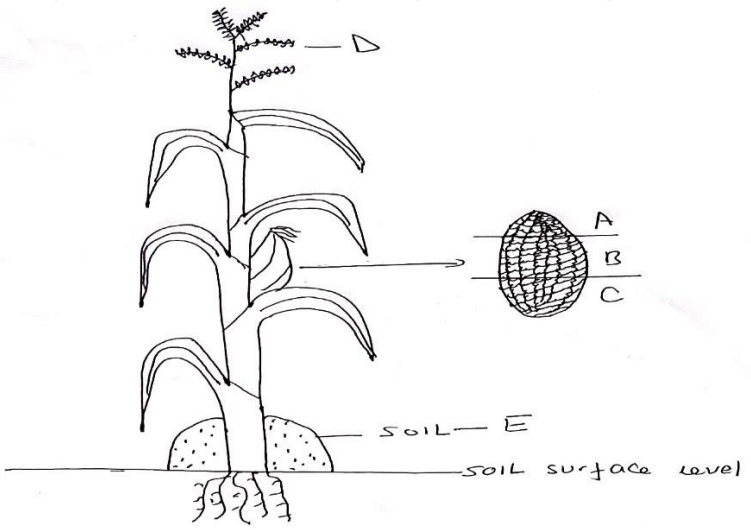
(b) stooking.

19. Outline two ways of controlling damping off diseases on vegetable seedlings in nursery. **(1 Mark)**

SECTION B (20 MARKS)

Answer all questions in the spaces provided.

20. The diagram below illustrates a maize crop plant and its produce. Study the diagram and answer the questions that follow.



(a) Name one disease that attacks the part of the plant labelled D. **(1 Mark)**

(b) From which section of the produce labeled A, B and C should seeds for planting be obtained?

($\frac{1}{2}$ Mark)

(c) Give one reason for the answer given in (b) above**.** **(1 Mark)**

(d) Which practice is done on part E**?** **($\frac{1}{2}$ Mark)**

(e) State the importance of the practice in the following crops.

(i) Maize **($\frac{1}{2}$ Mark)**

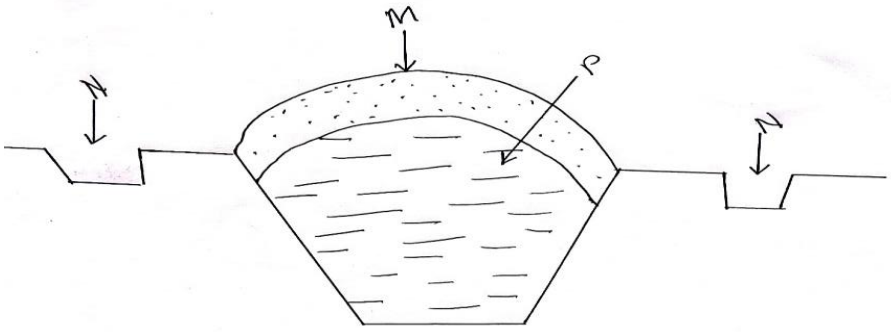
(ii) Irish potato **($\frac{1}{2}$ Mark)**

(iii) At what stage of growth should the above practice be carried out on maize? **($\frac{1}{2}$ Mark)**

(f) A plot measuring 4 M by 3 M was prepared for planting maize at a spacing of 30 cm by 90 cm.

Calculate the plant population in the plot. (Show your working). **($1\frac{1}{2}$ Mark)**

21. The diagram below shows a silo. Study it carefully and answer the questions that follow.



(a) Identify the type of silo shown. **(1 Mark)**

(b) Identify the part labeled P**.** **($\frac{1}{2}$ Mark)**

(c) State the use of the part **labeled** **(1 Mark)**

M-……...

N-……

(d) Give two ways of ensuring that anaerobic conditions are achieved during silage making process.

(2 Mark)

(e) Name three other types of silage that are used in the farm**.** **($1\frac{1}{2}$ Mark)**

(f) Outline three ways in which silage losses occur during ensiling. **($1\frac{1}{2}$ Mark)**

22. Use the information on the table below to answer the questions that follow.

Fertilizer input Units	Maize yield Bags	Maize product Bags
0	50	_
1	62	12
2	66	4
3	68	2
4	69	1
5	69	0

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

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

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

(iii) Calculate the marginal return at the point of optimum production. **(1 Mark)**

(iv) State the law of diminishing returns in a crop production function process. **(1 Mark)**

(v) Name and explain three ways of combining inputs in production. **(1 Mark)**

SECTION C (40 MARKS)

Answer only two questions. Each question carries 20 Marks.

23. (a) Describe effects of land fragmentation and sub-division. **(6 Marks)**

b)What advantages does a farmer holding a title deed have over one who does not have a title deed. **(4 Marks)**

c) Describe the cultural methods a farmer would employ to control crop diseases. **(10 Marks)**

24. (a) State the importance of the following during chemical water treatment.

(i) Filtration at water intake. **(1 Mark)**

(ii) Softening. **(1 Mark)**

(iii) Chlorination **(1 Mark)**

(iv) Coagulation and sedimentation. **(2 Mark)**

(b) State seven roles of a farm manager. **(7 Marks)**

(c) Explain four ways a farmer can adjust to uncertainty and risks. **(8 Marks)**

25. (a) Discuss the classification of pesticides according to their mode of action. **(10 Marks)**

(b) Outline any seven general post-harvesting practices carried out on crops. **(7 Marks)**

(c) Give three pieces of information a dairy farm manager should collect for planning purposes. **(3 Mark)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 7)

AGRICULTURE

443/2

PAPER 2 (Theory)

TIME: 2 HRS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:

- *Write your **name** and **index number** in the spaces provided.*
- *Sign and write the date in the spaces provided above*
- *This paper consists of three section **A, B** and **C***
- *Answer **all** the questions in section **A** and **B***
- *Answer any **two** questions in section **C.***
- *Answers should be written in the spaces provided in this booklet.*

FOR EXAMINER'S USE ONLY:

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

SECTION A. (30 MARKS)

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

1. State **four** maintenance practices of a forked jembe. **(2mks)**

2. Fill in the origin for the breeds of livestock shown in the table below. **(2mks)**

Livestock breed	Origin
Friesian cattle	
Aberdeen Angus cattle	
Large white pig	
Boer goat	

3. State the importance of keeping livestock healthy. **(2mks)**

4. Give the functional difference between a pruning knife and a pruning saw. **(1mk)**

5. Name any **two** dual purpose breeds of sheep. **(1mk)**

6. List any **four** pre-disposing factors of livestock diseases. **(2mks)**

7. Differentiate between the terms breed and type of animal. **(1mk)**

8. Give the factors that determine the amount of water taken by an animal. **(3mks)**

9. List any **four** causes of livestock diseases. **(2mks)**

10. Give the reasons for breeding in livestock. **(2mks)**

11. List the materials used in making walls of farm buildings. **(2mks)**

12. What is the meaning of the term immunity as used in livestock health. **(1mk)**

13. State the measures that prevent egg eating in poultry. **(2mks)**

14. State the signs of heat in pigs. **(3mks)**

15. Give **one** use of a screen in a fish pond. **(1mk)**

16. State **two** methods of service in livestock. **(1mk)**

17. Give the advantages of wall fence. **(1mk)**

18. List the factors considered in sorting and grading eggs for market. **(1mk)**

SECTION B. (20 MARKS)

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

19. The diagram X and Y below show the hooves of sheep.



X



Y

a) Which one of the two hooves would be more susceptible to foot-rot disease. **(1mk)**

b) What routine management practice is required on the hoof to control foot rot? **(1mk)**

c) State four symptoms of hoof rot. **(2mks)**

20. a) The illustrations below labeled V, W, and X show three different ways some hens were debeaked.



I **II** **III**

i) Which hen was correctly debeaked? **(1mk)**

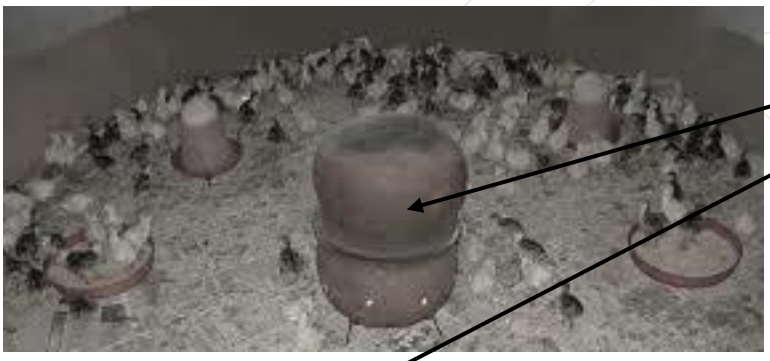
ii) State two reasons for your choice in (i) above. **(1mk)**

b) Name any two tools which would be used for debeaking. **(2mks)**

21. Below are diagrams illustrating the behaviour of chicks in various brooders. Study the diagrams and answer the questions that follow:



A



HEAT SOURCE

B



C

a) State the environmental problem in each brooder as illustrated by the behaviour of the chicks.

(3mks)

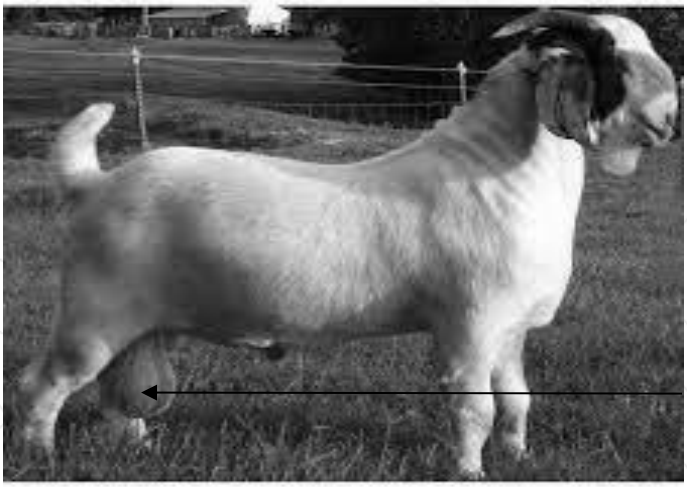
A …….

B…….

C …….

b) State one way of solving the problem in B. **(1mk)**

22. Below is a diagram of a male goat.

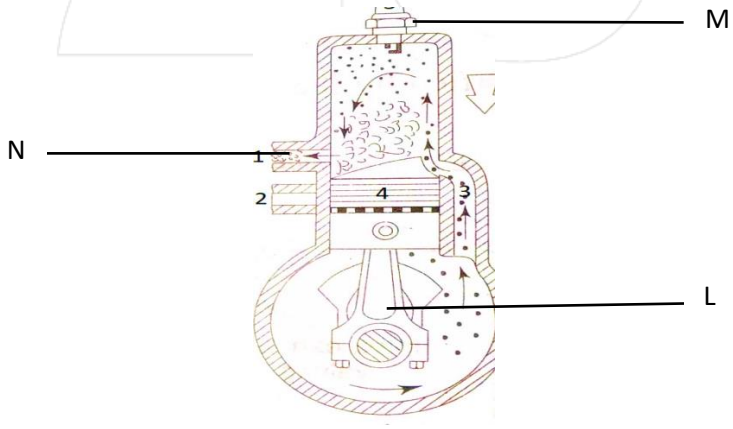


a) What operation is carried out on the part labeled F. **(1mk)**

b) Why is it necessary to carry out the operation. **(2mks)**

c) Give any two suitable methods of carrying out the operation in (a) above. **(1mk)**

23. Below is a diagram of a two-stroke engine cylinder.



a) Name any one farm machine where the above engine is used. **(1mk)**

b) Identify the parts labeled M, L, and N. **(3mks)**

SECTION C (40 MARKS)

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

24. a) Describe the feeding management of broiler chicks from one day old to slaughtering. (10mks)

b) Describe the routine management practices in dairy calves. **(6mks)**

c) Describe the factors that affect milk composition. **(4mks)**

25. a) Describe a blue tick (*Boophilus decolaratus*) under the following sub-headings.

i) Diseases transmitted. **(2mks)**

ii) Preferred site of attachment. **(3mks)**

iii) Non-chemical control measures. **(5mks)**

b) Discuss mastitis disease under the following sub-headings:

i) Predisposing factors. **(5mks)**

ii) Control and treatment. **(5mks)**

26. a) Describe the functions of each of the following parts of a plunge dip. **(7mks)**

i) Foot bath

ii) Entrance race

iii) Roof

iv) Drainage race

v) Jump

vi) Dip tank

vii) Exit steps.

b) i) Describe the disadvantages of animal power. **(5mks)**

ii) State the advantages of four-strokes engine over two stroke engines. **(3mks)**

c) Describe the factors that influence the amount of concentrate a lactating animal would be given. **(5mks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 8)

AGRICULTURE

443/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

1. *Write your name and index number in the spaces provided above*
2. *Sign and write the date of examination in the spaces provided.*
3. *This paper consists of **THREE** sections; **A, B**, and **C**.*
4. *Answer all questions in sections A and **B**.*
5. *Answer any **TWO** questions in section **C**.*
6. *All the questions should be answered in the spaces provided*

For Examiners' Use Only

Section	Questions	Maximum Score	Candidates score
A	1-17	30	
B	18-21	20	
C		20	
		20	
TOTAL SCORE		90	

SECTION A (30MKS)

Answer **ALL** the questions in this section.

1. Give four reasons why ranching is important in the arid and the semi-arid areas of Kenya. **(2mks)**

2. Explain three ways on how good transport and communication net-work improves agricultural production**.** **(1 1/2mks)**

3. (a) A maize farmer at Lumakanda ploughed his land twice using a tractor-drawn disc plough. What name do we give to the second ploughing**.** **(1/2mk)**

(b) State three reasons why rolling of land is recommended before planting some crops. **(1 1/2mks)**

4. Define the following terms as used in agriculture. **(2mks)**

(a) Drainage

(b) Pumping of water

(c) Piping of water

(d) Irrigation

5. What is soil fertility**?** **(1/2mk)**

6. (a) A farmer at Bulimbo would obtain Kshs.240,000, if he grew beans, Kshs.200,000 for maize and kshs.300,000 if he grew sugarcane on his 2 acres piece of land. He chooses to grow sugarcane. What was the opportunity cost? **(1mk)**

(b) Give two conditions under which opportunity cost exists. **(1mk)**

7.(a) What is elasticity of demand? **(1mk)**

(b) State two conditions that exists for a market to be purely competitive. **(1mk)**

8. Maize is grown in a plot measuring 4m x 3m at spacing of 7cm x 30cm, 2 seeds per hole. The outer rows begins 35cm all ground the width of the plot.

(i) Calculate the number of rows falling on the width side of the plot. **(1mk)**

(ii) Calculate the number of plants per row**.** **(1mk)**

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

10. (a) State three disadvantages of traditional stores. **(1 1/2mks)**

(b) Give the meaning of the following practices in crop production. **(1 1/2mks)**

(i) Changing of cycle

(ii) Training

(iii) Tipping

11. (a) Name three early maturing cabbage varieties. **(1/2mk)**

(b) Give a reason why well rotten manure is not recommended in production of carrots**. (1/2mk)**

12. (a) Explain two ways how trees help in soil and water conservation. **(1mk)**

(b) Differentiate between level and graded terraces**.** **(1mk)**

13. Distinguish between the intensity of defoliation and frequency of defoliation in pasture management**.** **(1mk)**

14. (a) List two signs shown by crops when they are attacked by nematodes. **(1mk)**

(b) Define the term "economic injury level" (EIL) of a crop**.** **(1mk)**

15. Give two reasons why a bean plant growing in a carrot crop field may be treated as a weed. **(1mk)**

16. Fill in the missing blanks in the table below**.** **(2mks)**

Fixed factor land (Ha)	Variable input NCK fertilizer (kg)	Total product maize (90kg bag)	Marginal product maize (90kg bag)	Average products maize (90kg bag)
1	30	10	10	(c)
1	60	27	(a)	13.5
1	90	42	15	14
1	120	56	(b)	(d)

17.(a) What is the meaning of the following in agroforestry**.** **(1mk)**

(i) Pruning

(ii) Looping

(b) Name two trees that are used as livestock feeds. **(1mk)**

SECTION B (20MKS)

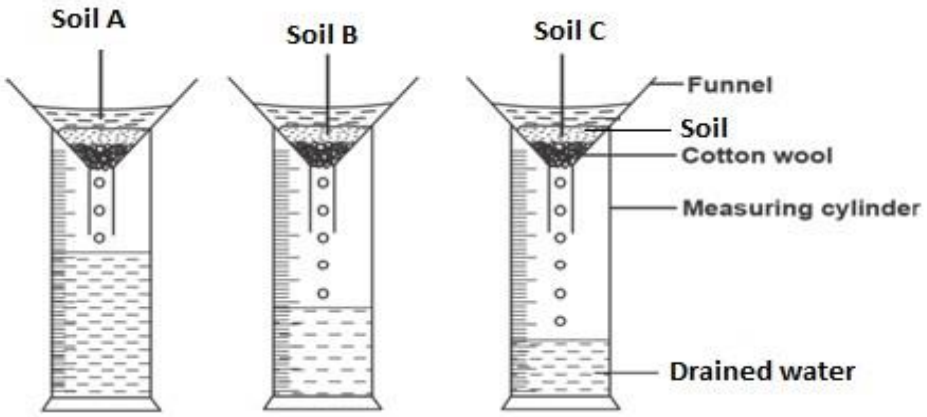
*Answer **ALL** the questions in this section.*

18. The Sacred Heart Girls High School, Mukumu Form Four student was to apply a compound fertilizer **5:20:10** at the rate of 200kg/Ha on her agricultural project plot measuring 3m x 4m.

(a) (What do the figures 5 and 10 in the compound fertilizer stand for? **(2mks)**

(b) Calculate the amount of fertilizer she would require for the plot. ***(show your working)*** **(3mks)**

19. The diagram below illustrates an experiment on soil.

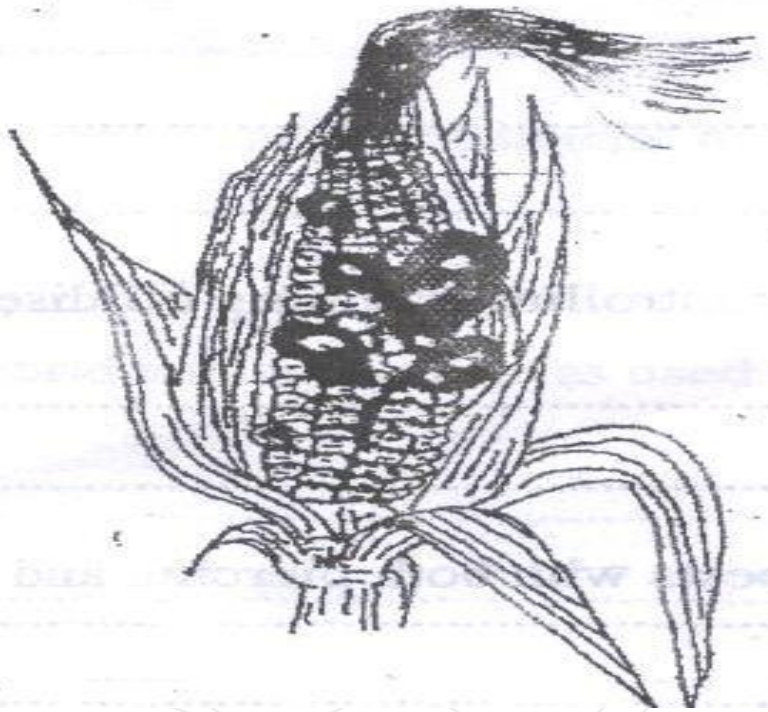


(a) State the aim of the experiment**.** **(1mk)**

(b) If the volume of water illustrated in the measuring cylinder was observed after the hour. Identify the soil sample **A** and **B.** **(2mks)**

(c) State two ways in which the soil structure of the sample labelled **C** above can be improved**.** **(2mks)**

20. The diagram below shows a crop disease. Use it to answer questions that follow.

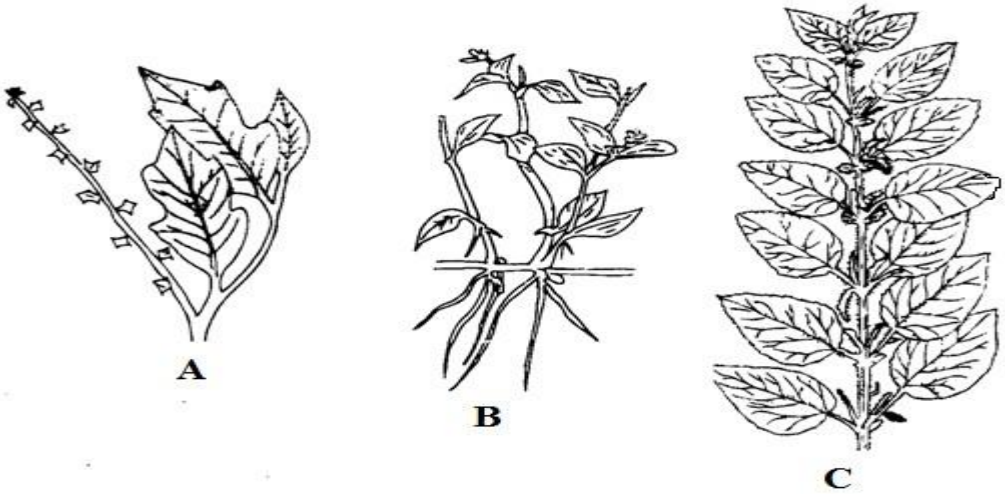


(a) Identify the crop disease. **(1mk)**

(b) Name two other crops apart from the one shown above that are attacked by the same disease. **(2mks)**

(c) State two control measures of the above disease**.** **(2mks)**

21. The diagrams below show some common weeds in East Africa.



(a) Name the class of weeds that in which the above weeds belong basing on morphology. **(1mk)**

(b) Identify two weeds that lower the work output of human labour on the farm. **(2mks)**

(c) Give two reasons why it is difficult to control weed **B** by cultivation. **(2mks)**

SECTION C (40MKS)

*Answer **ANY TWO** questions in this section.*

22. **(a)** Describe the production of tomatoes (Lycoperscon escalentum)

i) Ecological requirements. **(3mks)**

ii) Transplanting **(3mks)**

iii) Field management practices **(4mks)**

(b) State five measures of which are taken to minimize water pollution in the farm. **(5mks)**

(c) Describe precautions to be observed when harvesting pyrethrum**.** **(5mks)**

23. **(a)** Describe six physical /structural methods of controlling soil erosion. **(6mks)**

(b) Explain four practices of maintaining soil fertility**.** **(4mks)**

(c) Describe five principles of crop rotation. **(5mks)**

(d) State five conditions that necessitate effective settlement of people. **(5mks)**

24. **(a)** Describe six importances of budding and grafting in crop propagation. **(6mks)**

(b) State six factors that will lead to wider spacing when planting a crop. **(6mks)**

(c) The following information was obtained from Mr. Oseso's Farming Enterprise. Use it to prepare cash analysis for the year. **(8mks)**

			Kshs.
30/6/2003	-	Cash at bank (opening balance)	50,000
01/7/2003	-	Bought 20 empty egg trays	400
01/7/2003	-	Bought 5 bags of DAP fertilizer	10,000
01/7/2003	-	Sold 10 trays of eggs	12,000
01/7/2003	-	Bought 5 bags of broilers starter	7,500
01/7/2003	-	Sold milk 200kg bag	4,000
20/7/2003	-	Sold maize	6,000
30/7/2003	-	Bought milk churn	500
31/12/2003	Closed the financial year		

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 8)

AGRICULTURE

443/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

1. *Write your name and index number in the spaces provided above*
2. *Sign and write the date of examination in the spaces provided.*
3. *This paper consists of **THREE** sections; **A, B**, and **C**.*
4. *Answer all questions in sections A and **B**.*
5. *Answer any **TWO** questions in section **C.***
6. *All the questions should be answered in the spaces provided*

FOR EXAMINERS' USE ONLY

Section	Questions	Maximum Score	Candidates score
A	1-12	30	
B	13-16	20	
C		20	
		20	
TOTAL SCORE		**90**	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION A: (30 MARKS)

Answer ALL questions in this section

1. (a) Name **three** factors that dictate distribution of livestock in Kenya**.** **(1½ mks)**

(b) Name a breed of goats that is brown in colour with two white stripes running from the eyes to the nose. **(1/2 mks)**

2. (a) Give **two** reasons why proper storage of tools is important. **(1mk)**

(b) Name **two** tools that are recommended for layout and marking**.** **(1mk)**

3. (a) How does a vaccine work? **(1mk)**

(b) What **causes** the following conditions in livestock?

(i) Osteomalacia **(½ mk)**

(ii) Parturient paresis (milk fever) **(1/2 mk)**

4. Name **four** tick borne diseases in livestock. **(2mks)**

5. (a) What is the function of esophageal groove in a **ruminant** **(1mk)**

(b) List **two** methods of ration computation. **(2mks)**

6. State **four** advantages of using contemporary comparison as a method of selection in livestock. **(2mks)**

7. (a) What is a notifiable disease? **(1/2mks)**

(b) List **three** examples of notifiable diseases. **(1½mks)**

8. Give **four** causes of high mortality in Piglets**.** **(2mks)**

9. (a) State **two** disadvantages of using metal frames in construction of farm building. **(1mk)**

(b) List any **two** wood preservatives. **(1mk)**

10. (a) State **four** factors to consider when selecting eggs for incubation. **(2mks)**

(b) State **four** functions of the egg shell**.** **(2mks)**

11.(a) State **four** qualities of colostrum which make it suitable for feeding newly born calf. (2mks)

(b) What is **dry cow therapy**? **(1mk)**

12.(a) State **four** field conditions under which a disc plough is preferred instead of mouldboard plough. **(2mks)**

(b) Name **four** implements that are operated by the power take off (P.T.O) shaft**.** **(2mks)**

SECTION B (20 MARKS)

Answer ALL questions in this section

13. The diagram below shows an auger bit. Use it to answer questions that follow:

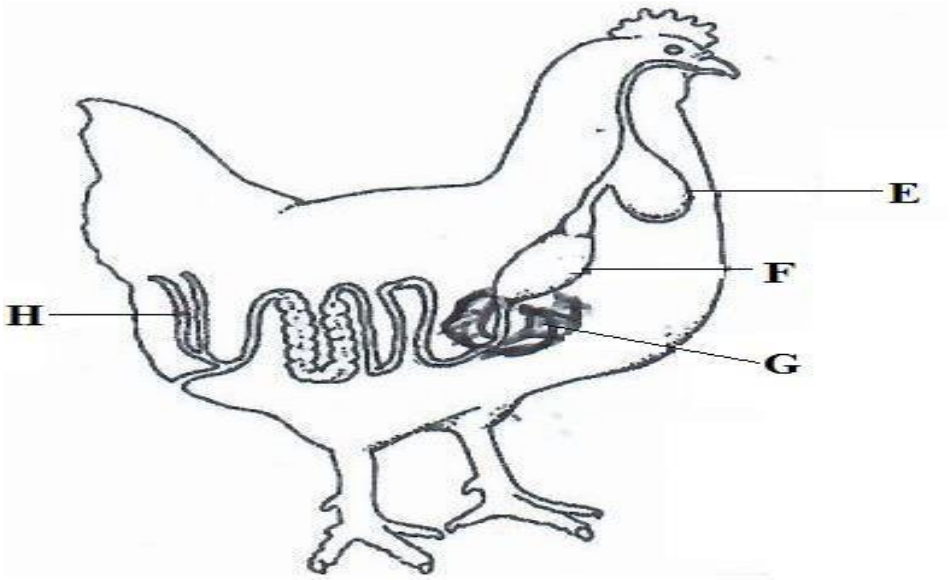


(a) Name the part labelled **X a**nd **Y**. **(2mks)**

(b) Give the function of the part labelled N. **(1mk)**

(c) List two other bits other than the one shown above. **(2mks)**

14.The diagram below shows the digestive system in poultry. Use it to answer the following questions.

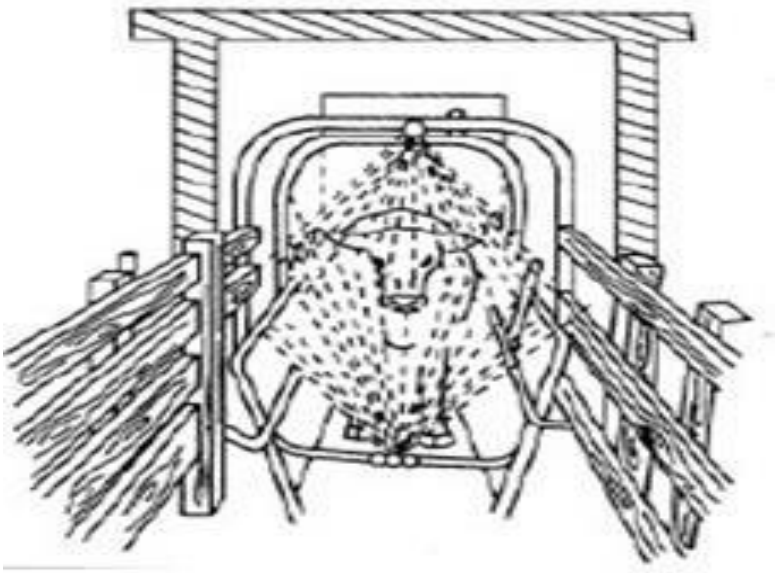


(a) Name the parts labelled **E** and **H.** **(2mks)**

(b) Give the function of part **F.** **(1mk)**

(c) State **two** ways in which the part labelled **G** is adapted to its function**.** **(2mks)**

15. The diagram below shows a routine practice being carried out on an animal. Study it and answer the questions that follow.

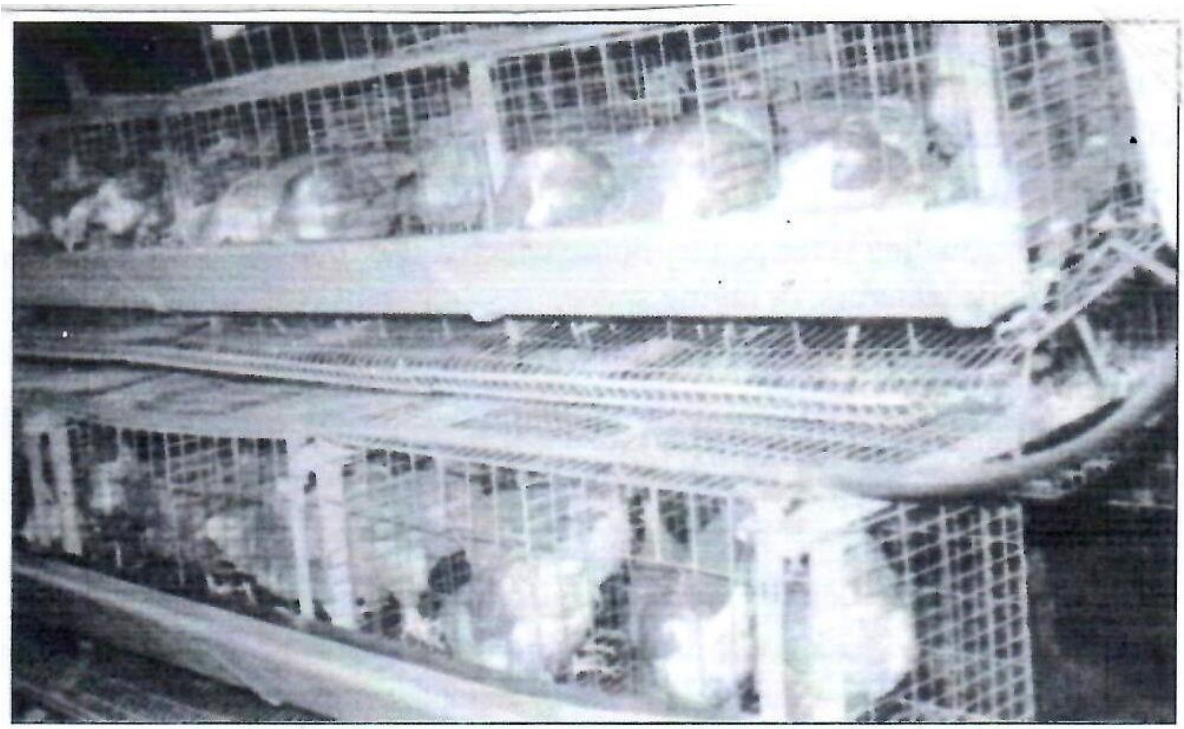


(a) Identify the practice. **(1mk)**

(b) Name the structure in which the practice is being carried out**.** **(1mk)**

(c) State three advantages of using the above structure instead of plunge dip. **(3mks)**

16. Study the picture of the system of rearing poultry and use it to answer questions that follow:



(a) Identify the system of poultry rearing shown above. **(1mk)**

(b) Name two other systems of rearing poultry apart from the one shown above. **(2mks)**

(c) State two advantages of using the above system**.** **(2mks)**

SECTION C (40 MARKS)

Answer ANY TWO questions from this section

17. (a) Describe gumboro disease under the following sub-headings

i) Animals affected **(1mk)**

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

iii) Incubation **(1mk)**

iv) Symptoms of attack **(5mks)**

v) Control **(2mks)**

(b) Describe **five** characteristic of Romney marsh dual purpose sheep**.** **(5mks)**

(c) State **five** functions of the lubrication system. **(5mks)**

18. (a) Describe how natural incubation is carried out and managed. **(8mks)**

(b) Explain seven mechanical methods of controlling ticks. **(7mks)**

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

19. (a) Describe the procedure of training a calf for bucket feeding. **(7mks)**

(b) Describe **Eigh**t measures to be observed when handling bees. **(8mks**

(c) State **five** signs of ill-health observed on the animal's skin and coat. **(5mks).**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 9)

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to Candidates

- *Write your **name, index number** in the spaces provided.*
- *This paper has three sections A, B and C.*
- *Answer **all** the questions in section **A** and **B** in the spaces provided.*
- *Answer any **two** questions in section **C***

For Examiner's Use Only

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 19	30	
B	20-23	20	
C	24-26	40	
	Total Score	**90**	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION A (30 MARKS)

Answer All the Questions in This Section in the Spaces Provided

1. State **four** farming activities that may improve soil structure. **(2 marks)**
2. Name **three** types of legume trees used as fodder. **(1½ marks)**
3. State **three** effects of low temperature on crop production. **(1½ marks)**
4. Give **three** reasons for drying grains to 21% moisture content after harvesting. **(2 marks)**
5. State **four** parameters of national economic development. **(2 marks)**
6. Outline **two** conditions that favors nomadic pastoralism in Kenya. **(2 marks)**
7. State **three** factors that determine the depth of planting seeds. **(1½ marks)**
8. State **three** factors that will determine the selectivity of herbicide in chemical weed control. **(1 ½ mark)**
9. Outline **four** factors that affect the quality of farmyard manure. **(2 marks)**
10. Name **three** basic concepts of economics **(1½ marks)**
11. State **four** importance of tissue culture. **(2 marks)**
12. Give **two** methods used to drain farmland. **(1 mark)**
13. State **four** factors to consider when designing a sound farm plan. **(2 marks)**
14. Nam **four** improper farming methods that increase the rate of soil erosion. **(2 marks)**
15. Outline **four** pieces of information contained in a land title deed. **(2 marks)**
16. Differentiate between a nursery bed and a seedbed. **(1 mark)**
17. Name **three** macro nutrients whose deficiency symptoms is chlorosis. **(1½ marks)**
18. Define Agriculture. **(½ mark)**
19. Give **two** reasons for sub soiling **(1 mark)**

SECTION B (20 MARKS)

Answer All the Questions in the Spaces Provided

20. After soil sampling and testing a farmer was advised to apply 200kg of nitrogen per hectare in his 2 hectare farm. If the farmer has only diammonium phosphate (D.A.P) 18:46:0 at his disposal;
    (a) Calculate the amount of D.A.P he would require **(1½ marks)**
    (b) Calculate the amount of P205 he will have applied per hectare. **(1½ marks)**
    (c) State **two** symptoms the farmer would have observed on the maize crops if he applied excess nitrogen. **(2 marks)**
21. The diagram below shows a common weed plant.



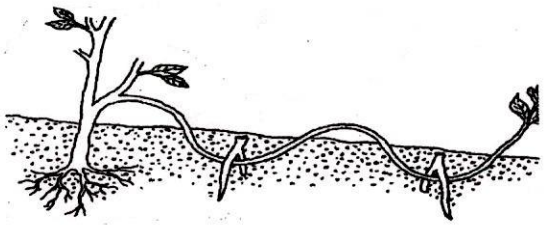
(a) Identify the weed**……(1 mark)**

(b) Why is it difficult to eradicate the above weed? **(1 mark)**

(c) Name **two** biological weed control methods. **(2 marks)**

(d) Name **one** economic importance of the above weed. **(1 mark)**

22. The diagram below show a method of crop propagation. Study it and answer the question that follows:

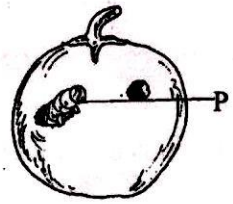


(a) Identify the method. **(1 mark)**

(b) State **one** advantage of the above method over the other methods of crop propagation. **(2 marks)**

(c) State **three** factors which influence the rooting of cutting in vegetable propagation **(3 marks)**

23. The diagram below shows a tomato fruit affected by a pest. Study it carefully then answer the questions that follow.



(a) Identify the pest labeled P. **(1 mark)**

(b) State **two** methods used to control the pest. **(2 marks)**

(c) State any **two** factors to consider when selecting tomato fruits for marketing. **(2 marks)**

SECTION C (40 MARKS)

Answer Any Two Questions From This Section In The Spaces Provided.

24. (a) Outline the various uses of water in a mixed farm. **(10 marks)**

(b) Describe **five** methods of draining water from a marshy land. **(10 marks)**

25. (a) Describe **five** field management practices carried out in tomatoes production. **(10 marks)**

(b) Describe **five** cultural practices used in soil and water conservation **(10 marks)**

26. (a) Explain **five** factors that would influence the spacing of a particular crop in the field. **(10 marks)**

(b) Describe **five** practices that a farmer should carry out to ensure uniform germination of seeds **(5 marks)**

(c) State **five** factors that determine the stages of harvesting crops. **(5 marks)**

For Marking Schemes Contact 0746-222-000 / 0742-999-000

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 9)

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to Candidates:

a) *Write your name and index number in spaces provided above*
b) *This paper consists of **THREE** sections: A, B and C*
c) *Answer all questions in Section A and B.*
d) *All answers should be written in the spaces provided on this question paper.*
e) *Candidates should answer the questions in English.*
f) *Answer any two questions in section C*

For Examiner's use only

Section	Questions	Maximum Score	Candidate's Score
A	1 – 18	30	
B	19 - 23	20	
C	24	20	
	25	20	
	26	20	
TOTAL SCORE		90	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

SECTION A [30 MARKS]

Answer All The Questions in The Spaces Provided.

1. State two factors that may cause ewes not to conceive after service. **[1 mark]**

2. State three signs of anthrax infection disease observed in the carcass of cattle **[1½ mark]**

3. State three adjustment that should be carried out on a tractor-mounted moldboard plough in preparation for ploughing. **[1 ½ mark]**

4. Outline two main characteristics of the Bactrian camel breed. **(1 mark)**

5. State four construction features necessary in a fish pond. **[2 marks]**

6. State four conditions that would encourage hens to eat eggs in poultry production. **[2 marks]**

7. What is the reason for turning eggs regularly during incubation? **(1 mark)**

8. State four practices that should be carried out on wooden fencing posts to make them last long. **[2 marks]**

9. Name four structures which would assist in the control of livestock parasites on a farm. **[2 marks]**

10. Give two benefits of providing enough nutrients to livestock for proper health. **[1 mark]**

11. Give two harmful effects of ticks in sheep. **[2 marks]**

12. State four roles of worker bees in a colony. **[2 marks]**

13. State the role of the crop in digestive system of a hen. **[2 marks]**

14. State four reasons for castration in pig production. **[2 marks]**

15. State two benefits of guard rails to piglets in a farrowing pen? **[1 mark]**

16. State the role of a foot bath in a cattle Dip. **(1 mark)**

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

(a). Crutching and ringing in sheep production. **(2 marks)**

(b). Cropping and harvesting in fish farming. **(2 marks)**

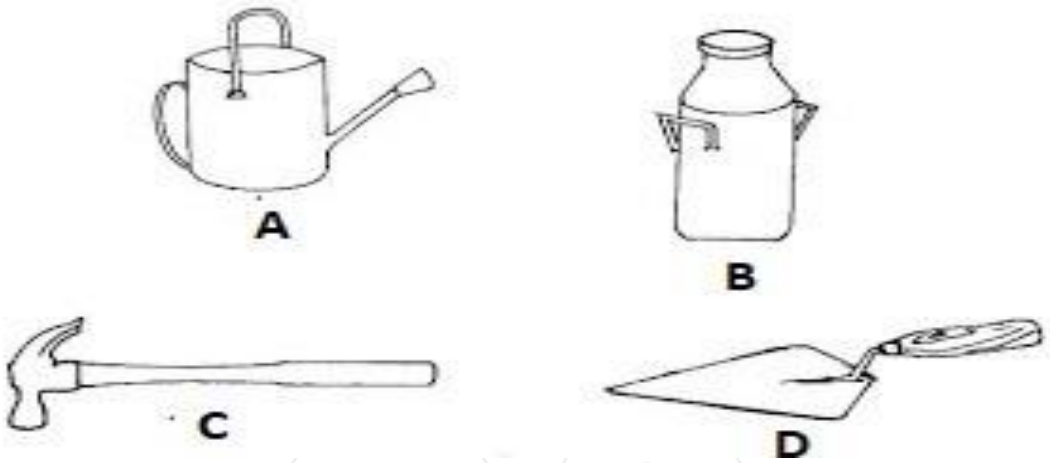
18. State two characteristics of a poor layer in poultry production. **(1 mark)**

SECTION B [20 MARKS]

Answer all questions in this section in the spaces provided.

19. A pig farmer in sugoi is required to prepare 100kg of sow and weaner meal containing 20% digestible crudeprotein (D.C.P). Calculate the quantity of soya bean (50%) D.C.P) and rice (16% D.C.P) the farmer requires for the meal. Use the Pearson's square method. **(4 marks)**

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

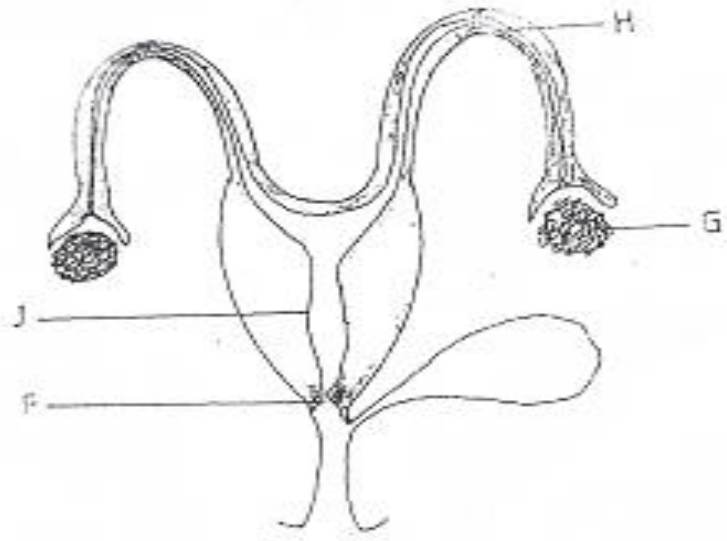


(a). Identify the tool/equipment labelled **B and C.** **(1 mark)**

(b). State the role of C and D **(2 marks)**

(c). Give <u>two</u> maintenance practices for the equipment labelled A. **(1 mark)**

21. The diagram below shows the reproductive system of a cow study it carefully and answer the questions that follow.

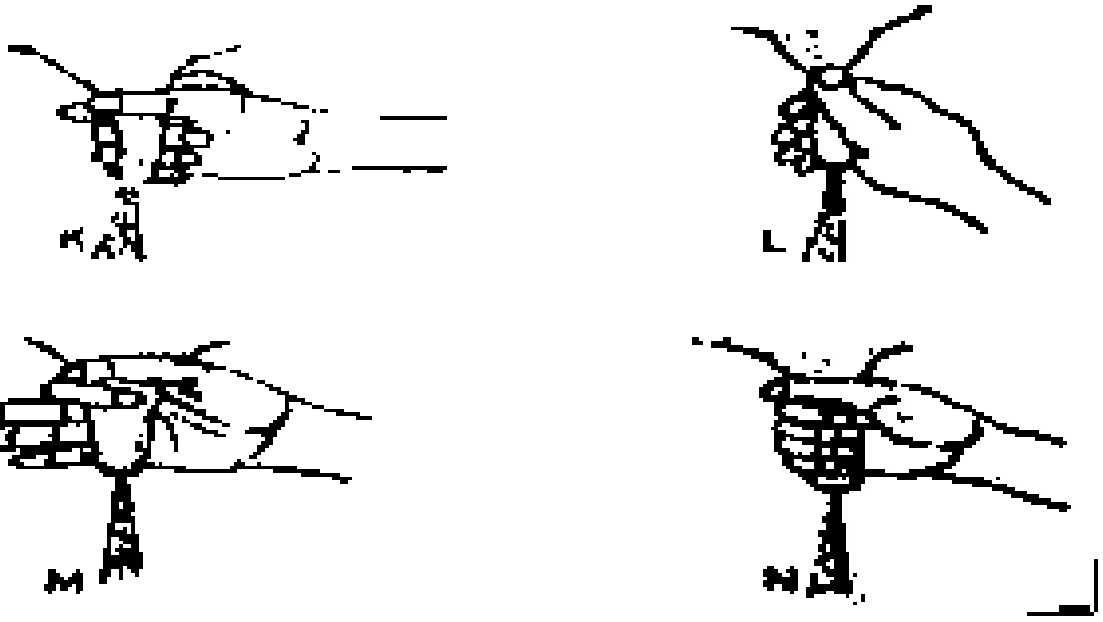


(a). Name the parts labelled J and G. **(2 marks)**

(b). Give <u>two</u> functions of the part labelled F. **(2 marks)**

(c). Give the role of the part labelled H. **(1 mark)**

22. 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. **(1 mark)**

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

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

(1 mark)

(d). State <u>two</u> disadvantages of using wrong milking method. **(2 marks)**

23. Below is a table showing names given various livestock animals at various stages of growth. Fill in the Blank spaces. **(2 marks)**

Stage	Name		
	Pigs	Cattle	Poultry
Mature male for breeding			cock
Young female before first parturition	Gilt		Pullet
Young one from birth/hatching to meaning		calf	chick

SECTION C. (40 MARKS)

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

24. (a). Describe the management of growers up to the point of lay. **(10 marks)**

(b). Describe ten management practices carried out on cattle during parturition. **(10 marks)**

25. (a). Name the strokes in a four stroke engine and describe how each operates. **(12 marks)**

(b). Describe the functions of the gear box in a tractor. **(8 marks)**

26. (a). Name and describe the features of an ideal calf pen. **(8 marks)**

(b). Discuss pneumonia in calves under the following sub-headings:

(i). predisposing factors **(4 marks)**

(ii). symptoms **(5 marks)**

(iii). Control measures. **(3 marks)**

KCSE 25

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 10)

443/1

AGRICULTURE

PAPER 1

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIADATES

1. *Write your name, admission number and class*
2. *This paper contains **three** sections*
3. *Answer all question in section **A** and **B***
4. *In section **C** answer any two questions*

For examiner's use only

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1 -15	30	
B	16-19	20	
C		20	
		20	
Total score		90	

SECTION A 30 MARKS

Answer all question

1. Name **two** physical agents of weathering **(1 marks)**

2. Outline **three** methods of breaking seed dormancy **(1 ½ marks)**

3. List **two** signs shown by crops when they are attacked by nematodes **(1 marks)**

4. Distinguish between soil structure and soil texture **(2 marks)**

5. State any **three** examples of working capital **(1 ½ marks)**

6. What is Land reform: **(1 mark)**

(b) State any **four** methods of land reform **(2 marks)**

7. Mention **four** ways in which losses may be incurred during hay making. **(2marks)**

8. Give **two** precautions taken to ensure good crop establishment during planting. **(1mark)**

9.(a) Define inventory records. **(1mark)**

b). State **four** pieces of information that is contained in health records. **(2marks)**

10)a. List **four** problems associated with nomadic pastoralism in Kenya. **(2marks)**

(b) Name **four** factors of production in agriculture. **(2marks)**

11. List **two** farming practices that can be carried out to increase the amount of light harnessed by crops. **(2marks)**

12. State **four** reasons why land is prepared before planting **(2marks)**

13. Give **one** reason in each case why the following tertiary operations are important**.** **(3marks)**

i) Ridging

ii) Rolling

iii) Leveling

14. Distinguish the following terms as used in pasture management. **(2marks)**

a. Intensity of defoliation

b. Frequency of defoliation

15. What does the term ‘close season’ in crop production mean? **(1mark)**

SECTION B

Answer All Question

16. Use the following crops to answer the questions that follow.



D



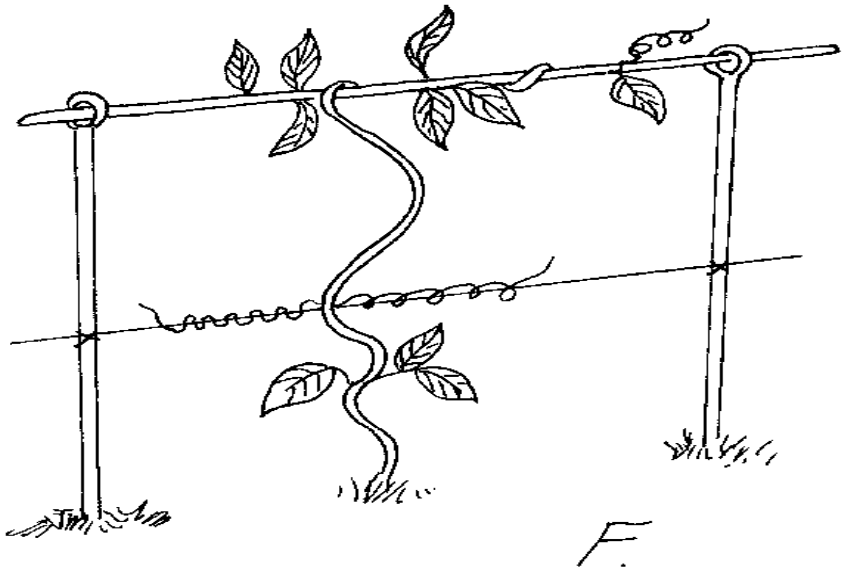
E

a) Name the crops labelled D and E above. **(2mark)**

b) Why is crop D rarely destroyed by pests in the stores? **(1mark)**

c) Name any **two** diseases that affect crop E. **(2marks)**

17. The diagram F, below illustrates a method of training in crops.



F.

i) Identify the method shown in F above. **(1mark)**

ii) Name **two** other methods used in training in crop production. **(1mark)**

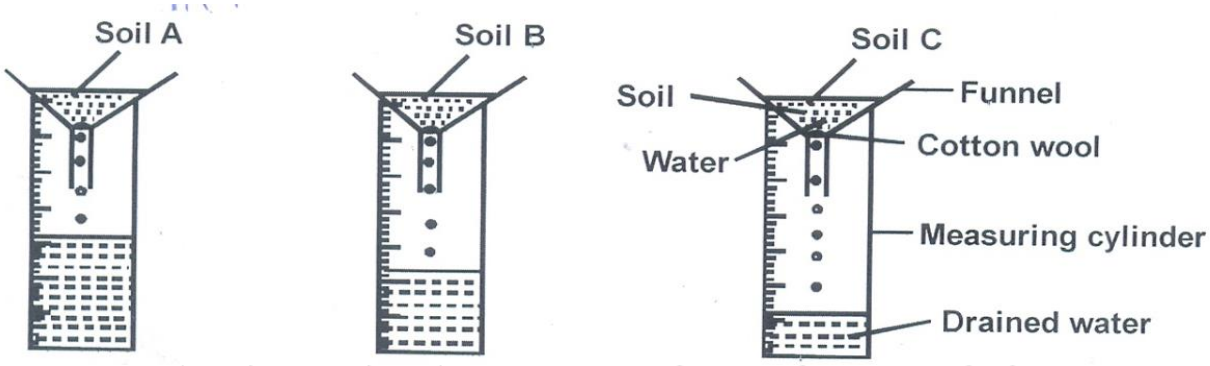
iii) State **two** advantages of training in crop production. **(2mark)**

iv) List **two** crops that require training. **(1mark)**

18.a) Describe the procedure which should be followed in spraying a crop of tomatoes using a fungicide in powder form, water and knapsack sprayer. **(3 marks)**

(b) State **two** safety measures that should be taken while spraying the crop with fungicide **(2 marks)**

19. The diagram below illustrate an experiment on soil



a) State the aim of the experiment (1 mark)

b) If the volume of water illustrated in the measuring cylinder was observed after one hour. Identify the soil sample A and B

Soil **A**…….. **(1 mark)**

Soil **B**…… **(1 mark)**

c) State **<u>two</u>** ways in which the soil structure of the sample labelled c above can be improved. **(2 marks)**

<u>SECTION C 40 MARKS</u>

<u>Answer Only Two Questions</u>

20. a) Giving one example in each case, identify **three** classes of crop diseases. **(6marks)**

b) Describe the physical measures of disease control in crops. **(10marks)**

c) Identify the factors affecting the efficiency of pesticides **(4marks)**

21).Describe the production of tomatoes (Lycoperiscon esculentum) under the following subheadings.

(a) Ecological requirements **(4marks)**

(b) Nursery establishment **(4marks)**

(c) Transplanting **(4marks)**

(d) Seed bed preparation **(4marks)**

(e) Field management practices **(4marks)**

22. a) State and explain **<u>five</u>** agricultural services available to farmers. **(10marks)**

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

c) State any **five** measures which are taken to minimize water pollution In the farm. **(5marks)**

KCSE 2025 FINAL PREDICTION

(POSSIBLE EXAM 10)

443/2

AGRICULTURE

PAPER 2

TIME: 2 HOURS

NAME…… ADM NO; ……

CLASS…… DATE……

SIGN: ……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) Write your name, admission number and class in the spaces provided above.
b) Sign and write the date of the examination in the spaces provided above.
*c) This paper consists of **three** sections : **A, B** and **C.***
*d) Answer **all** question in section **A** and **B.***
*e) Answer any **two** questions in section **C**.*
f) All answers should be written in the spaces provided.
*i) **Candidates must answer all the questions in English**.*

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1 -15	30	
B	16-19	20	
C		20	
		20	
Total score		90	

Answer All The Questions In This Section In The Space Provided.

1. Name one breed of livestock under each of the following categories. **(2mks)**

a) Dairy cattle breeds.

b) Dual purpose sheep breeds.

c) Dual purpose cattle breeds.

d) Hair goat.

2. State two importance of litter in a poultry house. **(1mk)**

3. State one way of connecting a trailer to a tractor. **(1mk)**

4. State two functions of the crop in the digestive system of poultry. **(1mk)**

5. State the functional differences between the following. **(2mks)**

a) Cross cut saw and rip saw.

b) Wood chisel and cold chisel.

6. State four functions of the worker bees in a bee colony**.** **(2mks)**

7. State four maintenance practices carried out on a fish pond**.** **(2mks)**

8. Give the meaning of the following terms as used in livestock breeding.

a) Close breeding**.** **(2mks)**

b) Line breeding

c) Out crossing.

d) Cross breeding.

9. State four egg abornomalities observed during egg candling. **(2mks)**

10. Give four reasons why an animal may be culled**.** **(2mks)**

11. Give the meaning of the following terms as used in livestock health. **(2mks)**

a) Predisposing factors.

b) Incubation period.

12. Name two appropriate hand tools needed to finish the handle of a jembe. **(1mk)**

13. State four ways of controlling lice in poultry**.** **(2mks)**

14. State four limitations of a tractor as a source of power on the farm. **(2mks)**

15. State four reasons for feeding a lamb on colostrum**.** **(2mks)**

16. State four disadvantages of fold systems in poultry rearing**.** **(2mks)**

17. State four ways in which disease causing organism can gain access into an animal**.** **(2mks)**

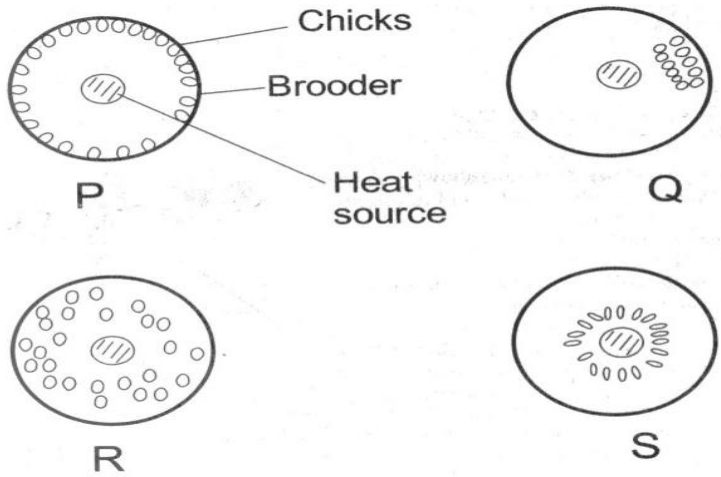
SECTION B (20 MARKS)

Answer All The Questions In The Spacaes Provided.

18. **a)** A farmer is required to prepare 200kg of dairy meal containing 16% DCP. Using the pearson's square method, Calculate the quantity of sunflower seed cake (28% DCP) and maize germ (8 % DCP) the farmer requires for the dairy meal. (Show your working). **(4mks)**

b) Apart from the method used above, name the other method used in computation of feed rations. **(1mk)**

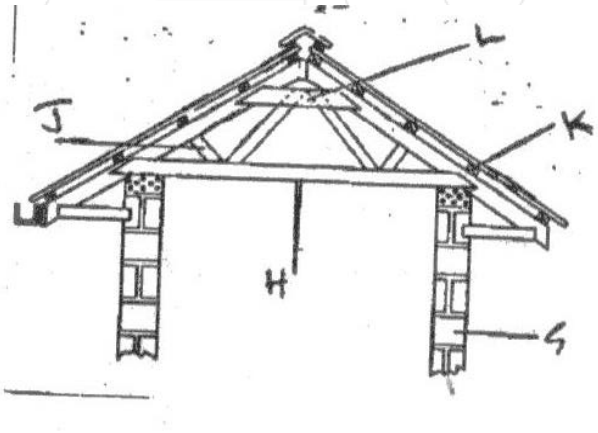
19. The diagrams below illustrate behavior of chicks in a brooder.



a) Describe the behavior of chicks in brooders labeled Q,R and S. **(3mks)**

b) State two other observable behavior of chicks in brooder labeled P other than the behavior shown above. **(2mks)**

20. The diagram below represents part of a roof. Study the diagram and answer the questions that follow

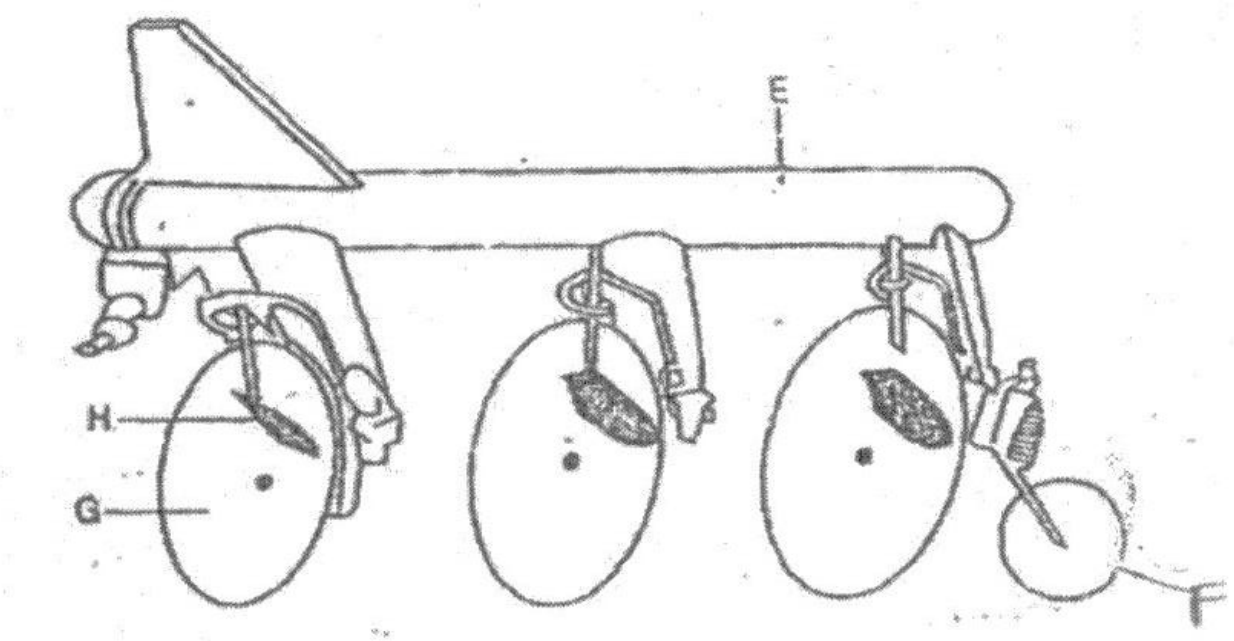


a) Name the parts G, H, J and K. **(2mks)**

b) State two functions of the roof illustrated above. **(1mk)**

c) Give the collective term for the parts labeled H, J and L**.** **(1mk)**

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



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

b) Name the part labeled E,F,G and H**.** **(2mks)**

c) State two ways in which the depth of ploughing can be increased when using the implement above. **(2mks)**

SECTION C (40 MARKS)

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

22. **a) Outline** the daily maintenance practices that should be carried out on a farm tractor. **(10mks)**

b) Describe the body conformation features of a dairy cattle. **(5mks)**

c) State five reasons for maintaining livestock healthy. **(5mks)**

23. **a) Describe** how a four stroke cycle petrol engine works. **(8mks)**

b) State and explain any six factors that should be considered when sitting farm structures. **(12mks)**

24. a) Describe mastitis in dairy cattle under the following subheadings.

i. Predisposing factor. **(4mks)**

ii. Symptoms of attack. **(3mks)**

b) Outline eight symptoms of tape worm infestation in cattle. **(8mks)**

c) State five ways of stimulating a cow for milk let down. **(5mks)**

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KCSE 2025

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Don't panic!

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SUCCESS

KCSE 25

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