

# **KCSE FINAL PREDICTION**

# **AGRICULTURE**

## **(KCSE PREDICTIONS 1-10)**

*An Exclusive Top-Notch KCSE Model Prediction Questions.*

*A special preview of Possible Expected sample KCSE Questions  
Most likely to be Tested in the Forthcoming KNEC examinations.*

**SERIES 1**

*Proudly prepared by an Exceptional team of  
Experienced Veteran KNEC examiners within the  
National Group of Mwalimu Agency.*

*For Marking Schemes/Answers*

**0746 222 000**

**MWALIMU AGENCY**

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 1 PAPER 1

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

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### FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

**SECTION A (30MKS)****Answer ALL the Questions in this section**

- 1) Give **four** advantages of large scale farming. (2mks)
- 2) a) Define nomadic pastoralism (1mk)  
b) State **two** advantages of nomadic pastoralism. (1mk)
- 3) State **four** factors which determine soil depth. (2mks)
- 4) Give **four** natural factors that would encourage the gully erosion on a farm. (2mks)
- 5) State **four** ways in which trees help in soil conservation. (2mks)
- 6) State **four** disadvantages of communal land tenure system. (2mks)
- 7) State **four** factors that should be considered when selecting a forage crop species to be established in a given area. (2mks)
- 8) What do you understand by the following terms. (3mks)
  - a) Seed dressing
  - b) Seed inoculation
  - c) Chitting
- 9) Give **two** advantages of compound fertilizers (1mk)
- 10) State **two** effects of varying spacing in maize production. (2mks)
- 11) State **four** symptoms of viral diseases in crop production. (2mk)
- 12) List **four** branches of livestock farming. (2mks)
- 13) Name **four** varieties of dry beans (2mks)
- 14) Give **four** precautions taken to prevent pest attack in stored produce. (2mks)
- 15) What is organic farming? (1mk)

**SECTION B (20MKS)**

- 16) Study the diagrams below carefully and answer the questions that follow.



- a) Identify the pests labelled **A** and **B** (2mks)
- b) State **two** effects the pest labelled A causes on a maize plant. (2mks)
- c) List **three** effects of pest **B** in stores. (3mks)
- d) State **three** methods of controlling striga weed. (3mks)

17) The diagram below shows a field management practice carried out on a fruit crop. Study it carefully and answer the question that follow.



- a) Identify the practice (1mk)
- b) Give **two** reasons for carrying out the above practice. (2mks)
- c) State **three** reasons for storing beans after harvesting. (3mks)
- d) State **three** advantage of processing farm produce. (3mks)
- e) Define the term drainage. (1mk)

### SECTION C (40MKS)

Answer any two questions from this section

- 18) a) Describe **eight** farming activities that would encourage soil erosion (8mks)
- b) Describe the harvesting of cotton. (8mks)
- c) Describe seedbed preparation for carrot production. (4mks)

- 19) a) Describe **ten** factors that would determine the nutrient content of hay. (10mks)  
b) Describe **ten** advantages of using organic matter for mulching. (10mks)
- 20) a) Explain **six** morphological features of weeds that influence selectivity of herbicides. (6mks)  
b) Give **five** disadvantages of zero grazing system. (5mks)  
c) Describe nine factors considered in the selection of planting materials. (9mks)

# KCSE FINAL PREDICTION

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## TRIAL 1 PAPER 2

443/2

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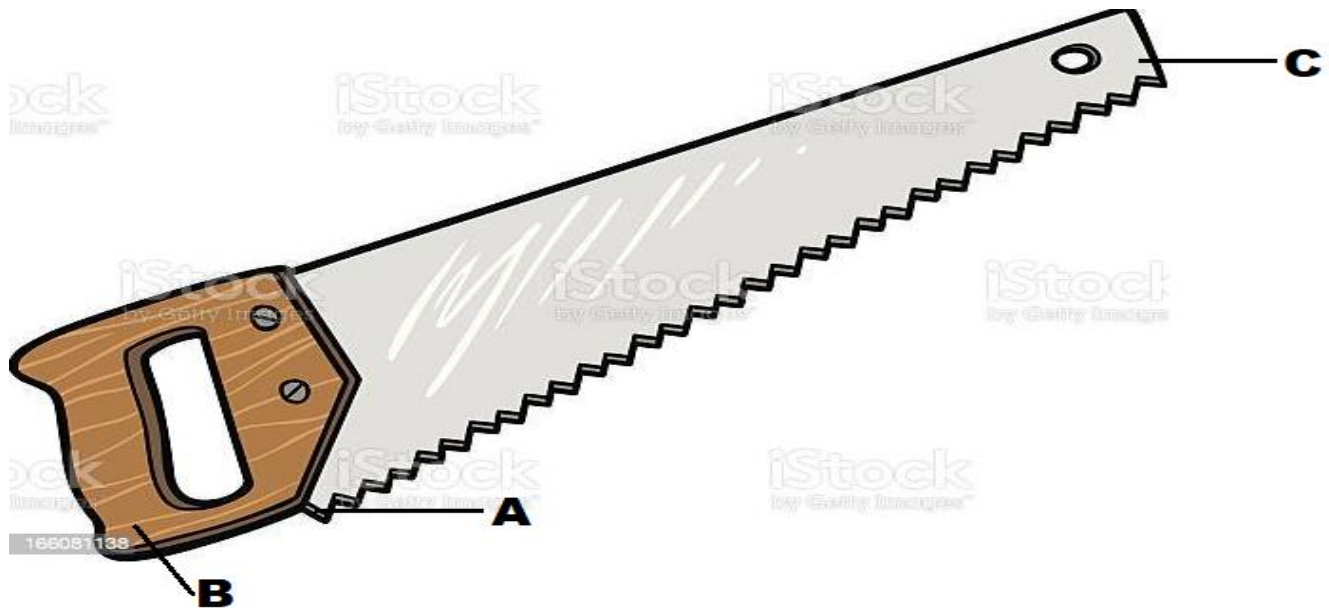
**SECTION A (30MKS)****Answer ALL the Questions in this section**

- 1) State **four** causes of stress in poultry. (2mks).
- 2) State **four** factors that determine the amount of feed an animal consumes (2mks)
- 3) State **four** advantages of artificial calf feeding. (2mks)
- 4) Name **two** methods of service in livestock breeding (1mk)
- 5) Name **two** species of camel. (1mk)
- 6) State **four** functions of vitamins in livestock body (2mks)
- 7) **Define** the following terms (2mks)
  - (a) Cockerel-
  - (b) Broiler-
  - (c) Ewe-
  - (d) Kid—
- 8) List **two** main parts of a farm building. (1mk)
- 9) State **two** reasons why lubrication or greasing of farm machines is important (1mk).
- 10) Give **two** reasons for seasoning timber before it is used for construction. (1mk).
- 11) **State** the functional difference between a drenching gun and a bolus gun. (1mk).
- 12) Name **four** tools which a farmer uses for dehorning cattle. (2mks)
- 13) List **two** reasons why bees are fed with syrup (1mk)
- 14) **Differentiate** between inbreeding and outbreeding (1mk)
- 15) Identify **four** abnormalities which can be identified in eggs through candling (2mks)
- 16) Name **two** dual purpose breeds of sheep (1mk)
- 17) State **four** factors which influences the rate of respiration in farm animals (2mks)
- 18) Mention **four** preventive measures farmers uses to control diseases in animals(2mk)
- 19) State **four** harmful effects of lice in sheep. (2mks)
- 20) Name **two** examples of two host ticks. (1mks)

**SECTION B (20MKS)**

Answer all the questions in this section.

21) Study the diagram below and answer the questions that follows.



Identify the tool.

(1mk)

Name the parts labelled A,B,C

(3mks).

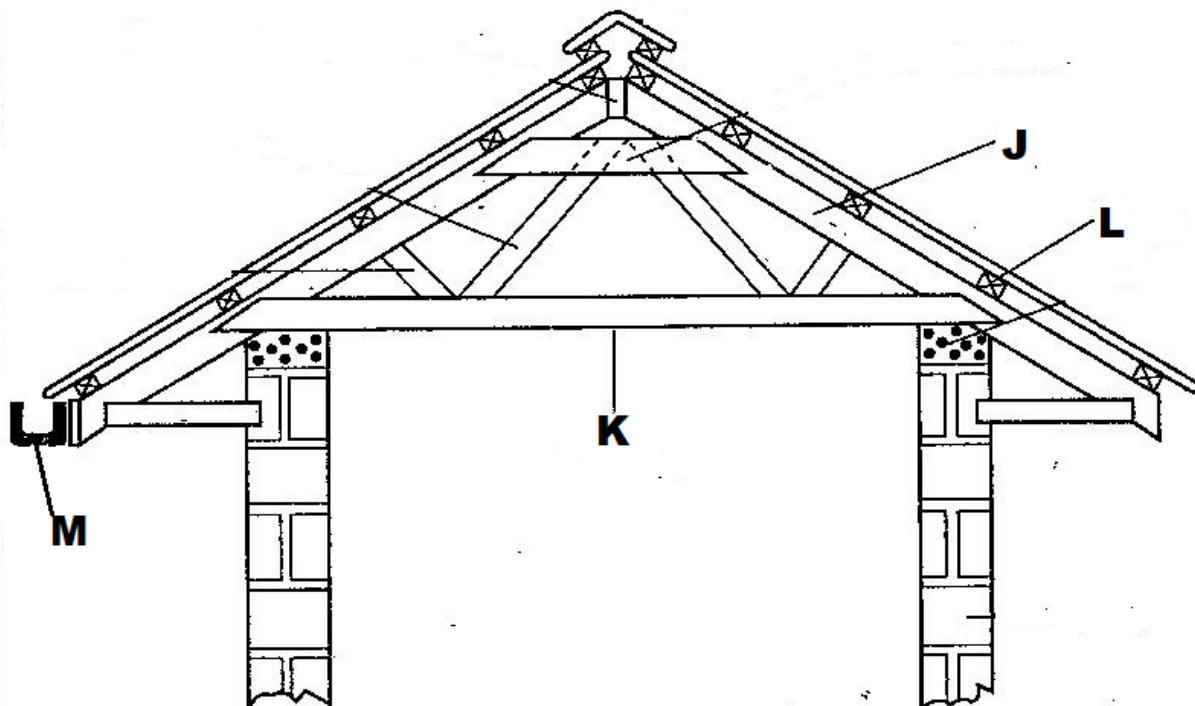
State **two** maintenance practices of the tool above

(2mks)

22) Using Pearson's square method, **compute** a 200 kg ration with 20% DCP from oats which contains 10% DCP and sim sim seedcake containing 60%DCP

(3mks)

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



Identify the parts labeled

(2mks).

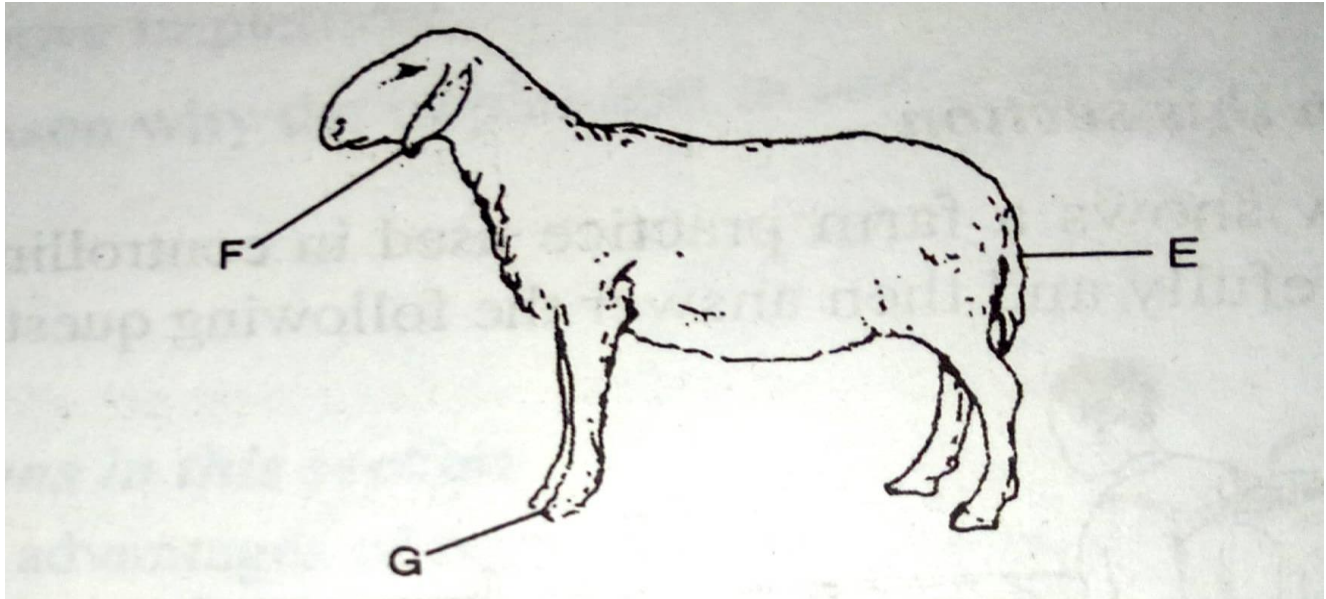


- (a) J -----
- (b) K -----
- (c) L -----
- (d) M -----

State **one** use of the part labelled L. (1mk).

(c) State **one** reason why it is important to have the structure labelled M at the edge of the roofing materials. (1mk).

24) Below is an illustration of a sheep with parts marked E, F and G.



(a) State the operations that are carried out on the parts labelled (2mks).

- i. E-----
- ii. G-----

(b) State **two** reasons for carrying out the operation identified in E (2mks)

(c) At **what** age should the operation stated in E be carried out. (1mk).

(d).State **two** methods of carrying out the operation named in E. (2mks)

### SECTION C (40MKS)

#### Answer any two questions from this section

25) (a).Give **nine** reasons why the battery cage system of rearing poultry is popular for used by large scale poultry farmers. (9mks)

Describe **five** management practices carried out on a fish pond. (5mks)

Describe **six** symptoms observed on a calf heavily infested with internal parasites(6mk)

- 26) (a) State **six** advantages of animal power over tractor power in seedbed preparation. (6mks)
- (b) Explain **nine** factors to consider in siting farm structures (9mks)
- (c) State **five** importance's of farm buildings. (5mks)
- 27) (a). Name **two** causes of pneumonia in livestock. (2mks)
- (b) State **four** predisposing factors of pneumonia disease in livestock (4mks)
- (c). Describe **four** types of stores that can be found on a farm. (8mks)
- (d). State **six** differences between Petrol and diesel tractor engines. (6mks)

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## TRIAL 2 PAPER 1

443/1

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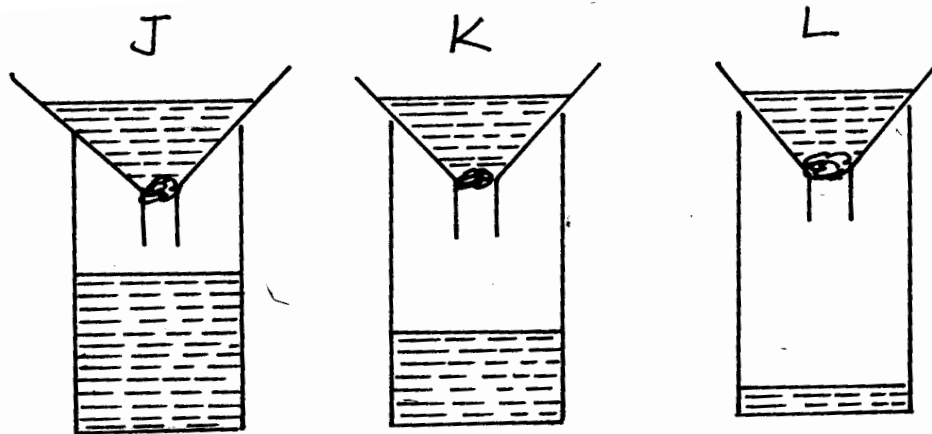
SECTION	MAXIMUM SCORE	CANDIDATE SCORE
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**SECTION A (30MKS)****Answer ALL the Questions in this section**

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

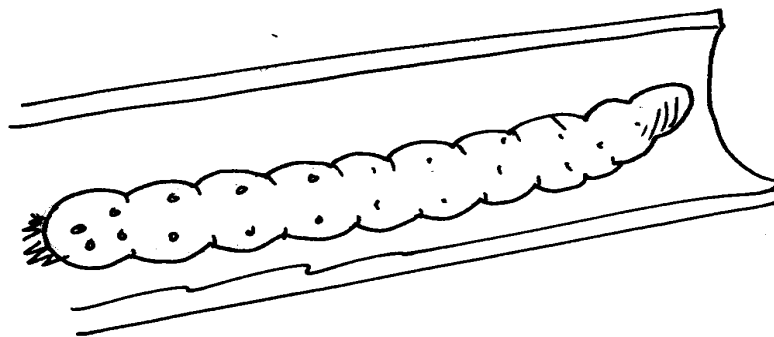
**SECTION B (20 MKS)**

- 21.A) A farmer in Kabondo was advised to apply 80 kg of nitrogen to his maize plantation during top dressing. The fertilizer available was calcium ammonium nitrate (20% N). Calculate the amount of this fertilizer in kilograms the farmer should purchase (2mks)
  - B. At what stage should the farmer top dress his maize crop
  - C. State three applications practices the farmer should consider to maximize the use of the fertilizer by the crop for top dressing (3mks)
- 22.The diagram below illustration an investigation on property of soil using samples labeled J,K and L



- a.) If the level of water drained into the test tubes were observed after two hours, name the property of soil being investigated (1mk)
- b.) What is the relationship between this property of soil and the size of soil particles (1mk)
- c.) Which soil sample will be suitable for growing paddy rice? (1mk)
- d.) Name the type of soil labeled J. (2mks)
- L.

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



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

**SECTION C**

- 24.A.** Explain six cultural methods of controlling crop diseases (12mks)  
B. Describe the effects of land fragmentation and subdivision (8mks)
- 25.a.** Explain how five factors lead to loss of soil fertility (10mks)  
b. Explain five ways by which farmers minimize grain losses in stores (10mks)
- 26.a.** Explain three reasons for pruning coffee (3mks)  
b. Discuss the production of kales under the following sub headings (12mks)
- Transplanting
  - Weed control
  - Pests and diseases
- c. State five factors that would influence soil erosion (5mks)

# KCSE FINAL PREDICTION

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## TRIAL 2 PAPER 2

443/2

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## SECTION A (30MKS)

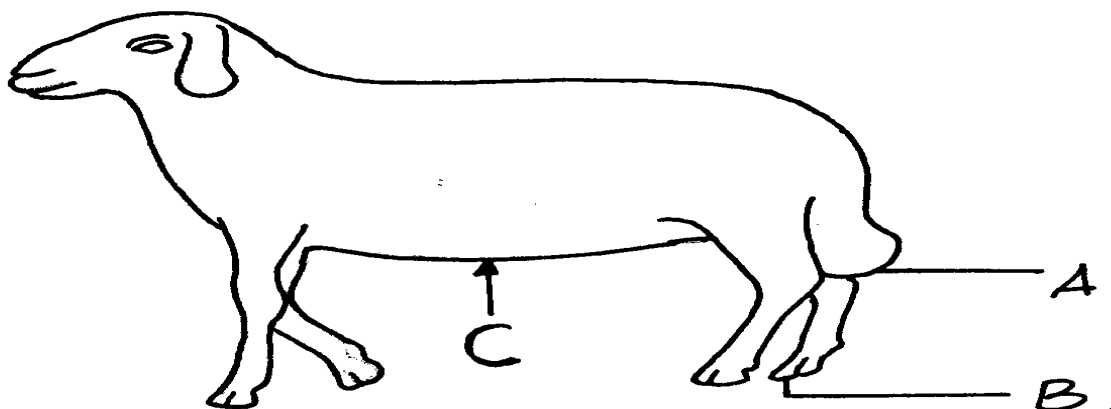
### Answer ALL the Questions in this section

1. Name three types of dairy goats reared in Kenya (1 ½)
2. a. What is raddling in sheep management (1mk)  
 b. Give two reasons for raddling in sheep management (1mk)
3. Give three advantages of contemporary comparison method in selection of livestock (1 ½)
4. State four advantages of animal power in the farm (2mks)
5. Give two qualities of a creep feed that make it suitable for piglets (1mk)
6. Give two reasons for spreading a polythene paper (PVC) on the slab of a permanent farm building (2mks)
7. Name three types of Fresh warm water fish reared in Kenya (1 ½ mks)
8. a) Give three disadvantages of inbreeding in cattle production (1½mks)  
 b). Give three advantages of embryo transplant in cattle (1½mks)
9. Give two factors inhibiting milk let-down (1mk)
- 10.a. Differentiate between “Flushing “and “Steaming up “ in livestock management (2mks)  
 b. Give three characteristics of succulent roughage (1½mks)
- 11.State two characteristics of a air cooled engines (1mk)
- 12.Give four characteristics of a good vaccine (2mks)
- 13.State five factors that necessitate culling of a dairy cow (2½mks)
- 14.Give two reasons why the afterbirth is removed immediately the sow farrows (1mk)
- 15.Give two reasons why bees swarm (1mk)
- 16.List three chemical methods of treating timber (2mks)
- 17.Give four importance of farm buildings (1mk)
- 18.State two control measures of controlling fleas in a flock of layers (1mk)

## SECTION B (20 MARKS)

### *Answer all question s in the spaces provided*

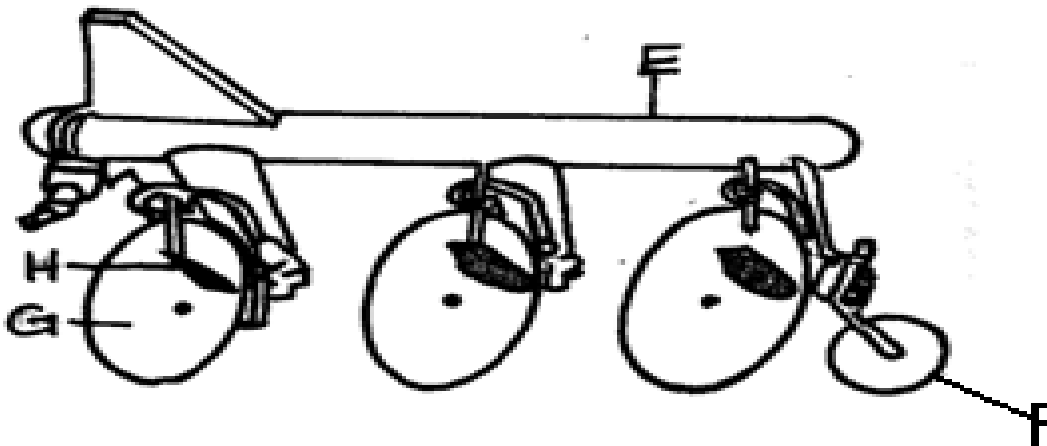
- 19.Below is an illustration of a sheep with some parts labeled A,B and C.Study the diagram and answer questions that follows?





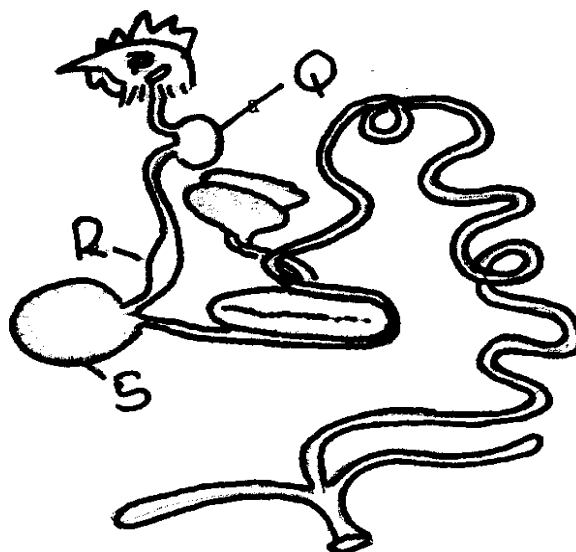
- a. State the practices carried out on the part labeled A,B and C
- b. State two reasons for carrying out the operation on the part labeled A. (1mk)
- c. Name one tool used for operation carried out on the part labeled B and C(1mk)
- B.....
- C.....

20. Study the illustration below and answer questions that follows



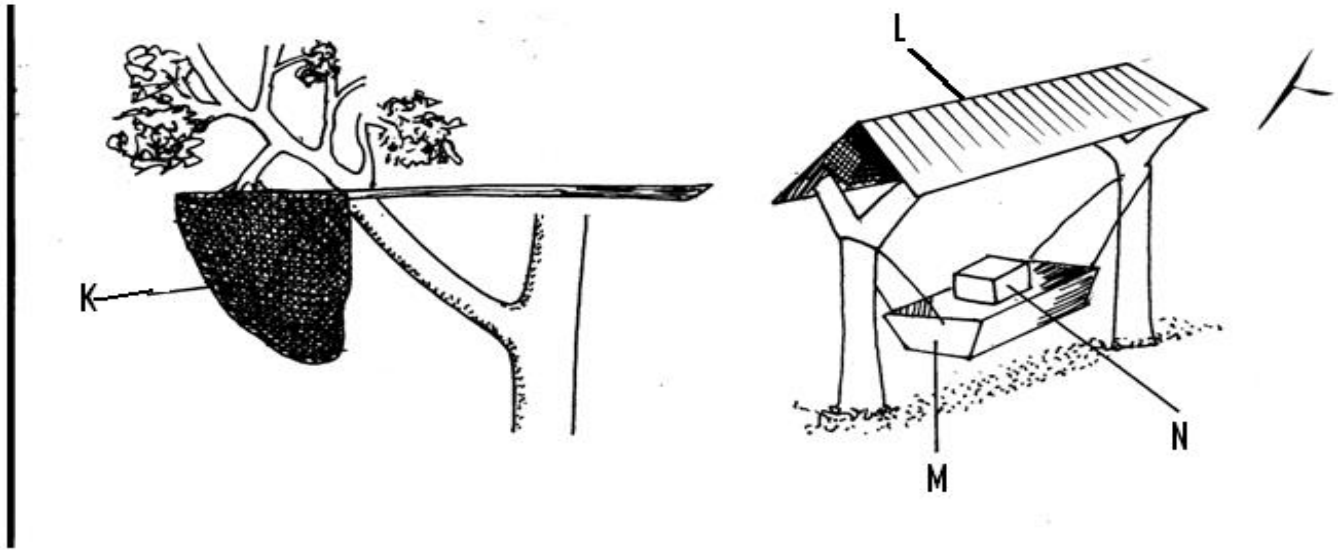
- i) Identify the implement illustrated above (1mk)
- ii) Name the parts labeled E,F,G and H (2mks)
- iii) State three ways in which the depth of ploughing can be increased when using the implement above (3mks)

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



- i) Name the parts Q,R and S (1½)
- ii) State the functions of the part labeled Q and R (2mks)
- iii). Give two characteristics of the part labeled S that make it effective in it's function (2mks)

22. Below is an illustration of a bee keeping structure



- a.) Name the parts labeled K,L,N and M (2mks)
- b. Give two factors that affects quality of honey (2mks)
- c. Name two types of pests that affects bees (1mk)

## SECTION C 40 MARKS

Answer any two questions from this section

- 23.a. Describe the characteristics of eggs selected for incubation (5mks)
- b. Discuss five factors which affects the quality of honey (5mks)
- c. Describe the management of growers from the 9<sup>th</sup> week to the point of lay (10mks)
  
- 24.a. Outline ten functions of Rumen (10mks)
- b. Describe the digestion of grass in the rumen of an adult ruminant (8mks)
- c. Describe two reasons why raddling is necessary in sheep management (2mks)
  
- 25. Describe the component parts of a plunge dip for cattle (20mks)

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## TRIAL 3 PAPER 1

443/1

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**SECTION A (30MKS)****Answer ALL the Questions in this section**

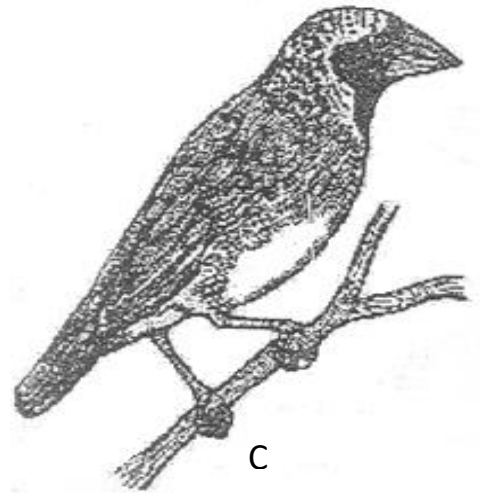
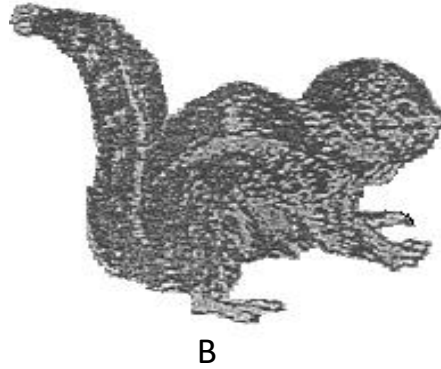
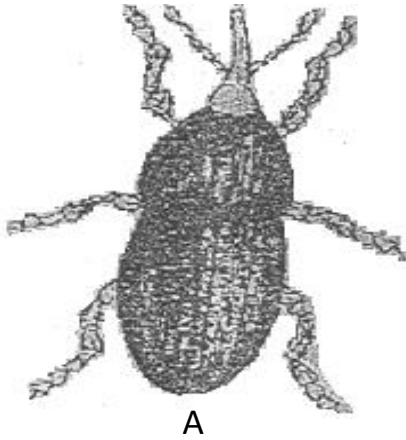
- 1) Agriculture is viewed as an Art and a Science. State **four** practice in the farm that makes Agriculture an Art. (2 marks)
- 2) State **four** ways in which a farmer can improve the structure of a water logged clay soil. (2 marks)
- 3) Despite efficient water supply to his tomatoes, Mr. Gikandi still noted wilting of some plants. Suggest **two** possible causes of this wilting. (1 mark)
- 4) Outline the stages undergone in the development of a gully. (2 marks)
- 5) (a) Explain why zone 2 in the zones of production is called a Rational Zone. (1 mark)  
(b) Differentiate between a complete budget and a partial budget. (1 mark)
- 6) (a) State **four** deficiency symptoms that would be seen in crop lacking potassium. (2 marks)  

A farmer was advised to apply 150kg of CAN of maize. Calculate the amount of Nitrogen applied per Hectare if CAN contains 21%N. (1 mark)
- 7) List down **three** types of Nurseries. (1½ marks)
- 8) State **four** achievements that can be made with high level of education and technology in agriculture. (2 marks)
- 9) Name **four** examples of liabilities in a balance sheet. (2 marks)
- 10) State **four** ways in which a farmer can increase labour productivity in the farm. (2 marks)
- 11) Give **four** farming practices that may help in achieving minimum tillage. (4 marks)
- 12) State **four** reasons why timely weed control is advisable in crop production. (2 marks)
- 13) Give **two** forms of collective land tenure system in Kenya. (1 mark)
- 14) Define the term “Economic Injury Level” of a crop. (1 mark)
- 15) State **three** characteristics of shifting cultivation. (1½ marks)
- 16) Name the disease that is characterized by mass of dark spores on the flowering part of maize.

**SECTION B: (20 MARKS)**

**Answer all the questions in this section**

17) Three maize pests are shown in the diagram below. Study them and answer the questions that follow.



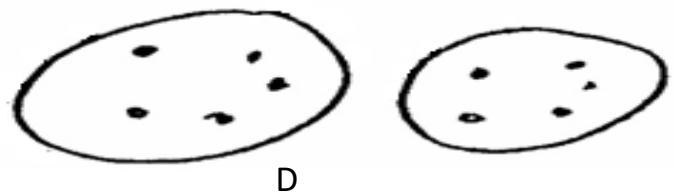
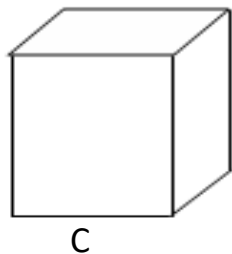
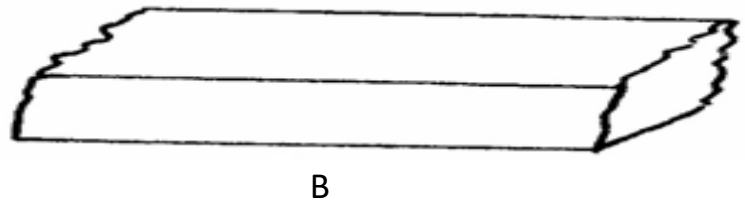
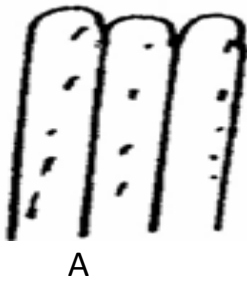
(a) Identify the pests in the diagrams labeled A, B and C. (2 marks)

At what stage of maize production does pest A and B damage the crop? (2 marks)

- i. A
- ii. B

b. (c) Give two ways in which C causes loses in field crops. (2 marks)

18) Study the following types of soil structures and answer the questions that follow.

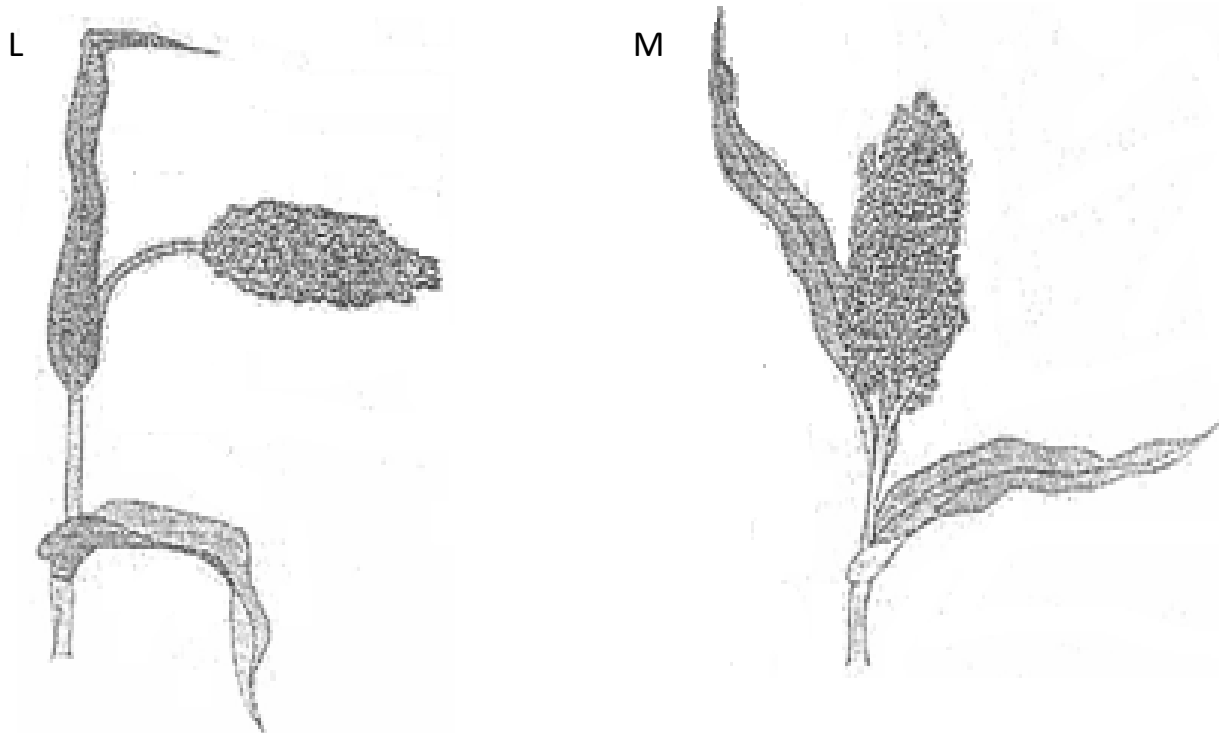


- (a) Identify the type of soil structure labeled. (2 marks)
- i. A
  - ii. B
  - iii. C
  - iv. D

- (b) Which type of soil structure is best suited for farming. (1 mark)

Identify **four** characteristics which make the soil structure named in (b) above suitable for farming. (2 marks)

- 19) The diagram below shows panicles of two sorghum varieties. Study the diagrams and answer the questions that follow.



- (a) Identify varieties **L** and **M**. (2 marks)
- Which of the two varieties of sorghum is less likely to be damaged by birds?(1 mark)
- (c) Give a reason for your answer in (b) above. (1 mark)
- 20) Differentiate between a Hybrid and a composite as applied in maize production. (1 mark)
- 21) Why are the following weeds difficult to control?
- a. Couch grass. (1 mark)
  - b. Oxalis latifolia. (1 mark)
  - c. Double thorn. (1 mark)

**SECTION C: (40 MARKS)**

**Answer any two questions in this section**

22) (i) Explain **five** structural structures used to control soil erosion. (10 marks)  
State and explain **five** factors which may influence the spacing of crops. (10 marks)

23) (a) Describe **ten** cultural methods used in controlling crops pests. (10 marks)

Describe production of paddy rice under the following sub headings:

- i. Land preparation. (3 marks)
- ii. Water control. (3 marks)
- iii. Role of irrigation water. (3 marks)
- iv. Signs of maturity. (1 mark)

24) Using the data below answer the questions that follow.

Fertilizer input (Bags)	Maize output (Bags)	Total Revenue Kshs.	Total Cost Kshs.	Marginal Revenue Kshs.	Marginal Cost Kshs.	Net Revenue Kshs.
0	0	0	0	0	0	0
2	14	28000	5600	-	-	-
4	39	78000	11200	-	-	-
6	61	122000	16800	-	-	-
8	78	156000	22400	-	-	-
10	87	174000	28000	-	-	-
12	88	176000	23600	-	-	-

Work out the Marginal revenue, Marginal cost and Net revenue at all levels of production and complete the table. (7 marks)

(b) On the graph paper provided, draw a graph of output against input. (4 marks)

(c) From the graph, work out the maize output at the input levels 3 and 9. (2 marks)

(d) State the level of input where maximum profit is realized and give a reason. (2 marks)

(e) What is elasticity of demand? (Ed) (1 mark)

(f) Enumerate the factors that determine the elasticity of demand. (4 marks)

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## TRIAL 3 PAPER 2

443/2

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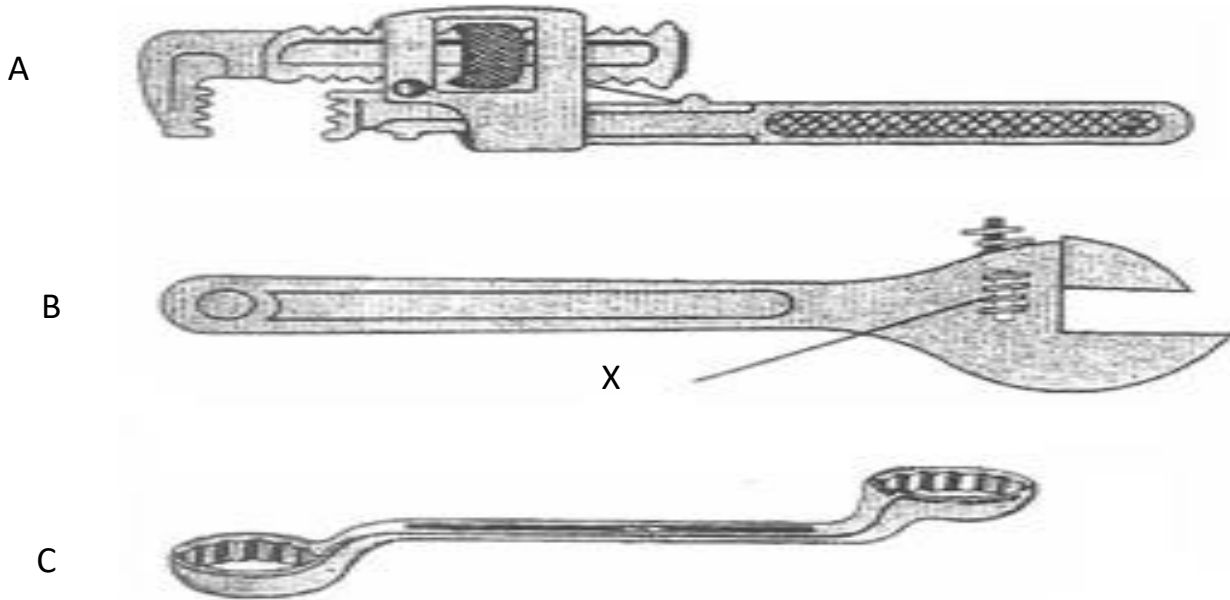
**SECTION A (30MKS)****Answer ALL the Questions in this section**

- 1) State the major physical difference between a Landrace and a Large White Pig. (2 marks)
- 2) (a) Name **two** livestock diseases that are controlled through use of same vaccine. (2 marks)  
(b) Name the vaccine as in 2 (a) above. (½ mark)
- 3) Name **two** diseases that attack bees. (2 marks)
- 4) State **two** distinguishing external characteristics of Californian White Rabbit. (2 marks)
- 5) State the functions of the following hormones in livestock.  
(a) Oxytocin. (1 mark)  
(b) Stilboesterol. (1 mark)
- 6) Name **four** species of fresh water fish reared in Kenya. (2 marks)
- 7) Give **three** methods of feeding colostrums to a Newly Born Calf. (1½ marks)
- 8) State **four** advantages of using Kenya Top Bar Hive over Log Hive. (2 marks)
- 9) List **four** factors that would ensure clean milk production. (2 marks)
- 10) State **two** reasons for clipping the Upper Beak in poultry management. (1 mark)
- 11) State **two** ways of preventing predation in a fish pond. (2 marks)
- 12) Differentiate between crutching and ringing. (1 mark)
- 13) Name **two** major physical differences between Dromedary and Bacterian Breeds of camel. (2 marks)
- 14) State **four** major Routes of Administering vaccines in a day old chick. (2 marks)
- 15) State **four** measures that prevent egg eating in poultry. (2 marks)
- 16) Give **four** factors determining the amount of water taken by an animal. (2 marks)
- 17) List **two** factors considered in sorting and grading eggs for market. (2 marks)
- 18) List any **four** predisposing factors of livestock diseases. (2 marks)
- 19) (a) Define the term immunity as used in livestock health. (1 mark)  
(b) List **four** causes of livestock diseases. (2 marks)
- 20) Name **two** structures used in the control of ticks. (1 mark)
- 21) (a) State **two** possible causes of soft shelled eggs. (1 mark)  
(b) State **two** qualities of good eggs for incubation. (1 mark)

**SECTION B: (20 MARKS)**

**Answer all questions in this section**

22) The diagram below show some workshop tools. Study the diagrams and answer the questions that follow.



Identify tools labelled. (3 marks)

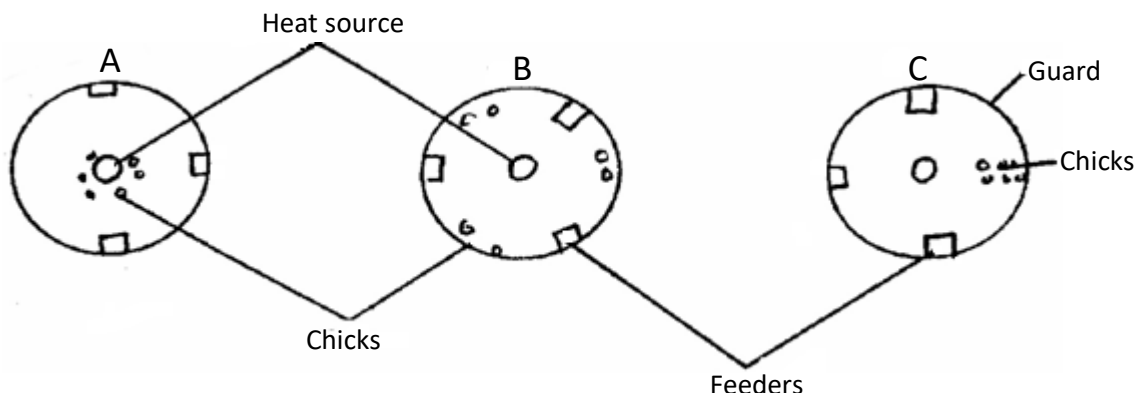
- i. **A**
- ii. **B**
- iii. **C**

(b) What functional advantage does the tool labelled **B** have over tool **C**? (1 mark)

(c) State the function of the tool labelled **A**. (1 mark)

(d) State the function of part **X** in the tool labelled **B**. (1 mark)

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

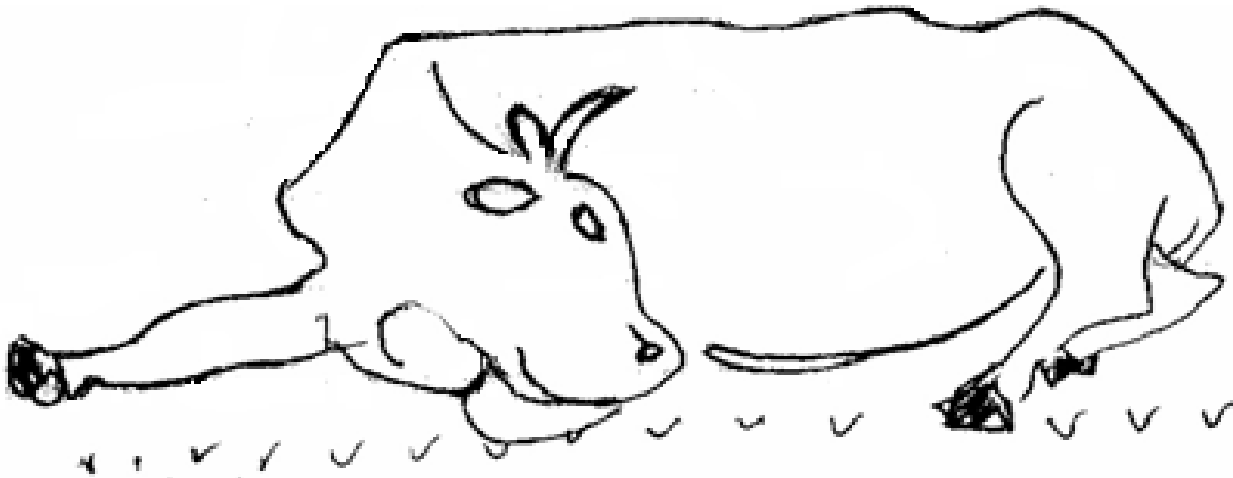


State the environment problem in each brooder as illustrated by the behaviour of the chicks. (3 marks)

- i. A
- ii. B
- iii. C

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

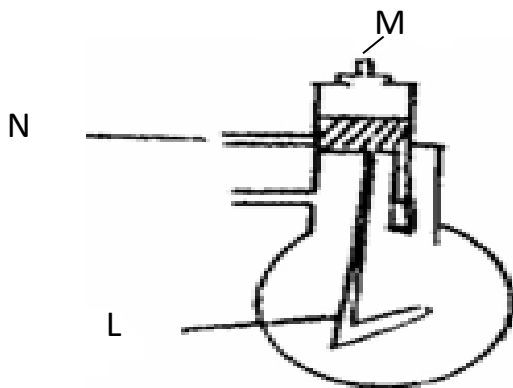
24) Study the illustration shown below and answer the questions that follow.



- (a) Name the condition shown above. (1 mark)
- (b) What causes the condition shown in 24(a) above? (1 mark)
- (c) Explain the treatment of the condition named in 24(a) above. (2 marks)

25) A farmer computed 100kg ration with 20% DCP from oats which contains 10% DCP and simsim seed cakes containing 60% DCP. Using the Pearson Square method, calculate the amount of each feedstuff in the ration. (5 marks)

26) Below is a diagram of two stroke engine cylinder.



Name **one** farm machine where the above engine is used. (1 mark)

**SECTION C: (40 MARKS)****Answer any two questions in this section**

- 27) (a) Describe the management practices that should be carried out on a sow and piglets during the furrowing period. (12 marks)
- (b) Explain **five** reasons why a breeding boar may be culled. (5 marks)
- (c) State **four** maintenance practices of forked jembe. (3 marks)
- 28) (a) Describe how the transmission system of a tractor transmits power that is developed in a cylinder to the wheels for motion. (15 marks)
- (b) Describe **five** long term tractor services and maintenances. (5 marks)
- 29) (a) State **six** features of an ideal calf pen. (6 marks)
- (b) Describe the uses of fences in the farm. (8 marks)
- (c) State **six** factors considered when siting farm structures. (6 marks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## **TRIAL 4 PAPER 1**

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

- Write your name & Index Number in the spaces provided.
- Sign and write the date of Examination in the spaces provided above.
- This paper consists of three sections A,B and C
- Answer **ALL** the questions I Section A and B
- Answer two question from Section C.

### FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

**SECTION A (30MKS)**

**Answer ALL the Questions in this section**

- 1) State three characteristic of shifting cultivation. (1 1/2mks)
- 2) State any four factors that determine the spacing of a crop . (2mks)
- 3) State two conditions under which the opportunities cost is zero in a farming practice. (11/2mks)
- 4) Give two activities carried out during hardening off tomatoes seedling . (2mks)
- 5) State three benefits of minimum tillage in crop production . (1 1/2mks)
- 6) Differentiate between Olericulture and Pomoculture as used in crop production.(1mks)
- 7) 7.Name three negative effects of strong wind on Agriculture . (1 1/2mks)
- 8) Differentiate between hybrid and composite as used in crop production . (1mk)
- 9) Name three reasons for treating water in the farm. (1 1/2mks)
- 10) Outline four disadvantages of communal land tenure system. (2mks)
- 11) List three aspects of light that influence crop growth . (1 1/2mks)
- 12) List three reasons for conserving forage. (1 1/2mks)
- 13) Name four factors that influence soil erosion. (2mks)
- 14) What is integrated pest management. (1mk)
- 15) Name four types of water pumps which can be used in the farm . (2mks)
- 16) State four factors that determine the stage at which a grain crop is ready for harvesting . (1 1/2mks)
- 17) Name four methods of farming. (2mks)
- 18) State two crop production practices that can be carried out to maintain optimum plant population. (1mk)
- 19) State four information contained in land title deed. (2mks)

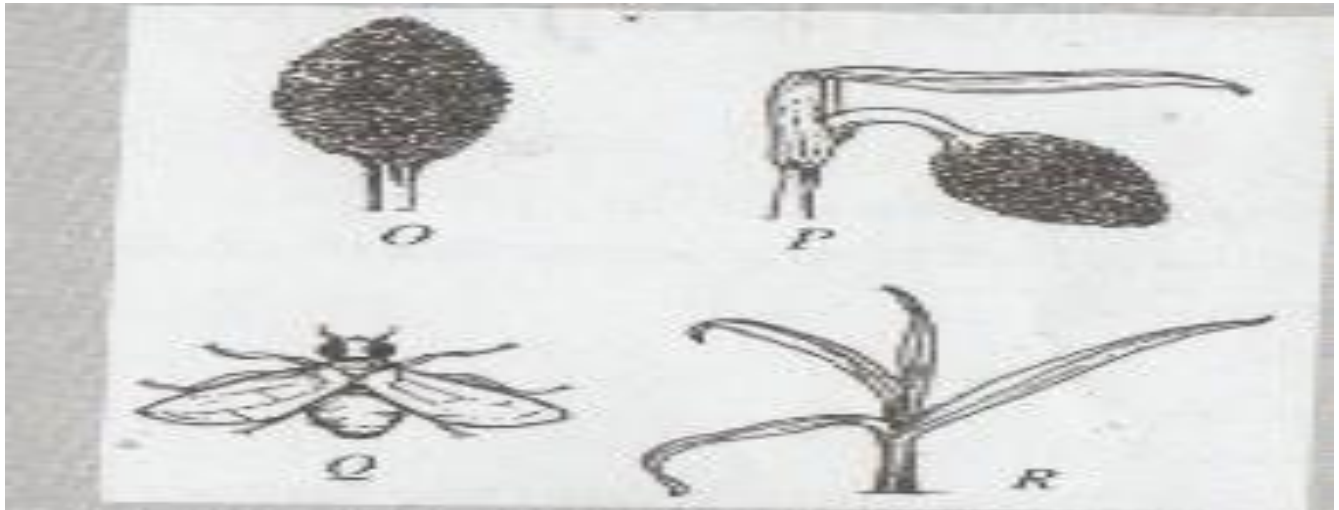
**SECTION B (20 MARKS)**

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

20) A farmer has four plots P1,P2,P3,& P4 as shown in the table below .

P1	P2	P3	P4
Infested with Bacteria wilt	Deficient in Nitrogen	Infested with witch grass(strigaspp)	Prone to soil erosion

- a)A Farmer intends to grow Maize ,Irish potatoes ,beans and Rhodes grass .plan a rotation for the first year of the rotation system. (2mks)
  - b)Account for the plan above . (4mks)
- 21) Study the illustration below and answer the question that follow.



- a) Name the varieties which is resistant to bird attack. (1mk)
- b) Give a reason for your answer in a above. (1mk)
- c) Identify pest Q which has attacked sorghum seedling labeled R. (1mk)
- d). State two methods that are used in controlling birds in a field of sorghum. (2mks)

22) Below is a diagram of a crop pest .



- Identify the pest in the diagram . (1mk)
- Suggest two ways of controlling the pest . (2mks)
- Name any two diseases of cabbages. (2mks)
- Give three advantages of training in crops. (3mks)

**SECTION C (40 MARKS)**

**Answer any two questions in this section**

- 23) a) Outline ten harmful effects of crop pest (10mks)  
b) State the effect of land fragmentation (10mks)
- 24) Describe the production of tomatoes under the following sub heading :  
Ecological requirement (3mks)  
Land preparation (4mks)  
Transplanting (4mks)  
field management practices (3mks)  
Outline six importance of crop rotation. (6mks)
- 25) a) outline ten safety precautions when using Herbicides. (10mks)  
b) state and explain biotic factors that influence agriculture. (10mks)



# KCSE FINAL PREDICTION

# AGRICULTURE

## **TRIAL 4 PAPER 2**

443/2

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

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- Answer two question from Section C.

### FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

**SECTION A (30MKS)**

**Answer ALL the Questions in this section**

- 1) 1 Study the table below fill in the blanks to show the term used to refer to parturition and young ones of the following animals? (2mks)

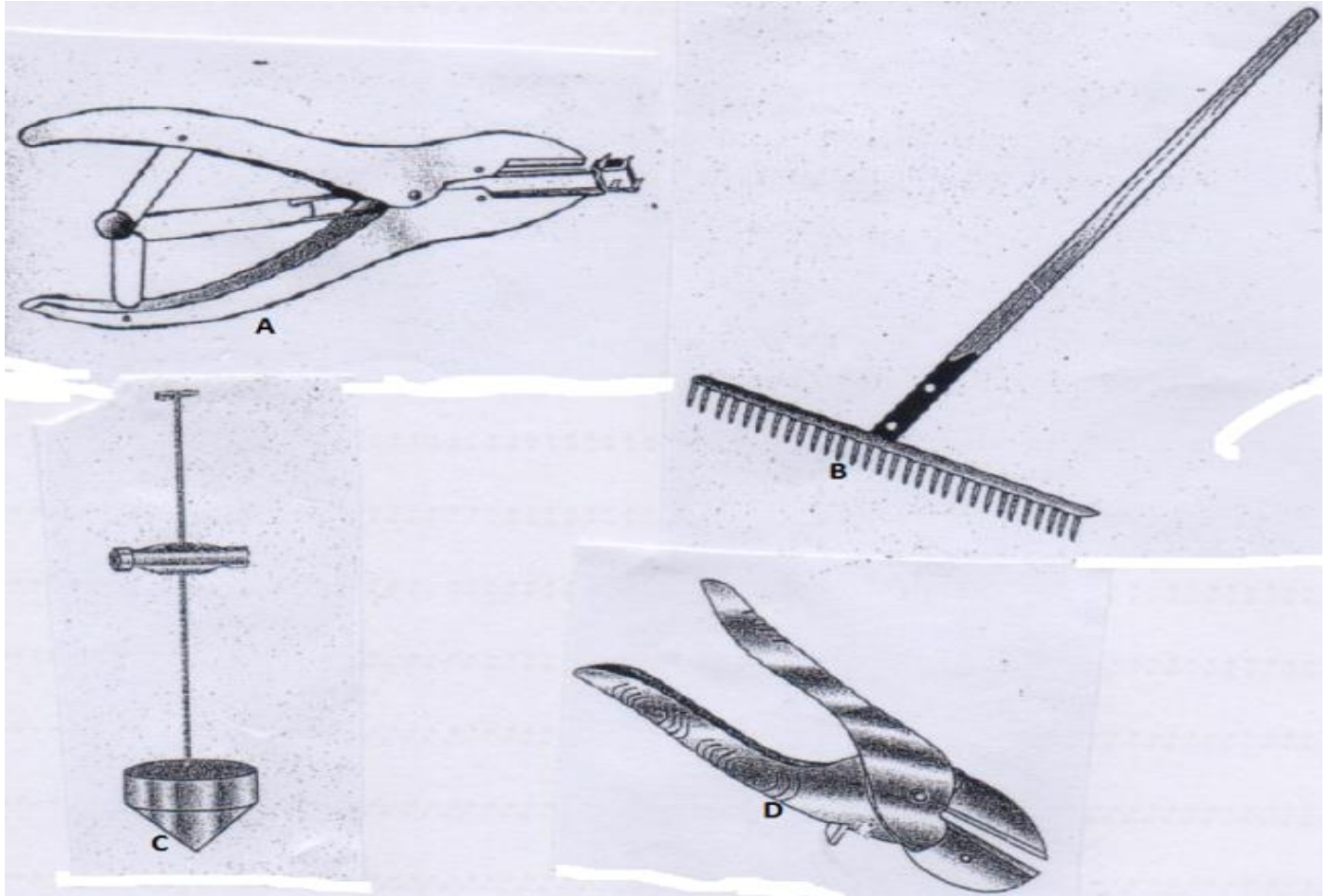
Type of animal	Act of parturition	Term to refer to the young one
Cattle	Calving	Calf
Goats	.....	.....
pig	.....	.....

- 2) Name two tools used to trim overgrown hooves in sheep. (1mk)
- 3) Name three dual purpose breeds of sheep. ( 1 ½ mks)
- 4) State four symptoms of mastitis in cattle. (2mks)
- 5) State two functions of the queen bee in a bee colony. (1mk)
- 6) State four factors affecting the digestibility of a feed. (2mks)
- 7) State four harmful effects of ticks. (2mks)
- 8) State four conditions that may inhibit milk let-down during milking. (2mks)
- 9) Give three disadvantages of using a plunge –dip for tick control. (1 ½ mks)
- 10) Name two viral diseases that affect each of the following livestock.  
 (a) Cattle..... (1mk)  
 (b) Poultry..... (1mk)
- 11) State four desirable factors to consider when siting a fish pond. (2mks)
- 12) Give three disadvantages of cross breeding in cattle. ( 1 ½ mks)
- 13) State four conditions that would encourage hens to eat eggs in poultry production. (2mks)
- 14) Outline four reasons for maintaining farm tools and equipment in good condition. (2mks)
- 15) State four nonpathogenic causes of livestock diseases. (2mks)
- 16) In the preparation of artificial colostrum, what is the role of each of the following?  
 (a) Caster oil ( ½ mk)  
 (b) Cod liver oil ( ½ mk)
- 17) What is the importance of applying milking salve on teats of a lactating cow?(½mk)

**SECTION B (20 Marks)**

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

18) Below are illustrations of farm tools labeled **A,B,C** and **D**. Study them and answer questions that follow.



Give the correct name of each of the tools illustrated above. (2mks)

How is each of the tools **B** and **D** maintained? (1mk)

**B**.....

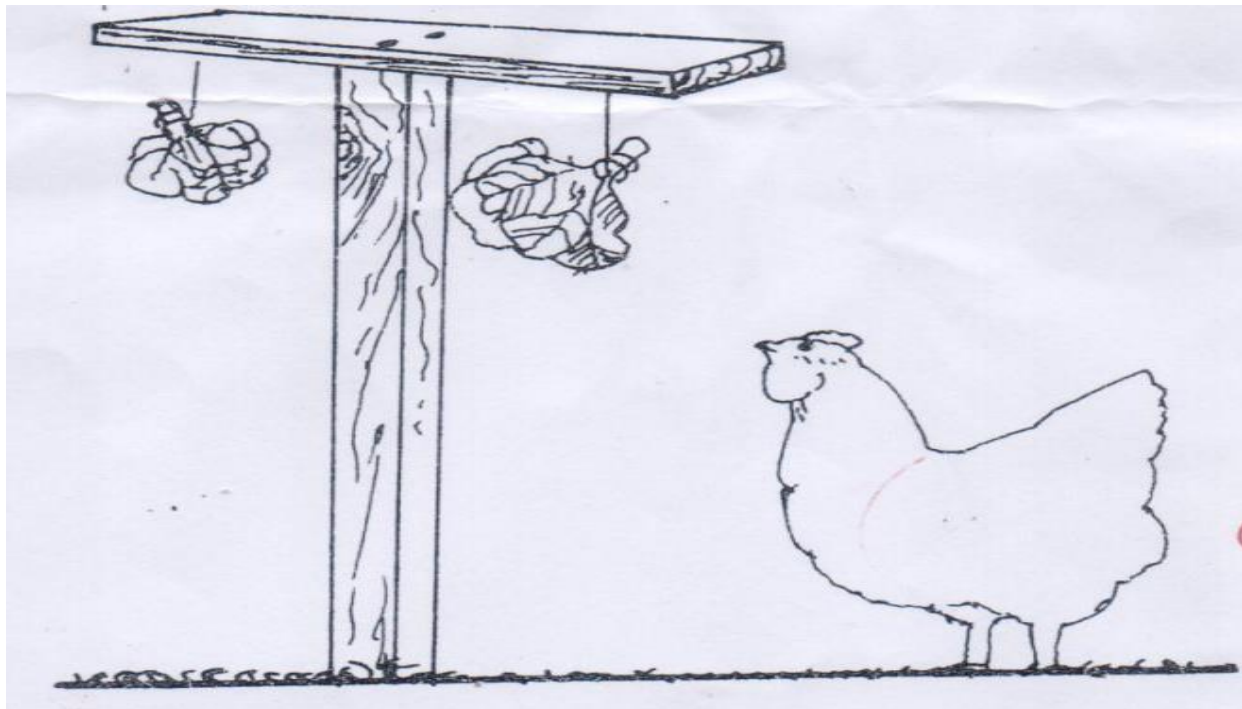
**D**.....

(c) State one proper use of each of the tools **A** and **C**. (2mks)

**A**.....

**C**.....

19) The diagram below illustrates a method of providing feed stuff to chicken in a chicken house. Study the diagram and answer the questions that follow.



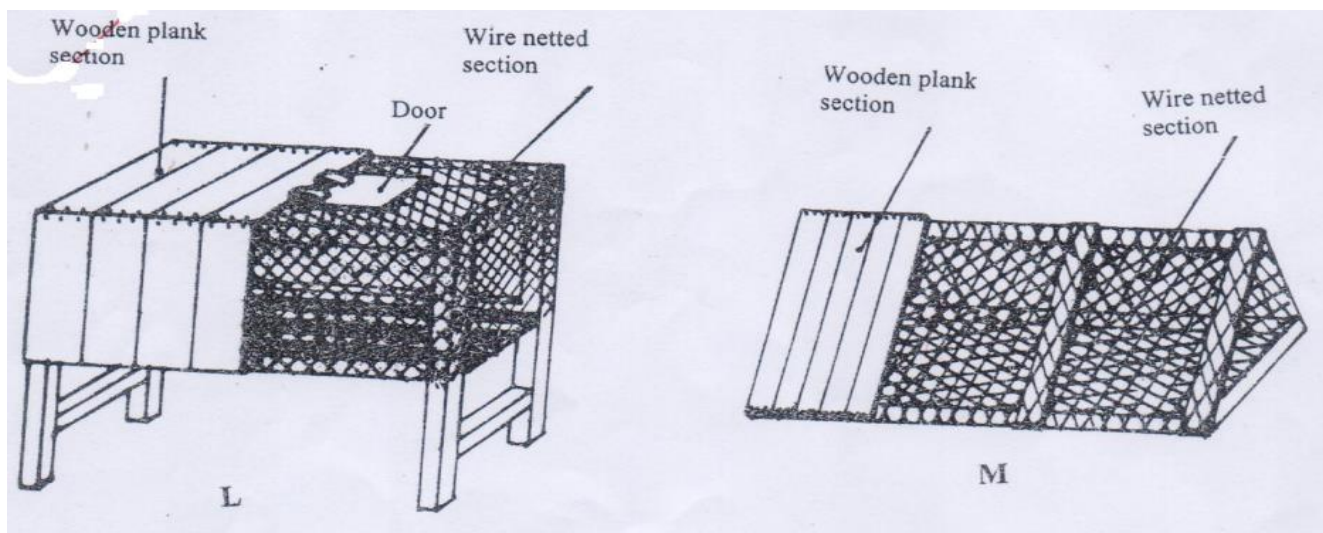
What type of feed stuff is illustrated in the diagram above? (1mk)

Give two reasons why the feed stuff should be suspended above the height of the chicken. (2mks)

Apart from above practice, name one other practice that can be used in place of practice (i) above. (1mk)

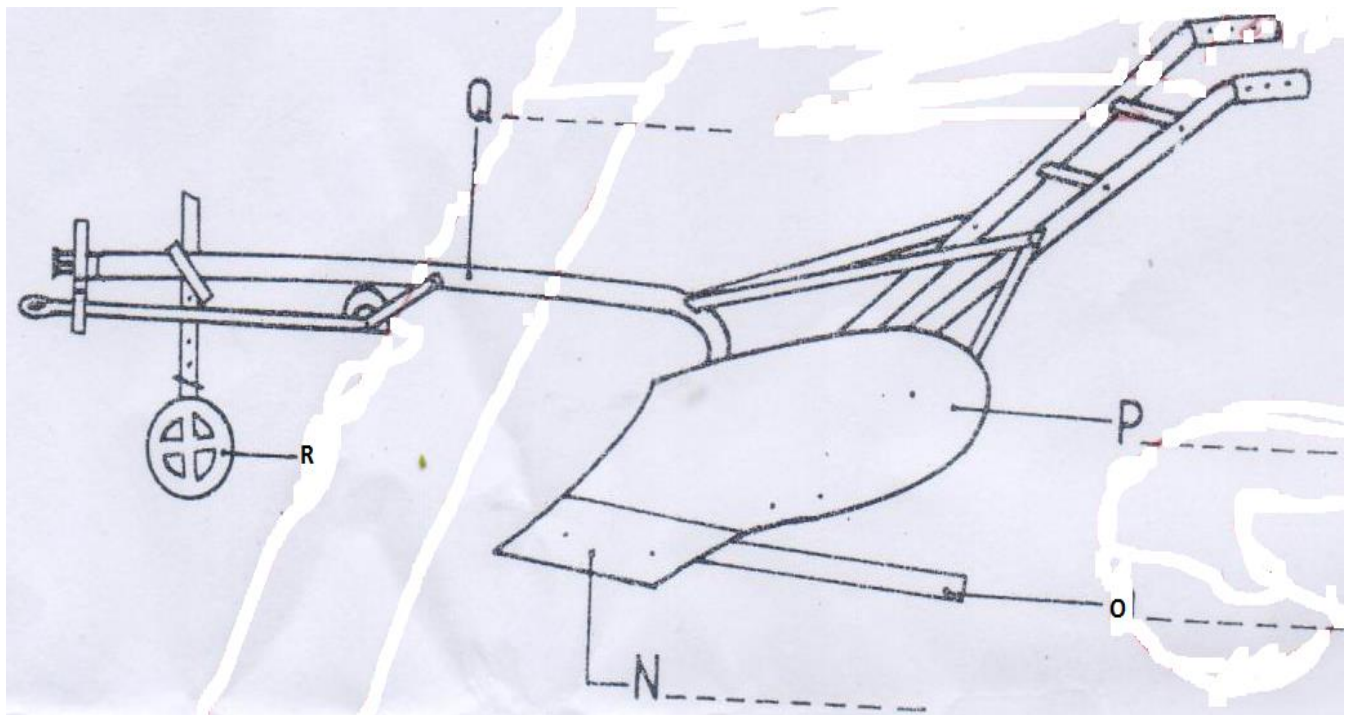
What other advantage of the practice named in (ii) in a deep litter house. (1mk)

20) The diagrams below illustrate two types of rabbit hutches labeled L and M. Study the diagrams and answer questions that follow.



- In which section of the hutches should the water and feed troughs be placed? **(1mk)**
- State one use of the wooden section of the hutch. **(1mk)**
- What additional facility should be included inside the hutches for a doe? **(1mk)**
- Identify the type of floor shown in hutch **L** above. **(1mk)**
- Give one advantage of the type of floor illustrated in hutch **L** above. **(1mk)**

**21)** Below is a diagram of an Ox-plough. Study it and answer questions that follow.



- (a) Identify the parts labeled **N,O,P** and **Q** on the diagram above. **(2mks)**
- State one maintenance practice that should be carried out in each of the parts labeled **N** and **R**.
  - i. N..... (1mk)**
  - ii. R.....(1mk)**
- (c) What adjustment should be carried out on the implement so as to reduce the depth of ploughing. **(1mk)**

**SECTION C (40 Marks)****Answer any two questions from this section**

22) (a) Describe the process of processing honey using heat method. (6mks)

Describe Foot and Mouth disease under the following sub- headings;

(a) Causal organism. (1mk)

(b) Animal attacked (1mk)

(c) Five symptoms of attack. (5mks)

(d) three control measures. (3mks)

(c ) Outline four ways through which power is made available from a tractor. (4mks)

23) (a) Explain six requirements of a good calf pen. (6mks)

(i) Give four reasons for steaming up a dairy cow. (4mks)

(ii) Explain the management practices carried out on a dairy calf from birth and immediately after birth. (4mks)

(c ) Outline six signs of round worms (*Ascaris* spp) infestation in cattle. (6mks)

24) (a) Describe the process of egg formation in a chicken up to the point of lay. (10mk)

(b) State the difference between four stroke cycle and two stroke cycle engine. (4mks)

(c ) Describe the process of digestion in the rumen. (4mks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 5 PAPER 1

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

- Write your name & Index Number in the spaces provided.
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- Answer two question from Section C.

### FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

## SECTION A (30MKS)

### Answer ALL the Questions in this section

1. List **four** environmental factors that affect crop distribution in a given area. (2mks)
2. Mention **two** methods of storing water on a farm (1mk)
3. Give one reason why too much air in the silo is undesirable in the process of making silage. (1/2mk)
4. State **two** advantages of a grass-legume pasture over a pure grass pasture (1mk)
5. State **two** characteristics of a large scale farming system. (1mk)
6. Give **four** reasons why farmers are encouraged to practice organic farming. (2mks)
7. (a) What is meant by the term **land reform**? (1/2mk)  
 (b) State **four** steps followed in land adjudication. (2mks)  
 (c) Mention any **four** pieces of information contained in a land title deed. (2mks)
8. State **two** ways how ridging controls soil erosion (1mk)
9. List down **two** determinants of national income (1mk)
10. State **two** possible causes of a hard pan. (1mk)
11. Differentiate between chitting and seed inoculation. (1mk)
12. Mention **four** management practices that are carried out on agro forestry trees from transplanting to maturity (2mks)
13. Give four possible causes of seed dormancy. (2mks)
14. State **four** reasons for planting cereals early in the planting season. (2mks)
15. Give **four** functions of Young Farmers Clubs in Kenyan secondary schools and colleges. (2mks)
16. Give **one** term used to explain a market condition where there is a:  
 (i) Sole seller (1/2mk)  
 (ii) Sole buyer (1/2mk)
17. Distinguish between the terms hybrid and composite as used in maize breeding (1mk)
18. State **two** characteristics of green manure plants (1mk)
19. Give **four** farming practices that may help in achieving minimum tillage (2mks)
20. What is biological weed control (1mk)



**SECTION B (20MKS)**

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

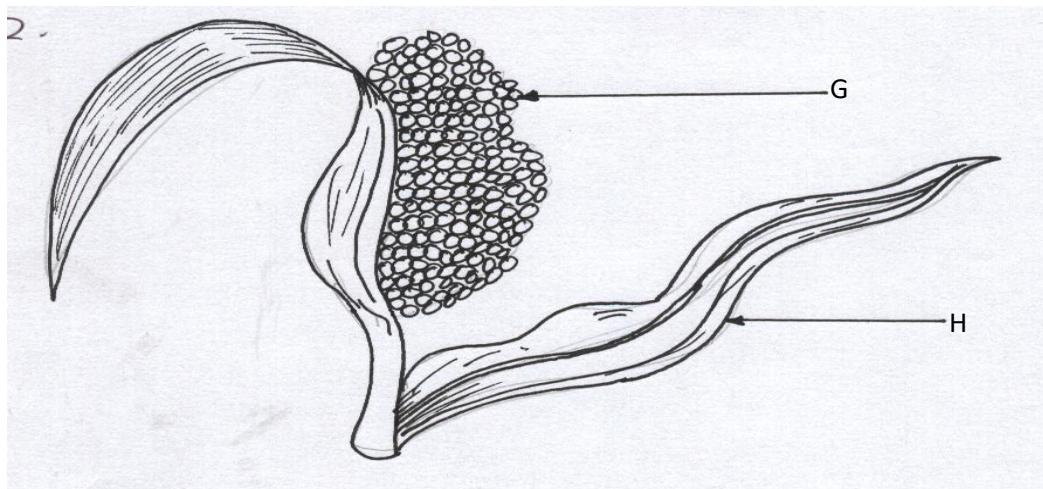
21.(a) A farmer can combine dairy meal and home made feeds in order to obtain 40kg of milk from a lactating cow as shown in the table below.

Dairy meal(kg)	Home-made feed(kg)	Marginal rate of substitution
1	48	0
2	39	V
3	32	7
4	27	W
5	23	4
6	21	X
7	20	1
8	19	Y

(i) Given the above information, calculate the Marginal Rate of Substitution and give the value of V, W, X and Y. **(4mks)**

(ii) Given that the price of dairy meal is Kshs.8.00 per kilogram and that of home-made feeds is Kshs.2.00 per kilogram, calculate the least cost combination. **(1mk)**

22. The diagram below illustrates one of the arable field crops. Study it carefully and answer the questions that follow.

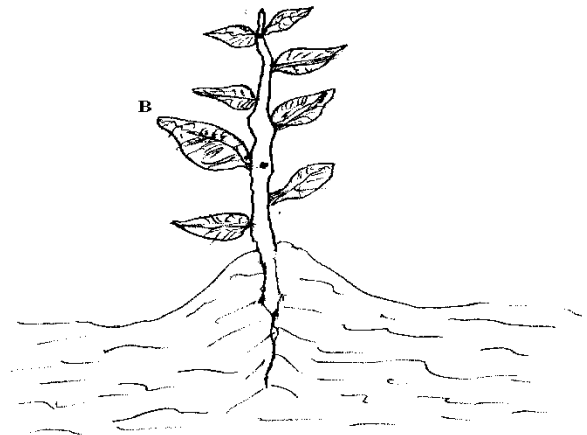
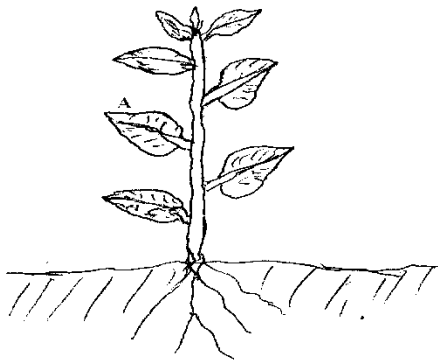


- a) Identify the field crop. **(1mk)**
- b) State **two** common diseases that attack the parts labeled G and H **(2mks)**  
 G..... H.....
- c) Explain four **cultural** methods of controlling the disease named H in (b) above **(2mks)**

23.a Name the deficient nutrient element in plants showing the following symptoms;

- i. Stunted growth, die back of plant tips, leaves roll up and chlorosis along margins of younger leaves (1mk)
- ii. Yellowing of leaves appears first on lower leaves; leaves turn brown and fall prematurely, stunted growth. (1mk)
- iii. Leaf curling, yellowing of leaves tips and edges of leaves scorched and has small mottles. (1mk)
- iv. Purpling of leaves, stunted growth, slender stalks and lateral buds remain dormant. (1mk)

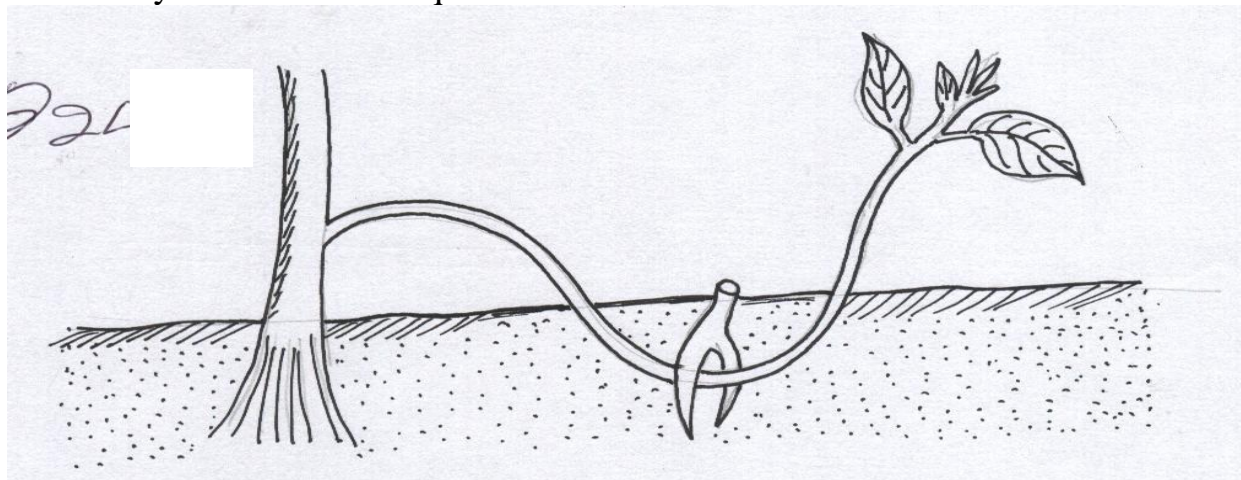
b The diagrams below show a practice out on various crops on the farm. Study them carefully and answer the questions that follow.



Identify the practice in diagram B

( 1 mk)

24. The figure below is a diagram illustrating a method of crop propagation. Study it carefully then answer the questions that follow.



- a) Name the method of propagation illustrated above (1mk)
- b) Give **two** ways of initiating faster root development in the propagation method shown above (2mks)
- c) What would make it necessary for a farmer to choose the above method of propagation instead of using cuttings? (2mks)

**SECTION C (40MKS)**

**Answer any TWO questions in this section**

25. a) Describe the production of tomatoes under the following:-
- (i) Transplanting: (5mks)
  - (ii) Field Management practices. (5mks)
- b) Give **six** advantages of drip irrigation. (6mks)
- c) Explain **four** factors that determine the quality of hay. (4mks)

26. Study the information provided carefully and use it to prepare a profit and loss account for Mr. Makunda farm for the year ending 2021. His purchases and expenses were as follows:

Goats	4,000
Poultry	15,000
Dairy meal	25,000
Pasture seeds	50,000
Transportation of farm produces	15,000
Casual workers	12,000
Ox-plough	10,000
Opening Valuation	150,000

**His sales and Receipts.**

Mohair	75,000
Rabbits	36,000
Pigs	70,000
Groundnuts	100,000
Orange	20,000
Eggs	15,000
Closing valuation	200,000

- a) Prepare profit and loss account (15mks)
  - b) Name Five methods of draining water in water logged / marshy areas. (5mks)
27. (a) Explain five problems associated with credits? (5marks)
- b) Explain eight uses of farm records? (8marks)
  - c) Explain seven effects of strong winds in agriculture (7marks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 5 PAPER 2

443/2

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

- Write your name & Index Number in the spaces provided.
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### FOR EXAMINERS USE ONLY

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A	30	
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## SECTION A (30MKS)

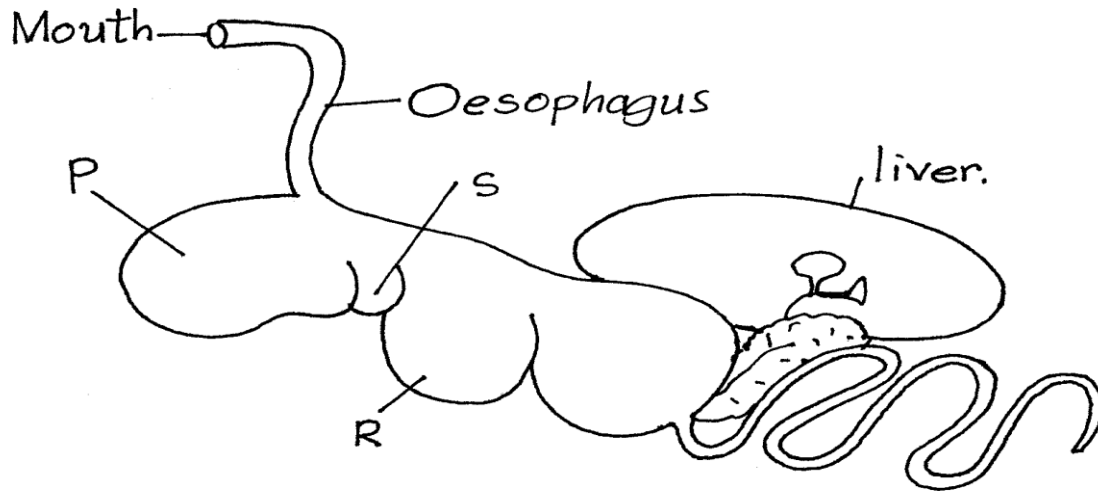
### Answer ALL the Questions in this section

- 1) Name the breed of goat kept for hair production (1mk)
- 2) State **two** ways in which barbed wire fence may be reinforced in the farm (1mk)
- 3) Broadly classify two causes of infertility in a herd of cattle (1mk)
- 4) Name the tool that is used together with the following as a pair (1mk)
  - Hypodermic needle .....
  - Elastrator .....
- 5) Name **four** signs of anthrax observed in carcass of cattle (2mks)
- 6) Name **four** ways by which cannibalism in poultry could be avoided (2mks)
- 7) Name the intermediate host of the following parasites (1mk)
  - a. Tapeworm .....
  - b. Liver fluke .....
- 8) a) List down two groups of cattle that are susceptible to milk fever (1mk)
  - Give **two** situations which may necessitate the preparation of artificial colostrum (1mk)
  - Give **two** uses of gears in a tractor. (1mk)
- 9) a) List **two** tools used for laying concrete blocks when constructing a wall (1mk)
  - b) List **four** characteristics of clean, high quality milk (2mks)
- 10) a) What is the cause of grass staggers in animals (1mk)
  - Give the meaning of the following terms as used in livestock health (2mks)
    - i) Incubation period
    - ii. =ii) Mortality rate
- 11) a) Write down two common examples of chemical causes of diseases among livestock (2mks)
  - b) Name **two** main parts of a farm buildings (1mk)
    - Name the breed rabbit with black nose, ears and tail but the body is white (1mk)
- 12) a) State **two** uses of a footbath in a cattle dip (1 mk)
  - b) What is hybrid vigour or heterosis in breeding? (1mk)
- 13) a) What is the difference between a tenon and crosscut saw (1mk)
  - b) State **two** qualities of marketable size eggs (1mk)
- 14) a) Give **one** reason for housing calves singly (1mk)
  - b) State **two** uses of a drawbar in a tractor (1mk)
- 15) State **two** functions of corner posts in barbed wire fences (1mk)
- 16) State the difference between crutching and raddling (1mk)

## SECTION B (20MKS)

**Answer All Questions In This Section**

17) The illustration below shows part of the digestive system of a cow. Study it carefully and answer the questions that follow.



Identify the part labelled R on the diagram

(1 mark)

Which of the parts labelled is also referred to as:

- i) The “book” or “many plies”
- ii) The “honey comb”

(1/2mk)

(1/2mk)

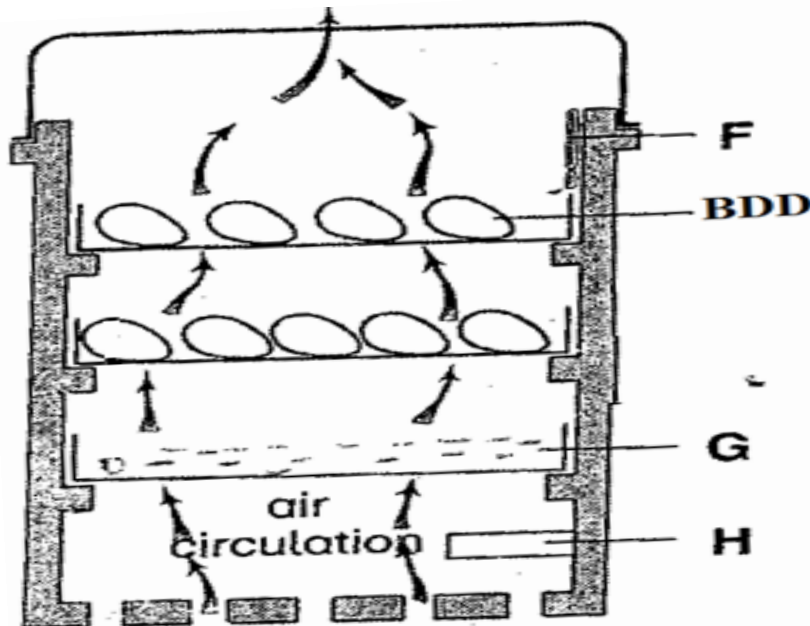
State **two** microbial activities that take place in the chamber labeled P?

(2mks)

State the role of esophageal groove in ruminants

(1mk)

18) The diagram E below illustrates an activity carried out by a farmer. Study the diagram and answer the questions that follow.



**E**

Identify the activity carried out in the structure labelled E above

(1mark)

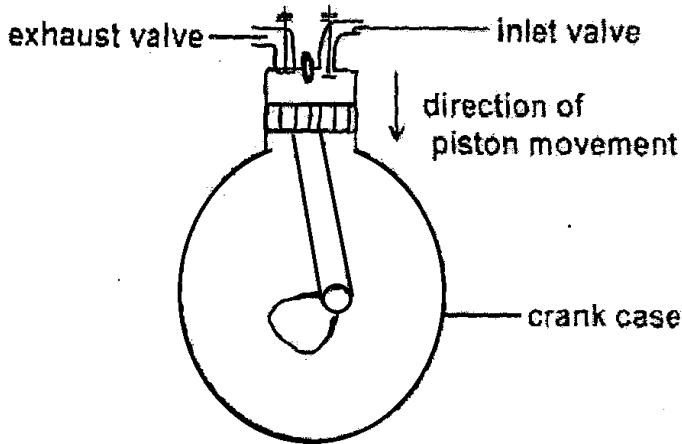
Name the parts labelled F and H in the structure E above

(2mks)

- i. F.....
- ii. H.....

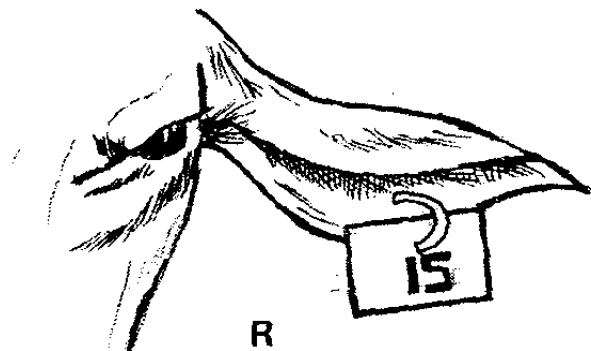
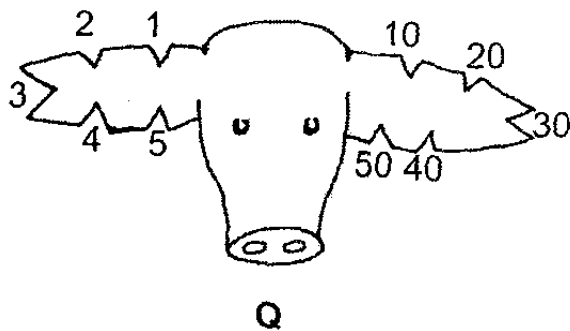
State **two** conditions apart from air circulation in E above which are necessary for a successful activity being carried out (2mks)

19) The diagram below illustrates a stroke in a four stroke cycle engine. Study it then answer the questions that follow. The arrows show the direction of motion of the piston



- Identify the stroke illustrated by the diagram (1 mark)
- Identify the type of tractor engine illustrated in the diagram on the basis of type of fuel it uses (1 mark)
- Give a reason for your answer in (b) above (1 mark)
- Name in the correct order the next two strokes which follow the one illustrated above (2mks)

20) Diagram Q and R below illustrates a practice carried out on livestock. Study the diagrams and answer the questions that follow:



- Identify the practice in Q and R (1mk)
- Name the method carried out in Q and R (1mk)
- a. Q .....

b. R .....

- State **one** advantage of R over Q (1mk)
- Give **two** reasons of carrying out the practice Q and R (2mks)

**SECTION C (40 MARKS)**

***Attempt Any Two Questions In The Space Provided***

- 21) a) Discuss the general methods of controlling livestock diseases (10mks)
  - Give **five** advantages of four-stroke cycle engines (5 marks)
  - State **five** disadvantages of natural mating (5 marks)
  
- 22) a) Explain **five** factors to be considered when selecting a breeding stock (10mks)
  - b) Describe the essentials of clean milk production in dairy farming (5 marks)
  - c) Outline the disease predisposing factors in livestock (5 marks)
  
- 23) State **five** symptoms of East Coast Fever (5 marks)
  - Give **five** advantages of using animal power (5 marks)
  - Give **five** characteristics of beef cattle breed (5 marks)
  - Describe the reasons why bees may abscond from a beehive (5 marks)



# **KCSE FINAL PREDICTION**

# **AGRICULTURE**

## **TRIAL 6 PAPER 1**

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### **INSTRUCTIONS TO CANDIDATES.**

- a) Write your name & Index Number in the spaces provided.
- 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 I Section A and B
- e) Answer two question from Section C.

### **FOR EXAMINERS USE ONLY**

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

## SECTION A (30MKS)

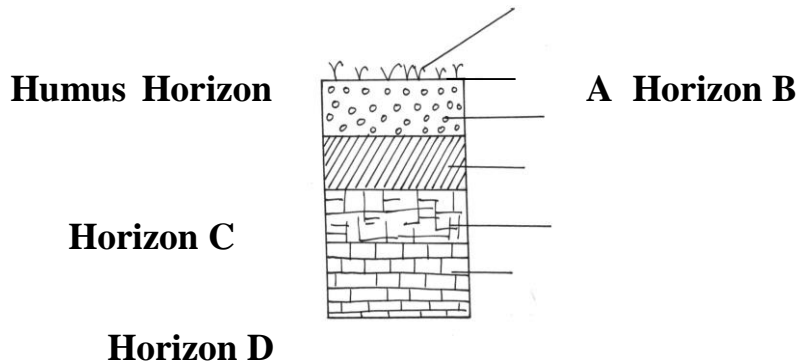
### Answer ALL the Questions in this section

1. What determines the colour of a particular soil? (1mk)
2. State **three** reasons for early weeding in annual crop production. (1½mks)
3. (a) Give any **four** factors which determine the number of operations done in a field before it is ready for sowing seeds. (2mks)
- (b) A potato farmer observes wilting in his potato crop during a rainy season. Name **one** possible disease and pest which could be responsible for the wilting in the crop.
- Disease (1mk)
- pest (1mk)
4. List any **three** factors considered when spacing crops during planting. (3mks)
5. (a) State any **three** disadvantages of indiscriminate and persistent use of pesticide in crop production. (2mks)
- Give **four** aims of research in maize by Kenya Agricultural Researchers in the institution (KARI) (2mks)
6. (a) Name **four** pasture legumes grown in high altitude zone. (2mks)
- Distinguish between topping and top dressing of pasture. (2mks)
7. State **four** characteristics of system of farming. (2mks)
8. List **four** advantage of grafting as a method of crop propagation. (2mks)
9. State **three** environmental factors which favour the population of pest in a give locality.
10. State **four** rols of trees in soil and water conservation. (2mks)
11. Give **three** symptoms of viral infection on crops. (1½mks)
12. Distinguish between over sowing and undersowing as used in forage crops. (1mk)
13. a) Define the term land reform. (½ mk)
- b)Give the methods of land reforms in Kenya. (1 ½ mks)
14. Give **four** factors that may determine the price of agricultural commodity. (2mks)

**SECTION B**

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

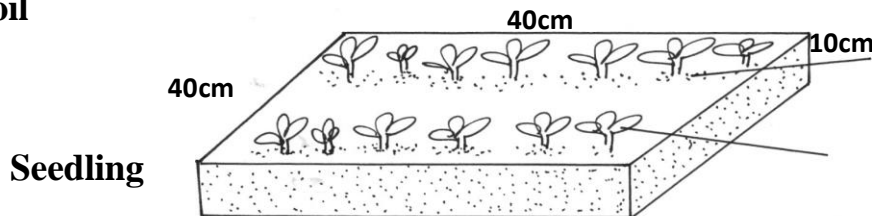
15. The diagram below represents a well-developed soil profile. Use it to answer questions below. **vegetation**



- (i) Describe the characteristics of horizon A (2mks)
- (ii) Apart from humus, name **three** other components of soil (1½ mks)
- (iii) State **three** ways in which humus contributes to the quality of soil. (3mks)

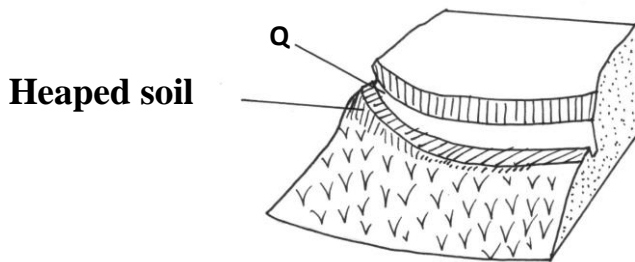
16. Observe the following diagram and answer the questions that follow.

Soil



- a) (i) Name the type of structure above used to prepare seedlings (½ mks)
- (ii) State **three** advantages of this methods of preparing seedlings. (1 ½ mks)
- (i) After sowing seeds give **three** practices carried out before seedlings germinate. ( 1 ½ mks)
- (ii) Give **three** management pratices that should be carried out to increase that survival of the seedling in the seedbed before transplanting. (3mks)

17. Below is a structure used to conserve soil.

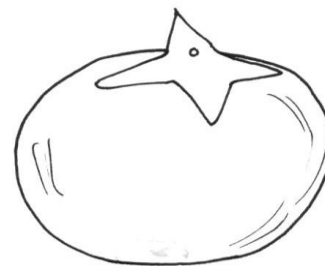
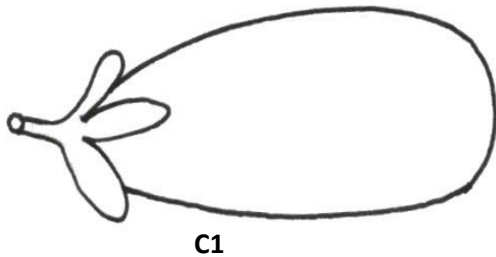


(i) Identify the part marked **Q**

( 1/2 mk)

(ii) Give **two** ways on how the structure conserving soil the conserve soil and water.  
(2mks)

18. Study the diagrams below showing tomato fruits.



C2

(a) Which fruit is good for processing and for fresh market.

(1mk)

Processing

Fresh market.

What physiological disorder occur in specimen either C1 or C2 in the field. ( 1/2 mk)

State **two** way of controlling the disorder named in (b) (ii) above

(1mk)

### SECTION C (40MARKS)

*Answer any two questions in this section in the s[paces provided*

19. (a) Name five methods of applying fertilizers to crops.

(5mks)

(b) Explain **four** characteristics of phosphatic fertilizer.

(8mks)

(c) State **six** roles of organic matter.

(6mks)

- 20.** (a) Define profit and loss account. **(2mks)**  
 (b) The following is a list of financial and position of Mr. Ndama’s farm in 2010.  
 Study the information carefully and then answer the questions that follows:-

<u>ITEMS</u>	<u>VALUE</u>
Sale of dairy Cattle	28,000.00
Closing valuation	25,000.00
Purchase of fertilizer	6,000.00
Interest payable	2,000.00
Milk sale	3,000.00
Veterinary bills	900.00
Wages	1,600.00
Opening valuation	4,800.00
Sales of pigs	8,000.00
Purchase of Assorted tools	3,560.00
Depreciation of machines	720.00
Repair of pigsty	370.00

- (i) Prepare a profit and loss account for Mr. Ndama’s farm. **(15mks)**  
 (ii) Calculate the percentage profit or loss of Mr. Ndama’s farm. **(3mks)**
- 21.** (a) Explain the management practice a farmer may carry out to improve the quality and quantity of Various crop yields. **(12mks)**  
 (b) describe how various practices carried out in the field help to control crop pests. **(8mks)**

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 6 PAPER 2

443/2

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

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A	30	
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## SECTION A (30MKS)

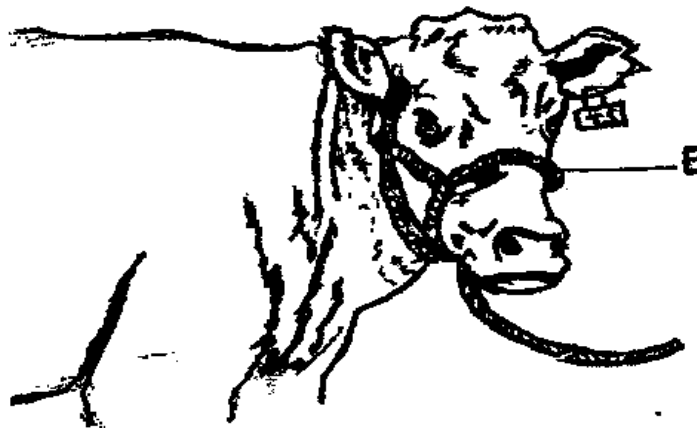
### Answer ALL the Questions in this section

- 1) Name **four** light breeds of poultry. (2mks)
- 2) State **four** conditions necessary for egg incubation (2mks)
- 3) Give **four** disadvantages of inbreeding. (2mks)
- 4) Give **four** factors that a farmer may consider while carrying out culling in livestock production. (2mks)
- 5) State **four** predisposing factors of pneumonia in lambs (2mks)
- 6) Name **four** tools used in dehorning. (2mks)
- 7) Give **four** general methods of controlling livestock diseases. (2mks)
- 8) State **four** features of clean milk. (2mks)
- 9) Name **four** factors to consider while choosing construction materials in the farm. (2mks)
- 10) State **four** control measures of liver fluke (2mks)
- 11) State **four** factors that influence the pulse rate of an animal. (2mks)
- 12) Distinguish between the Saanen and Jamnapari breeds of goats. (2mks)
- 13) Give **four** types of beehives. (2mks)
- 14) State **two** ways of caponisation in poultry. (2mks)
- 15) Name **four** disadvantages of battery cage system. (2mks)

## SECTION B (20 MARKS)

### Answer All The Questions In This Section

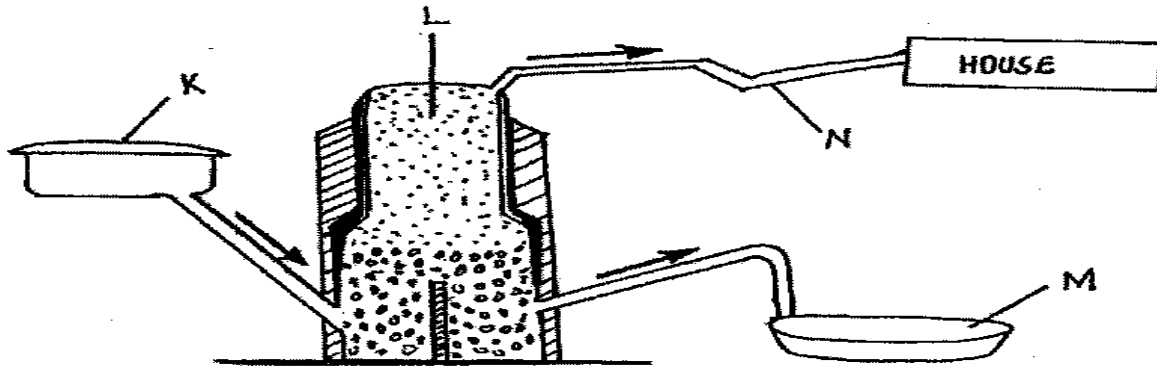
- 16) Study the diagram of a cow below and answer the subsequent questions.



- Identify the livestock equipment marked E above. (1mk)  
 State **two** uses of the equipment in 17 (i) above. (2mks)

Name the **two** types of identification marks applied on the animal above. (1mk)  
 Show with an arrow and mark with letter P where pye-grease acaricide should be applied on the animal. (1mk)

17) Study the illustration of a biogas digester plant and answer the questions that follow.

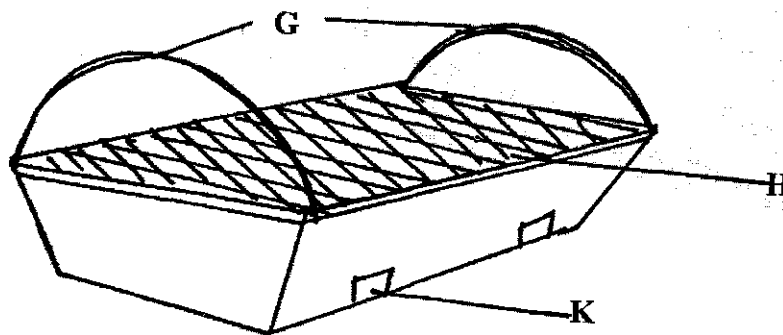


Name the major component of biogas that is trapped in part L above. (1mk)  
 Give the name of the material deposited in part labeled M and its use. (1mk)

- a. name \_\_\_\_\_
- b. Use \_\_\_\_\_

What is the component of K in the biogas production? (1mk)  
 Give **three** disadvantages of biogas as a source of farm power. (3mks)

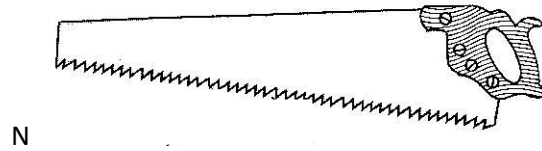
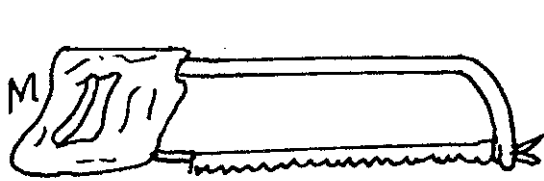
18) Below is a diagram illustrating a beehive? Study carefully an answer the questions that follow.



Name the type of beehive shown (1mk)  
 Name the parts labeled H and K (1mk)  
 Give **two** importance of part G (2mks)  
 Give **two** tools used for detaching honey combs during honey harvesting. (2mks)

19) Study the diagram below f farm tools and equipment and answer questions that follow.





- Identify tool M and N (1mk)  
 State **one** functional difference between M and N (1mk)  
 State **two** maintenance practices of tool M. (1mk)

**SECTION C (40 MARKS)**

**Answer Any Two Questions From This Section**

- 20) (a) State **four** reasons for breeding cattle. (4mks)  
 Explain **four** routine management practices carried out during rearing of dairy calves. (8mks)  
 (c) State **five** reasons for swarming in bees. (5mks)  
 List **three** ways of controlling liver flukes in sheep. (3mks)
- 21) (a) Discuss the disease Trypanosomiasis under the following sub headings.  
 Causal organism (1mk)  
 Animals attacked (1mk)  
 Mode of transmission (1mk)  
 Symptoms (2mks)  
 Control (2mks)
- (b) Explain **six** measures used in controlling diseases in livestock. (12mks)
- 22) (a) Explain the management of growers in deep litter system until the time of laying (1mks)  
 (b) State and explain **eight** materials and equipment used during milking. (8mks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 7 PAPER 1

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

- Write your name & Index Number in the spaces provided.
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### FOR EXAMINERS USE ONLY

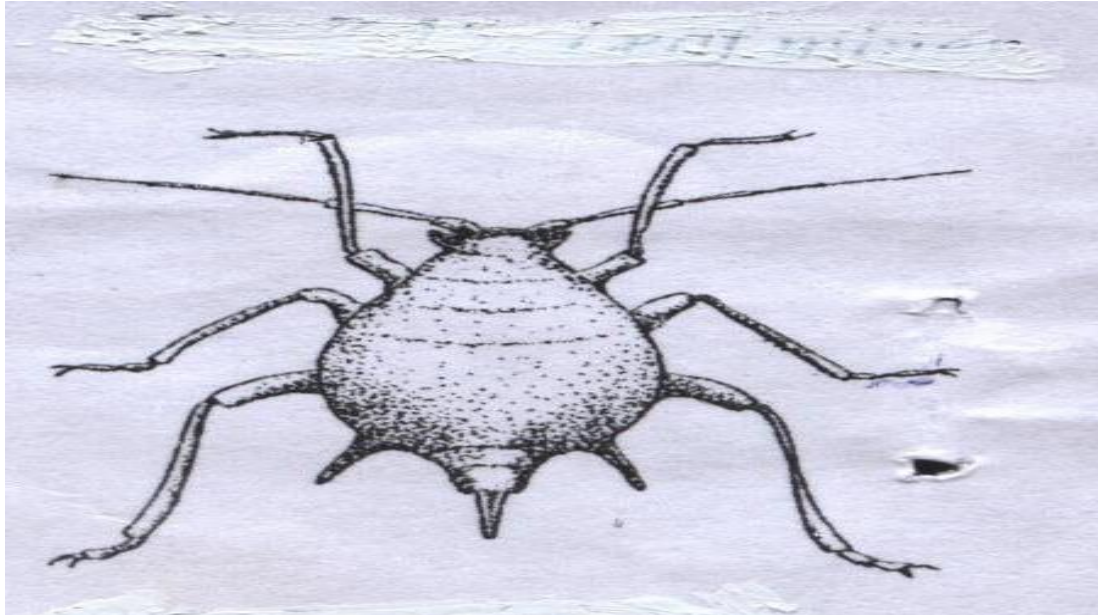
SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

**SECTION A (30MKS)****Answer ALL the Questions in this section**

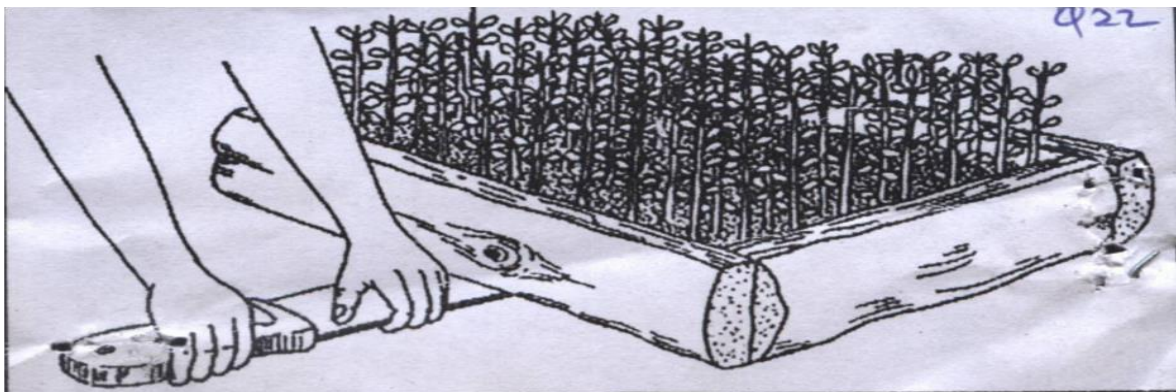
1. Name any four biotic factors influencing agricultural production and distribution. (2mks)
  2. State any two branches of horticulture. (1mk)
  3. State two properties of soil that are influenced by its texture. (1mk)
  4. Name any two tillage practices that ensure uniform germination of seeds. (1mk)
  5. State four benefits of minimum tillage in crop production. (2mks)
  6. Name two indicators of well decomposed compost manure. (2mks)
  7. Calculate the amount of  $K_2O$  contained in 400kg of a compound fertilizer 25:10:5. (2mks)
  8. Name two macro elements whose deficiency in crops causes chlorosis. (1mk)
  9. State two benefits a farmer would get by having the correct plant population in the production of annual crops. (1mk)
  10. State two precautions when handling inoculated seeds. (2mks)
  11. State two importance of tissue culture in crop production. (1mk)
  12. Give two activities carried out during hardening off of tomatoes seedlings. (1mk)
  13. Name four management practices carried out on a banana stool. (2mks)
  14. State two ways in which crop rotation controls crop diseases. (1mk)
  15. Give two reason of raising kale seedlings in the nursery before transplanting. (2mks)
  16. Name four factors that are considered when classifying crop pests. (2mks)
  17. List two non-pathogenic causes of crop disease. (2mks)
  18. Give two benefits of top dressing in the management of grass pastures. (1mk)
- State four ways of improving labour productivity in a farm (2mks)
19. State the use of each of the following financial documents. (1mk)
    - i) Cash receipt
    - ii) Delivery note

**SECTION B (20MKS)**

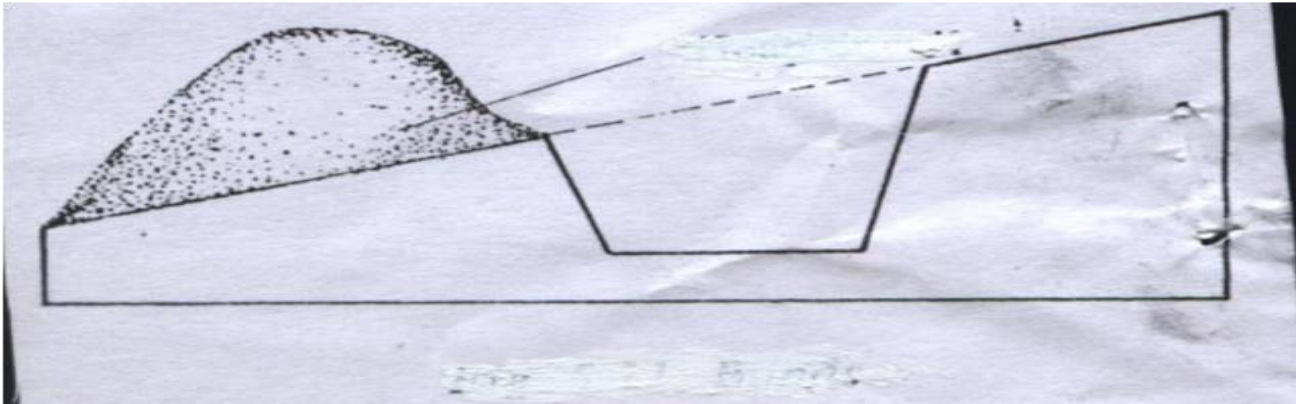
21. Use the illustration given below to answer the questions that follow.



- a) Identify the pest given. (1mk)
  - b) State the economic importance of the pest. (1mk)
  - c) Name at least **two** crops attacked by the pest. (1mk)
  - d) State **two** control measures of the pest. (1mk)
22. The diagram below shows a nursery management practice carried out on a tree seedling. Study it and answer the questions that follow.



- i) Identify the management practice. ( ½ mk)
  - ii) Give **two** reasons for carrying out the practice you have named in 22(i) above (2mks)
  - iii) State **three** reasons for grafting old trees as a management practice. (1 ½ mks)
23. The diagram below shows a structure used in soil and water conservation. Study it and answer the questions that follow.



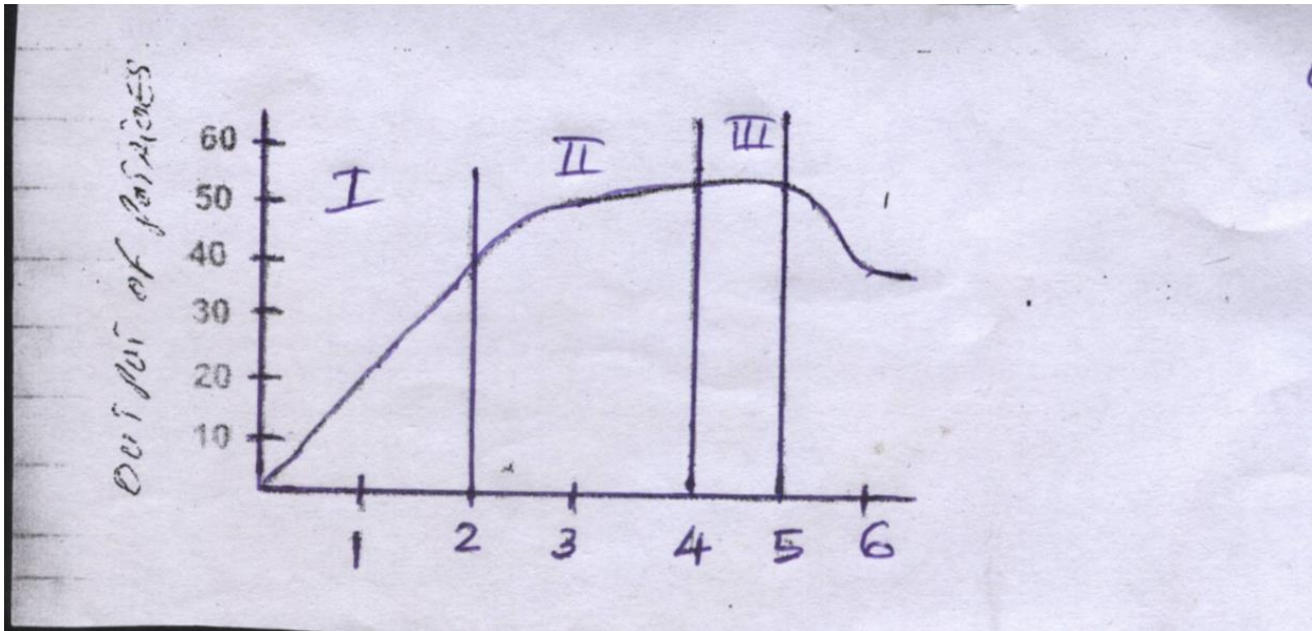
- a)i) Identify the structure. ( ½ mk)
- ii) State **two** ways by which the feature conserves soil and water. **(1mk)**
- b) Outline the procedure followed in the preparation of the structure named in (a) (i) above. (1 ½ mks)

24. Carefully study the diagram below then answer the respective questions.



- a) Identify cultivar F, G, and H (3mks)
- F-
- G-
- H-
- b) What advantage does cultivar H have over cultivar F. (1mk)

25 .Below is a graphical representation of the law of diminishing returns.



- a) Explain what happens in each of the zones marked I, II, III in relation to output (1 ½ mks)
- b) Which of the three is a rational zone of production? (½ mk)
- c) State any **two** precautions a potato farmer would take to minimise risk in the production of potatoes. (2mks)

**SECTION C (40MKS)**

- 26a) Explain **five** methods of drainage. (5mks)
- Explain **five** factors to consider when choosing maize varieties for different ecological zones in Kenya. (5mks)
- b) Outline **ten** effects of wind on agricultural production. (10mks)
- 27a) Explain **six** importance of farm budgeting. (6mks)
- b) Outline **six** importances of trees and shrubs. DD (6mks)
- c) Explain **eight** roles of agricultural co-operative societies in Kenya. (8mks)
- 28a) Describe the procedure of silage making. (10mks)
- b) Give **four** reasons why green manure is not commonly used. (4mks)
- c) State **six** advantages of land consolidation. (6mks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 7 PAPER 2

443/2

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

- Write your name & Index Number in the spaces provided.
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SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
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## SECTION A (30MKS)

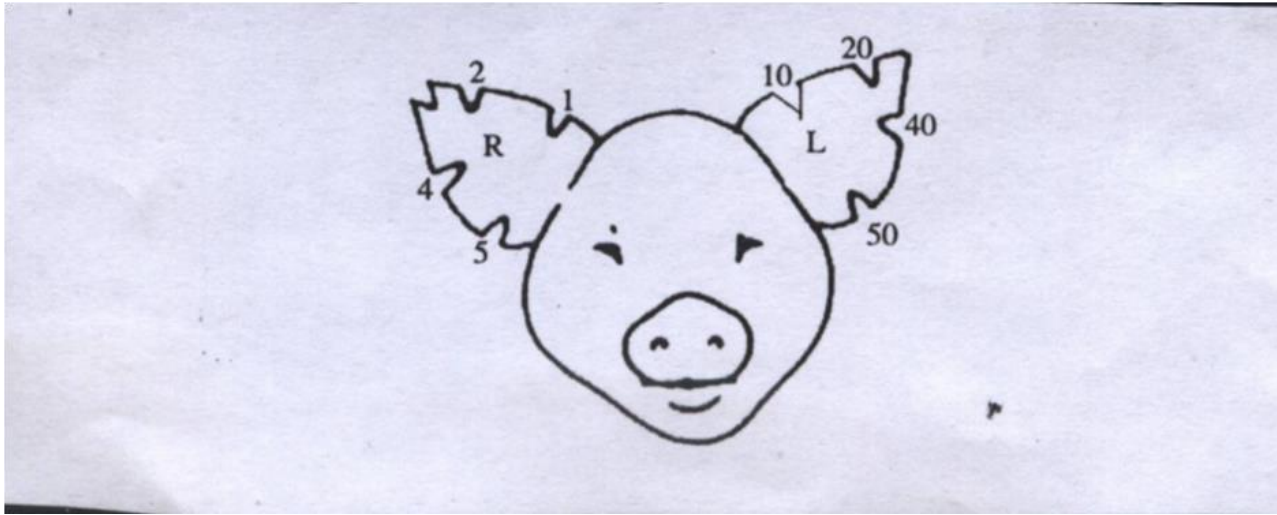
### Answer ALL the Questions in this section

1. Name **two** tools used for cutting galvanized iron pipes. (1mk)
2. State the difference between a tenon and a cross-cut saw. (1mk)
3. State the difference between the large white and landrace breeds of pigs. (2mks)
4. Define the following terms as used in poultry production. (1mk)
  - i) Capon
  - ii) Hen
5. State **two** ways by which proper feeding contribute to disease control in livestock (1mk)
6. What is prophylactic treatment in animal production? (1mk)
7. State **two** predisposing factors of diseases inside the animals body. (2mks)
8. Give **two** harmful effects of fleas in poultry. (1mk)
9. Give **two** control measures of liverflukes in livestock. (2mks)
10. Give **two** importance of additives in livestock feed. (1mk)
11. State **two** uses of production ration in livestock. (1mk)
12. State **one** functional difference between the rumen and abomasums in ruminant digestion. (1mk)
13. State **four** desirable characteristics to be considered when selecting heifer for milk production. (2mks)
14. Give **two** advantages of embryo transplants technology. (2mks)
15. State **two** advantages of using the seine nets over the hook and line. (1mk)
16. State **two** importance of tooth clipping in pigs. (2mks)
17. State **four** reasons considered in culling dairy cattle. (2mks)
18. State **two** advantages of using spray race over the plunge dip. (1mk)
19. Give **four** structural requirements of a calf pen (2mks)
20. Name **two** common vectors of protozoan diseases in livestock. (1mk)

## SECTION B (20MKS)

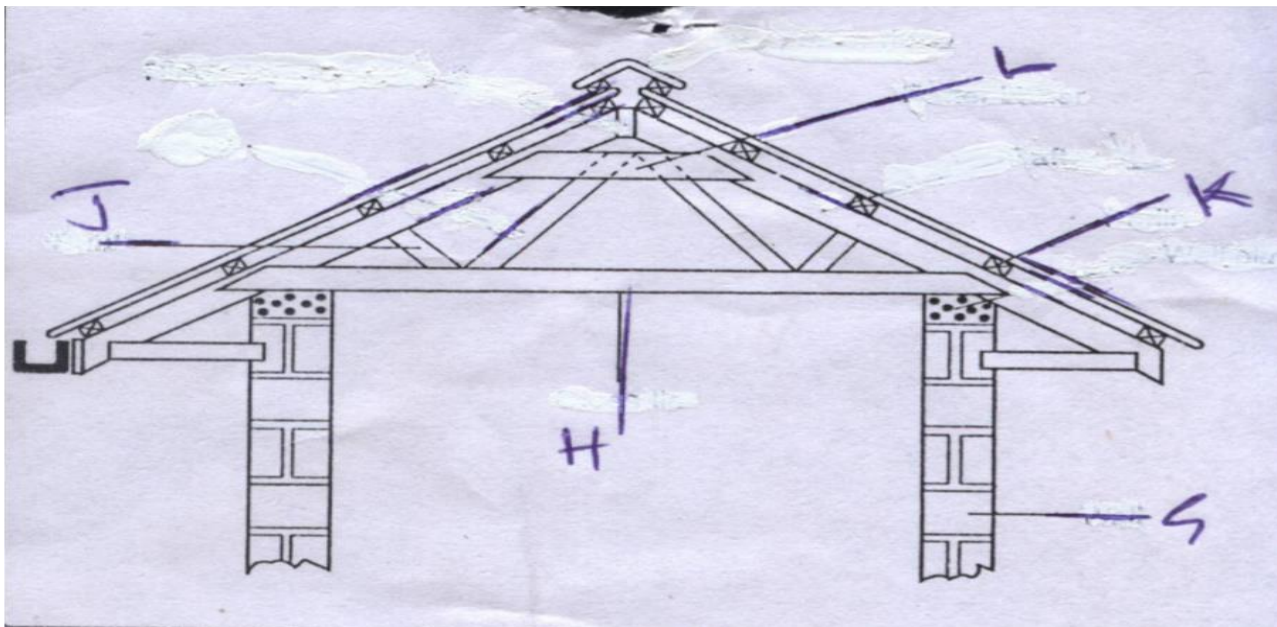
21. State **one** use of the following parts in a tractor engine. (2mks)
  - i) Mortar
  - ii) Piston
22. The diagram below shows a certain practice carried out in pigs





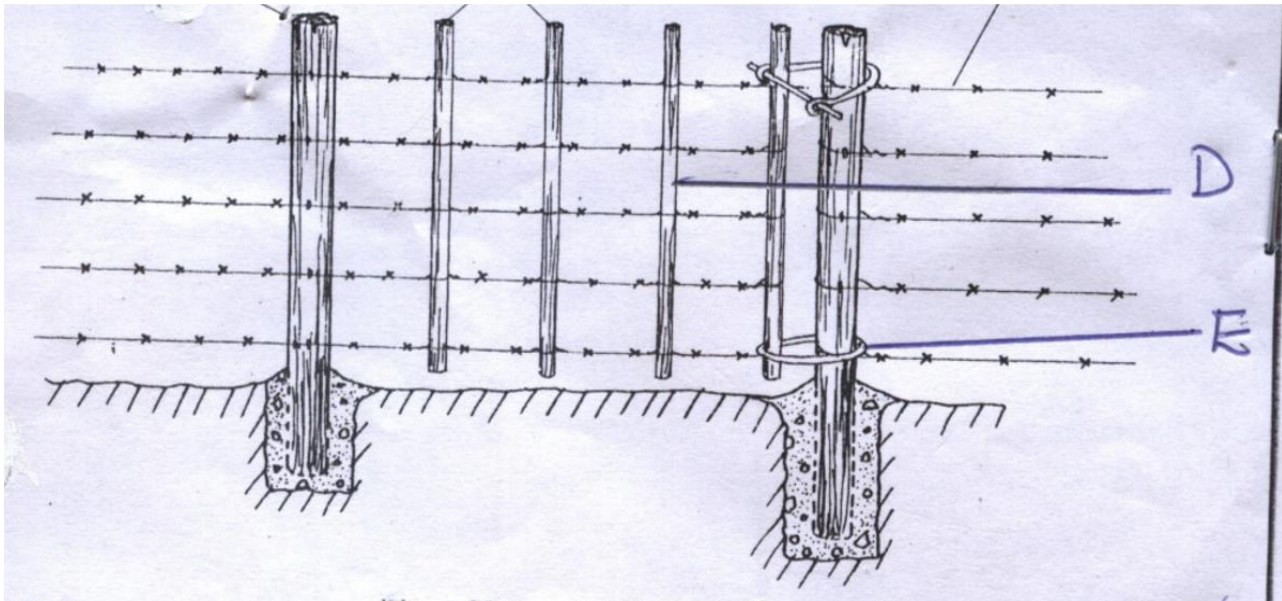
- a) Identify the practice illustrated (1mk)
- b) Draw another illustration depicting piglet no.37 (2mks)
- c) State two other methods of identification in piglets.

23. The diagram below represents parts of a roof. Study the diagram and answer questions that follow.



- a) Name the parts labelled G, H, J and K, (2mks)  
 G    H  
 J  
 K
- b) State two functions of the roof illustrated above. (1mk)
- c) Give the collective term for the parts labelled H, J and L (1mk)

24. The diagram below shows a type of a farm gate. Study the diagram and answer the questions that follow.

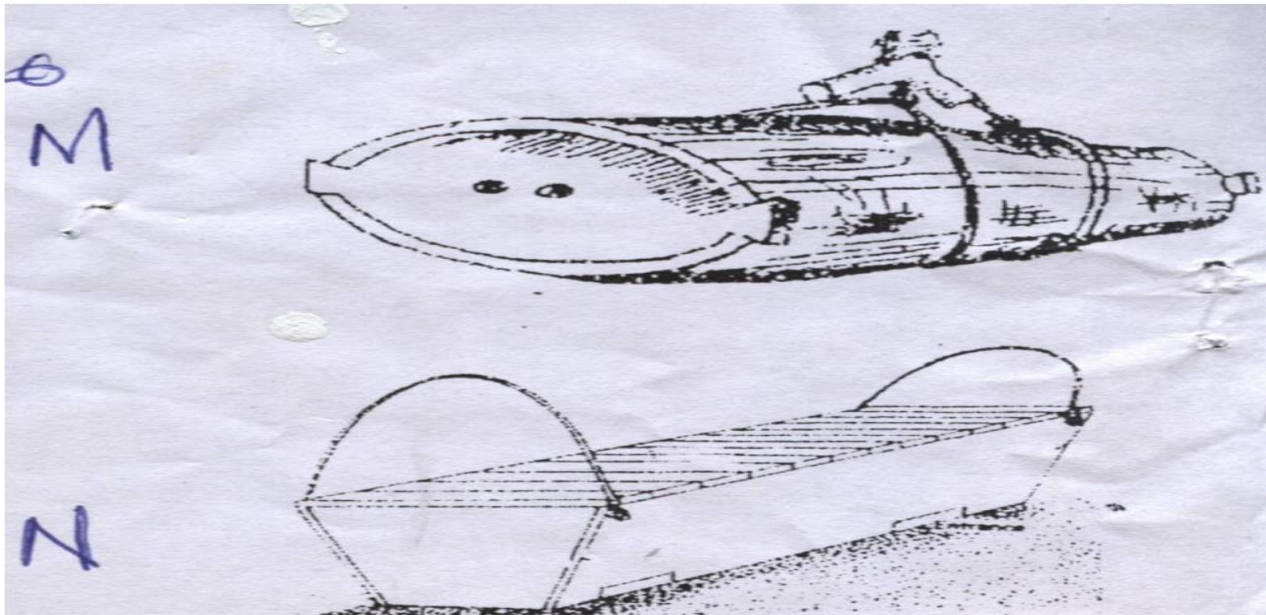


- a) Identify the type of gate shown. (1mk)
  - b) Name parts labelled **D** and **E**. (1mk)
    - i) State **one** function of the part labeled E. (1mk)
    - ii) State **two** functions of the gate illustrated above. (1mk)
25. The diagram below illustrates a calf rearing practice.



- a) Identify the practice illustrated above. ( ½ mk)
- b) i) Describe the procedure followed in the feeding practice named in (a) above. (2 ½ mks)
- ii) Give **two** precautions taken while using the rearing practice stated in (a) above. (1mk)

26. The diagram below are types of beehives. Use them to answer the questions that follow.



- a) Give the identity of each hive. (1mk)
- b) State **two** advantages of hive N over M. (2mks)
- c) Give **two** methods of stocking the hive N. (1mk)

### SECTION C

- 27a) Compare the use of ox-drawn mould board plough with that of a tractor drawn mould board plough. (9mks)
- b) Describe the maintenance practices that should be carried out on oxdrawn mould board plough. (2mks)
- c) What are the advantages and disadvantages of using tractor hire services instead of owning and using your own. (5mk)
  
- 28a) Describe the management of layers in a deep litter system starting from the point of lay (10mks)
- b) Discuss milk fever (parturient paresis) under the following sub-headings
  - i) Predisposing factors. (2mks) ii) Symptoms (5mks) iii) Control and treatment (3mks)
  
- 29a) Describe the use of various hand tools required for the construction of a wooden fence. (5mks)
- b) Outline the procedure of castrating a bull using a burdizzo. (7mks)
- c) Describe eight reasons why bees may abscond from a beehive. (8mks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 8 PAPER 1

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

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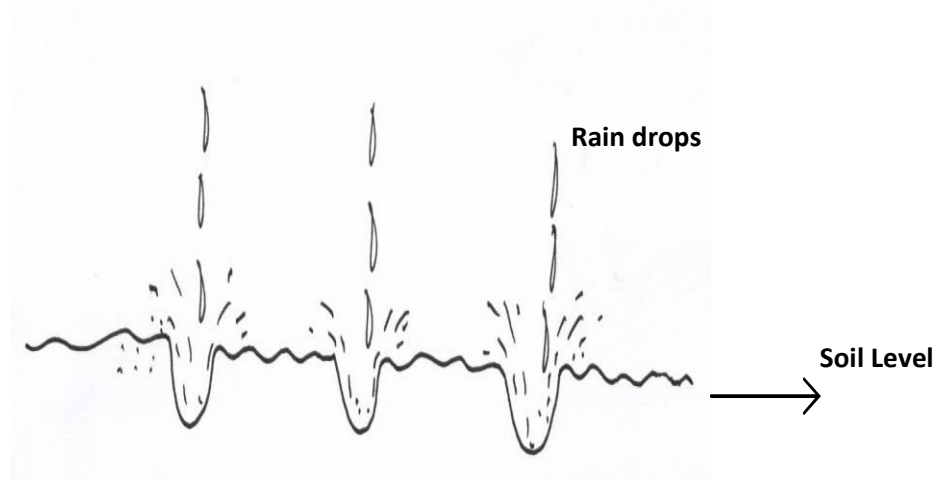
**SECTION A (30MKS)****Answer ALL the Questions in this section**

1. State **two** factors that determine the colour of soil during soil formation. (1mark)
2. State **four** harmful effects of crop pests in maize production. (2mks)
3. Give **two** properties of phosphatic fertilizers. (1mk)
4. List **three** physical agents of chemical weathering. (1½mks)
5. Mention **four** factors that influence the choice of implement to use in primary cultivation. (2mks)
6. State **four** reasons of cutting back in pyrethrum. (2mks)
7. State **two** methods of table formation in tea production (1mk)
8. Name the chemical used to achieve the following during water treatment.
  - (a) Coagulation of solid particles. (1mk)
  - (b) Softening of water (1mk)
  - (c) Killing pathogens (1mk)
9. List **three** types of product-product relationship in Agricultural economics. (1½mks)
10. Distinguish between contact and systemic herbicides in weed control. (1mk)
11. List **four** biotic factors influencing Agriculture. (2mks)
12. State **two** methods of harvesting Agro forestry trees. (1mk)
13. Give **four** advantages of title deed to a farmer. (2mks)
14. State **one** way in which inorganic mulch helps to conserve soil water. (1mk)
15. Give the meaning of the following terms as used in crop production.
  - (a) Closed season (1mk)
  - (b) Earthing up (1mk)
16. State **four** benefits of soil organisms in crop growth. (2mks)
17. State **four** ways in which seeds can be treated before planting. (2mks)
18. Give **two** ways of forage utilization. (1mk)
19. List **four** financial documents. (2mks)

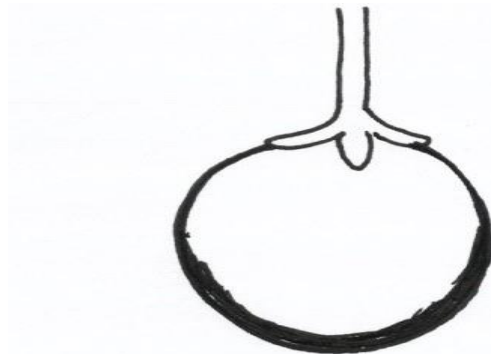
**SECTION B (20marks)**

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

20. The diagram below illustrates a type of soil erosion. Study it carefully and answer the questions that follow.



- (a) Identify the type of erosion illustrated above. **(1mk)**
- (b) State **two** measures that could be used to control the type of soil erosion illustrated above. **(2mks)**
21. The diagram below illustrates a crop disease. Study it carefully and answer the questions that follow.

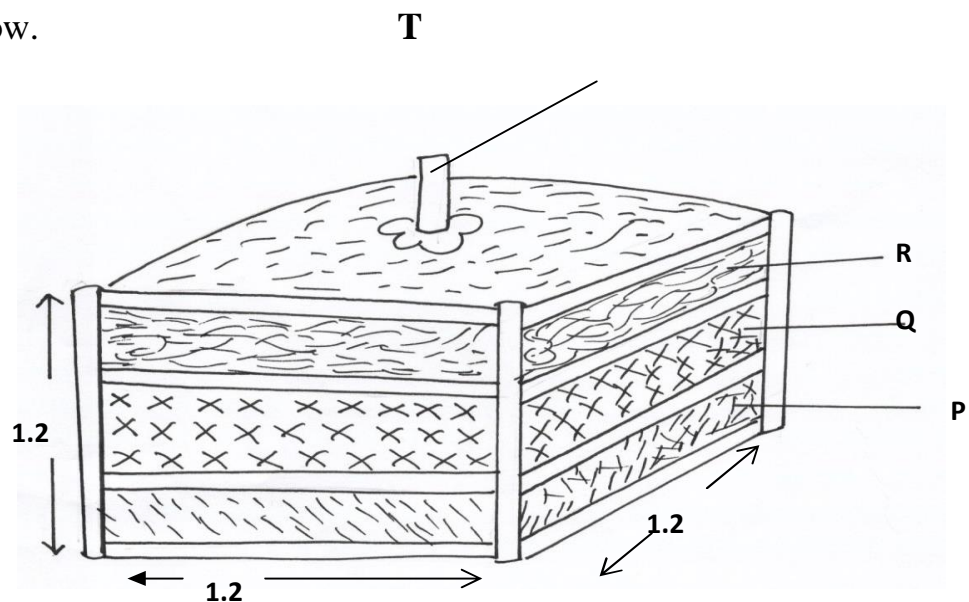


- (a) Identify the disease illustrated above. **(1mk)**
- (b) State **three** control measures for the disease illustrated above. **(3mks)**
22. The table below illustrates the yield of maize in 90kg bags in response to application of different quantities of planting fertilizers. Study it carefully and answer the questions that follow.

Fertilizer input in 50kg bags	Maize output in 90kg bags	Average Product (AP)	Marginal Product (MP)
0	6		
1	10	10.0	10.0
2	24	12.0	—
3	31	—	7.0
4	36	—	5.0
5	40	8.0	—
6	43	—	3.0
7	43	—	0
8	40	—	—

- (a) Complete the table by filling in the blank spaces. (4marks)
- (b) Suggest the best stage of production in relation to the fertilizer application. (1mk)

23. The diagram below illustrates the preparation of compost manure. Study it carefully and answer the questions that follow.



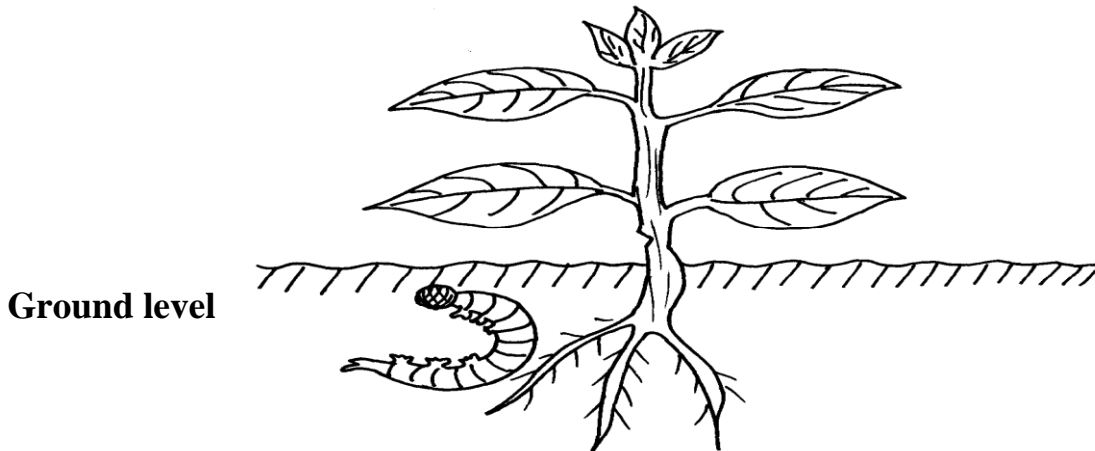
- (a) Identify the layers labeled P, Q and R above.

(b) State **one** use of each of the layers labeled P and T.

**P**..... **(1mk)**

**T**..... **(1mk)**

**24.** Below is an illustration showing a cabbage seedling attacked by a pest. Study it carefully and answer the questions that follow.



- (a) Identify the pest illustrated above. **(1mk)**
- (b) State how the pest causes damage to the crop. **(1mk)**
- (c) Give **one** method of controlling the pest illustrated above. **(1mk)**

**SECTION C (40 marks)**

**Answer any two questions in the spaces**

- 25.** (a) Explain the sources of capital to a farmer. **(10mks)**  
 (b) Explain the marketing functions involved in the marketing of maize. **(10mks)**
- 26.** (a) Describe the preparation of silage in a farm. **(10mks)**  
 (b) Explain the methods of establishing pastures. **(3mks)**  
 (c) Describe the management of pastures. **(3mks)**  
 (d) Explain methods of draining water in water logged/marshy areas. **(4mks)**
- 27.** (a) Describe the uses of water on a farm. **(8mks)**  
 (b) Explain reasons for pruning in crops. **(7mks)**  
 (c) Describe the procedure of sowing vegetable seeds in a nursery. **(5mks)**

**KCSE FINAL PREDICTION**



# AGRICULTURE

## TRIAL 8 PAPER 2

443/2

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

- Write your name & Index Number in the spaces provided.
- Sign and write the date of Examination in the spaces provided above.
- This paper consists of three sections A,B and C
- Answer **ALL** the questions I Section A and B
- Answer two question from Section C.

### FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

### SECTION A (30MKS)

Answer ALL the Questions in this section

1. State **Two** disadvantages of fencing using barbed wire. (1mk)
2. Write down **Four** factors considered when computing a ration for livestock on the farm. (2mks)
3. State **Four** symptoms that you would observe in an animal that has just died of Anthrax. (2mks)
4. List down **Three** types of harrows which are commonly used in Kenya. ½ mks)
5. State **Two** channels through which farmers can market their beef cattle. (1mk)
6. State **Four** characteristics that make it possible for a carried to survive in arid and semi-arid areas. (2mks)
7. Give **Four** factors considered when grading eggs for marketing. (2mks)
8. Name **Four** predisposing factors of pneumonia in livestock. (2mks)
9. Give **Four** practices used to improve milk production in a herd of indigenous dairy cattle. (2mks)
10. State **Four** points to look for when identifying non-layers in poultry production.(2mks)
11. Give **Two** ways by which proper nutrition helps to control livestock diseases. (1mk)
12. Give **Four** ways of stimulating milk let down in a dairy cow. (2mks)
13. State **Four** harmful effects of internal parasites on livestock. (2mks)
14. State **Four** ways through which tractor power could be utilized. (2mks)
15. Write down **Four** maintenance practices that should be carried out on a cattle dip. (2mks)
16. A part from concrete what other **Three** materials would be required in the construction of the floor of a milking shed. 1½ mks)
17. State **Five** factors to consider when siting a bee-hive in a far.(1 ½mk)

## SECTION B (20 MARKS)

Answer All questions in this section

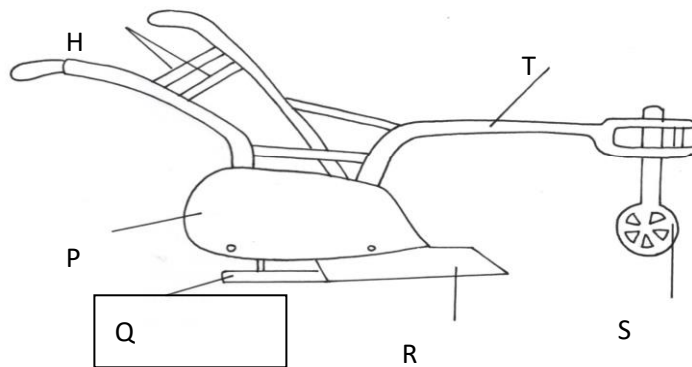
18. Below is an illustration of an activity carried out to detect an infection of the udder before milking. Study it carefully and answer the questions that follow.



- a) Identify the equipment labeled **U** in the illustration above. (1mk)
- b) State **Two** changes in milk that would be observed if the udder illustrated above is infected by a disease detected by equipment identified in (a) above. (2mks)

19. A farmer wanted to prepare a balanced ration for growing chicken containing 16% DCP. He was advised to use wheat and sunflower. Wheat contains 10% DCP while sunflower contains 34% DCP. Using pearsons square method, calculate the amount of each of the feedstaff the farmer would need in order to prepare 1000 kgs of the chicken ration. (Show your calculations clearly). 5mks)

20. Below is an illustration of a farm implement, study it carefully and answer the questions that follow.

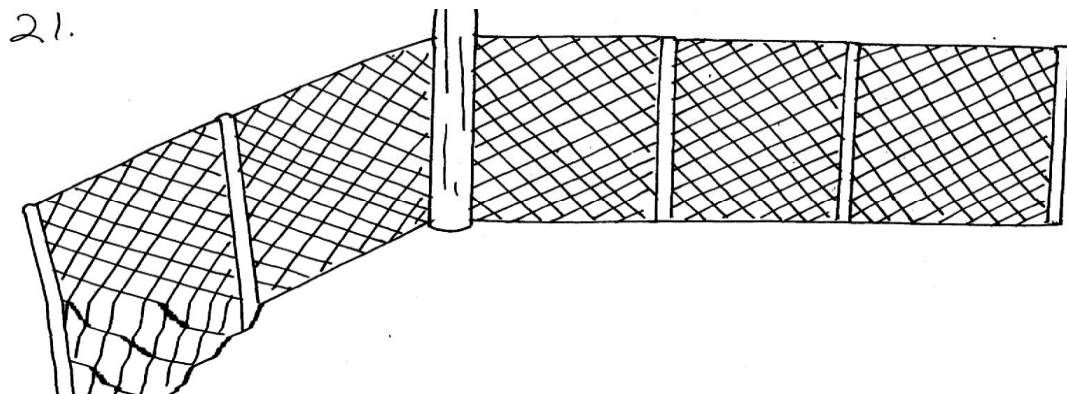


- a) Identify the implement illustrated above. 1mk)
- b) State **One** basic function of the implement named in (a) above. 1mk)
- c) What maintenance practice should be carried out on parts labeled **S** and **Q**

S ..... (1mk)

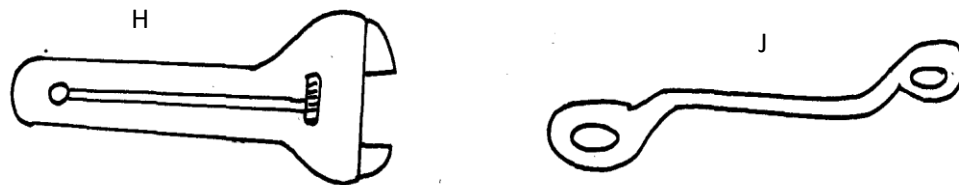
Q ..... (1mk)

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



- (a) Identify the type of wire fence illustrated above. 1mk
- (b) On the illustration show by drawing how the corner posts should be reinforced. (1mk)
- (c) Give a reason for using droppers in fencing. 1mk
- (d) Apart from wire fence name **two** other fences constructed on animal farms. (2mks)

22. Below are illustrations of workshop tools; labeled **H** and **J**



- (a) Identify the tools labeled **H** and **J** above.
- H** ..... (1mk)
- J**..... (1mk)
- (b) What functional **advantage** does tool **H** have over tool **J**? (1mk)

**SECTION C (40 MARKS)**

Answer any Two questions in this section

23. Discuss Foot Rot disease under the following sub headings.

- (i) Causal Organism. (1mk)
- (ii) Predisposing factors. (3mks)
- (iii) Symptoms of attack. (9mks)
- (iv) Control Measures. (7 mks)

24. Differentiate between **diesel** and **petrol** engines. 20mks)

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

(b) Outline **factors** to consider when selecting **livestock** for breeding. (10mks)

# **KCSE FINAL PREDICTION**

# **AGRICULTURE**

## **TRIAL 9 PAPER 1**

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### **INSTRUCTIONS TO CANDIDATES.**

- Write your name & Index Number in the spaces provided.*
- Sign and write the date of Examination in the spaces provided above.*
- This paper consists of three sections A,B and C*
- Answer ALL the questions I Section A and B*
- Answer two question from Section C.*

### **FOR EXAMINERS USE ONLY**

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

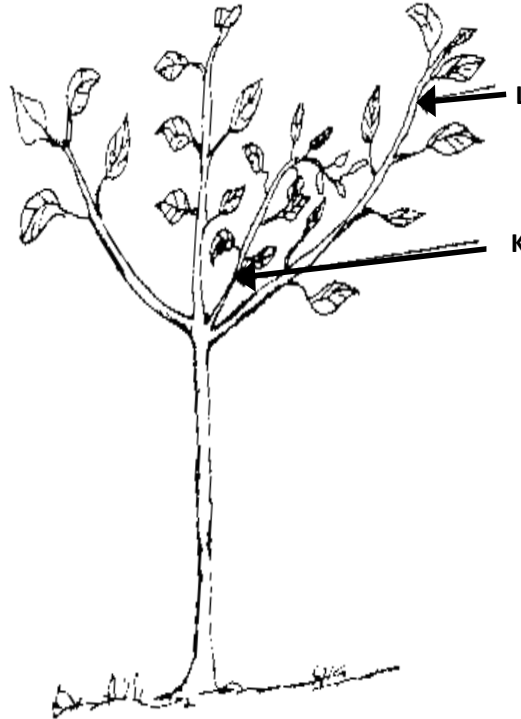
**SECTION A (30MKS)****Answer ALL the Questions in this section**

1. Give **three** ways in which nitrogen is removed from the atmosphere. (1½Marks)
2. Give **three** conditions that necessitate clearing of land. (1½Marks)
3. State **two** ways in which agriculture contribute to industrial development in a country. (1 Marks)
4. State **four** factors considered when choosing seed rate. (2 Marks)
5. Define the term land reform. (1 Mark)
6. State **four** factors that affect the selectivity and effectiveness of herbicides. (2 Marks)
7. How can a farmer reduce losses in stored grain? State **four** ways. (2 Marks)
8. Outline the procedure followed when sampling soil. (2 Marks)
9. Give **four** dangers of having a hand-pan layer within a soil profile. (2 Marks)
10. Give **four** advantages of staking tomatoes. (2 Marks)
11. a) Name **four** diseases caused to man by drinking untreated water. (2 Marks)  
State the functions of the following chemicals used in water treatment. (2 Marks)
  - i) Chlorine
  - ii) Aluminium Sulphate (Allum) (1 Mark)
12. Give **four** reasons for keeping health records. (2 Marks)
13. State **three** qualities of a good silage. (1½Marks)
14. Name the chemicals used in control of the following crop pests. (1½Marks)
  - i. Insects
  - ii. Nematodes
  - iii. Mites
15. State **four** factors that influence mass wasting. (2 Marks)
16. Differentiate between gross domestic product (GDP) and gross national product (GNP). (2 Marks)
17. State **two** varieties of bulbed onion. (1 Marks)

**SECTION B (20 Marks)**

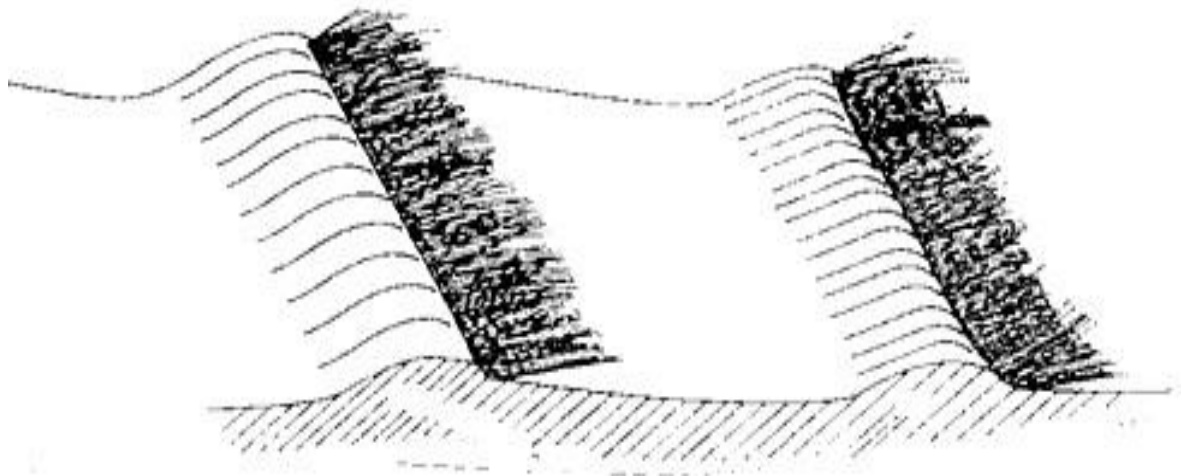
**Answer all questions in this section in the spaces provided.**

18. a) Below is a diagram of a young orange tree.



- i) Which **one** of the branches labeled K and L should be pruned? (½ Mark)
  - ii) Give **three** reasons for your answer in (a) (i) above. (3 Marks)
  - iii) Name the correct tool for pruning the branch. (½ Marks)
- Name any **two** crops propagated through suckers. (1 Mark)

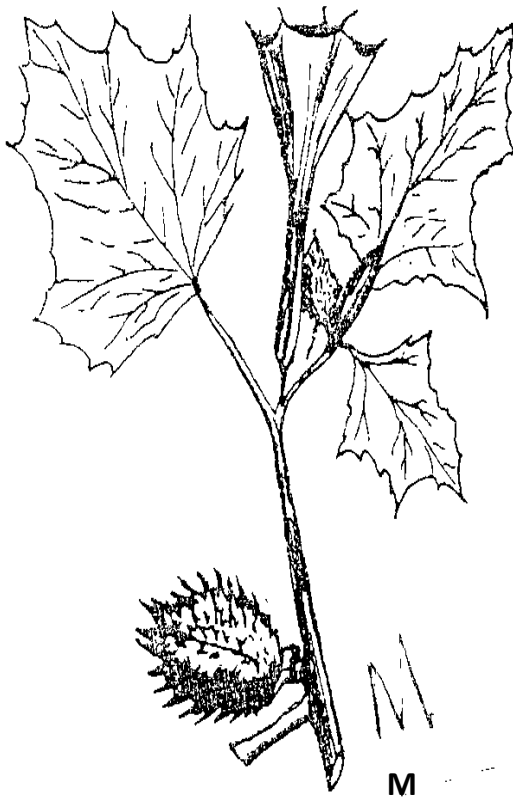
19. The diagram below shows a method of soil and water conservation method. Study it and answer the questions that follow.





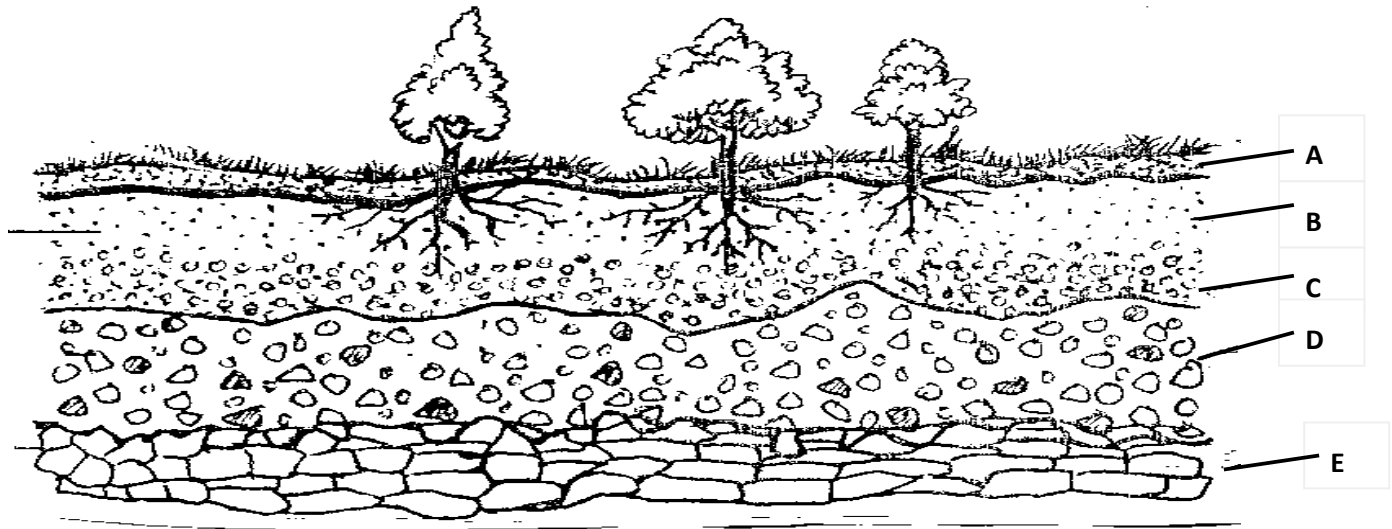
- a) Identify the method. (½ Marks)
- b) List **two** methods of establishing the structure. (2 Marks)
- c) Give **two** factors that necessitate the construction of the structure. (2 Marks)
- d) Give **four** other physical structures that can be used for the same purpose as the structure. (2 Marks)

20. The illustration below are crop weeds labeled L and M. Study it an answer the questions that follow.



- a) Identify the weeds labeled L and M. (1 Mark)
- b) Give **one** economic importance of the weed labelled L. (1 Mark)
- c) Classify the weed labeled L according to its life span. (½ Mark)
- d) Apart from competing for moisture, nutrient and light what other reason is it necessary to control the weed labelled M in a field of pastures. (1 Marks)

21. The diagram below illustrates the earth’s surface downward. Study it and answer the questions that follow.



- a) Identify the structure illustrated. (½ Mark)
- b) Name the parts labelled A – E. (2½Marks)
- c) Outline **four** ways through which the above illustration influence crop production. (2 Marks)

**SECTION C (40 MARKS)**

*Answer any two questions in this section.*

- 22. Describe the production of tomatoes under the following sub headings.
  - i. Ecological requirements. (3 Marks)
  - ii. Nursery establishment and management (10 Marks)
  - iii. Field establishment (7 Marks)
  
- 23. Describe the methods of disease control in crops under the following headings.
  - i. Cultural methods (14 Marks)
  - ii. Chemical methods (6 Marks)
  
- 24. a) Outline **ten** uses of farm records. (10 Marks)
  - b) Explain **four** ways of improving labour productivity in a farming organization. (4 Marks)
  - c) Explain **six** advantages of land consolidation. (6 Marks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## TRIAL 9 PAPER 2

443/2

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

### INSTRUCTIONS TO CANDIDATES.

- a) Write your name & Index Number in the spaces provided.
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- d) Answer ALL the questions I Section A and B
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### FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE SCORE
A	30	
B	20	
C	40	

**SECTION A (30MKS)**

**Answer ALL the Questions in this section**

1. Give **four** cultural uses of livestock. (2Marks)
2. State **four** advantages of zero grazing. (2 Marks)
3. Outline **six** importance's of fences in a farm. (3 Marks)
4. State **four** functions of lubrication system in a tractor. (2 Marks)
5. Name **two** categories of additives in livestock nutrition. (1 Mark)
6. Give **four** methods of stocking a beehive. (2 Marks)
7. Give **four** reasons for maintenance of farm tools and equipment. (2 Marks)
8. Give **four** reasons for treating timber. (2 Marks)
9. Give **four** advantages of four-stroke cycle engine over two-stroke cycle engine. (2 Marks)
10. Name the intermediate host for liverfluke. (1 Mark)
11. Name **two** categories of parasites in livestock. (1 Mark)
12. State **two** methods of lambing in sheep management. (1 Mark)
13. State **four** features of clean milk production. (2 Marks)
14. What is caponisation? (1 Mark)
15. Give **four** factors considered when selecting eggs for marketing. (2 Marks)
16. Outline **four** predisposing factors to diseases. (2 Marks)
17. Give **four** effects of parasites on their hosts. (2 Marks)

**SECTION B.**

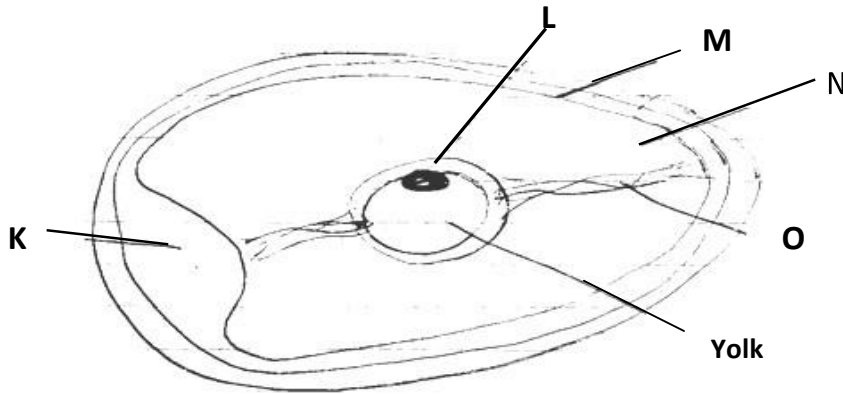
**Answer All Questions In This Section**

18. a) Define the term digestibility. (1 Mark)  
b) Using the pearson's square method compute a 1000kg ration with 20% DCP from maize containing 10% DCP and cotton seedcake containing 45% DCP. (Show your working). (5 Marks)

19. Study the illustration below carefully and answer the questions that follow.

- a) Name the type of beehive shown above. (1 Mark)
- b) Give names of other **two** types of beehives. (2 Marks)
- c) Name the parts labeled A, B, C and D. (4 Marks)

20. Study the diagram of an egg shown and answer the questions that follow.



- a) Name the parts labelled L, M and N. (3Marks)
- b) State the function of the parts labelled O and K. (2 Marks)
  - O .....
  - K. ....
- c) Give **two** reasons for egg candling. (2 Marks)

**SECTION C**

**Answer any two questions from this section.**

21. a) Discuss the disease trypanosomiasis under the following sub titles.

- i. Causal organism. (1 Mark)
- ii. Animal attacked. (1 Mark)
- iii. Mode of transmission (1 Mark)
- iv. Symptoms (10 Marks)
- v. Control. (3 Marks)

- b) Give **four** general management practices for control of parasites and diseases in livestock production. (4 Marks)

22. a) Discuss **ten** operational differences between a disk and mould board plough. (10 Marks)
- b) Give **ten** functional and structural differences between petrol and diesel engine. (10 Marks)
23. a) Explain **eight** factors considered when siting a farm structure on a farm. (10 Marks)
- b) Outline **six** desirable features of a good grain store. (6 Marks)
- c) Outline **six** maintenance practices carried out on saws. (6 Marks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## **TRIAL 10 PAPER 1**

443/1

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

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A	30	
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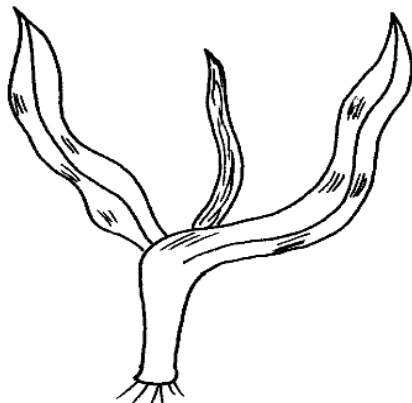
## SECTION A (30MKS)

### Answer ALL the Questions in this section

- 1) State **three** reasons why soil is important to crops. (1½mks)
- 2) List **two** aspects of light that influence crop growth. (1mk)
- 3) State **three** factors to be considered when choosing the type of irrigation to use. (1½mks)
- 4) Give **three** harmful effects of pests in crop production. 1½mks)
- 5) State **four** benefits of minimum tillage. (2mks)
- 6) State **four** practices that should be carried out to maintain grass pastures. (2mks)
- 7) Differentiate between grafting and budding. (1mk)
- 8) State **six** problems experienced by farmers in marketing agricultural produce. (3mks)
- 9) (a) List **four** types of terraces. (2mks)  
Give **four** methods that could be used to drain farm land. (2mks)
- 10) State **four** reasons for using certified seeds for planting. (2mks)
- 11) State **three** factors that would determine the amount of fertilizer to be top dressed to a crop in the field. (1½mks)
- 12) Give **three** effects of overstocking in pasture management. (1½mks)
- 13) State **four** benefits of budgeting to a farm manager. (2mks)
- 14) Give **three** reasons for staking tomatoes. (1½mks)
- 15) State **two** importance of tissue culture in crop propagation. (1mk)
- 16) What is increasing returns in a production function. (½mk)
- 17) State **three** roles of trees in soil and water conservation. (1½mks)
- 18) Name any **two** diseases that affect bean production in the field. (1mk)

## SECTION B (20 MARKS)

- 19) Below is a diagram of sorghum seedling that has been attacked by a certain pest.





- (i) Identify the pest. (1mk)  
 State the damage that has been caused by the pest named in (a) (i) above. (1mk)  
 Give **two** control measures that can be used to control the pest. (1mk)

**20)** (a) Explain the meaning of the following financial documents. (2mks)

(i) Purchase order

Invoice

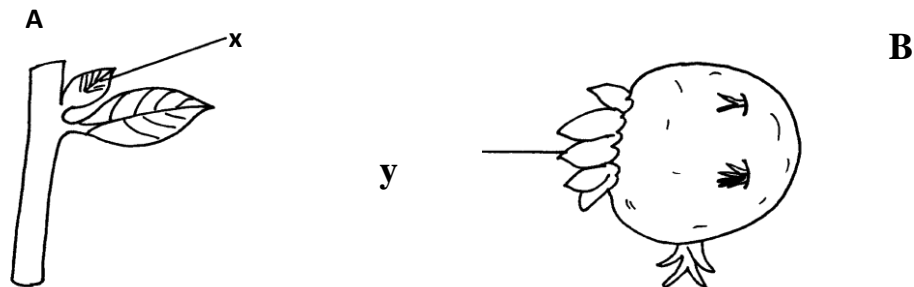
The following accounts information is from Mr. Wanyonyi’s farm for the year ending 31-12- 2021.

Opening valuation	Kshs. 6,000
Paid wages	Kshs. 5,000
Bought equipment worth	Kshs. 8,000
Bought pig feeds worth	Kshs. 4,000
Sold manure pigs worth	Kshs. 7,000
Bought drugs worth	Kshs. 3,200
Sold vegetables worth	Kshs. 3,000
Sold piglets worth	Kshs. 4,000
Closing valuation	Kshs. 4,000

(i) Using information above, prepare a profit and loss account for Mr. Wanyonyi’s farm. (3½mks)

(ii) From the calculations in (i) above, state whether Mr. Wanyonyi made a profit or a loss. (½mk)

**21)** The illustration below shows materials used in vegetative propagation, labeled **A** and **B**.



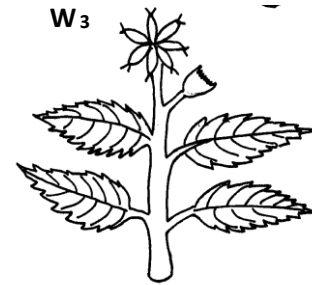
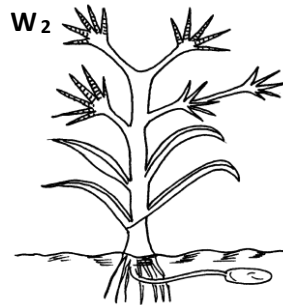
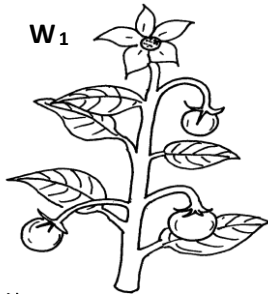
Identify materials **A** and **B**. (1mk)

Name the parts labeled **X** and **Y**. (1mk)

Name the preparation method used to get the vegetative material labeled **B**. (1mk)

State **three** disadvantages of vegetative propagation. (3mks)

22) Below are some common weeds. Use them to answer the questions that follow.



a. Identify **W<sub>1</sub>**, **W<sub>2</sub>**, and **W<sub>3</sub>**.

(1½mks)

b. State the problem associated with weeds **W<sub>1</sub>** and **W<sub>3</sub>**.

(2mks)

c. Give **three** disadvantages of using herbicides in weed control.

(1½mks)

### SECTION C (40 MARKS)

#### Answer any two questions in this section

23) (a) Explain how various practices carried out in the field help to control crop diseases. (12mks)

a. What are the advantages of grass-legume pasture over a pure grass pasture. (8mks)

24) Describe the establishment of kales under the following sub-headings:

a. Nursery preparation (4mks)

b. Establishment in the nursery (3mks)

c. Management of seedlings in the nursery. (5mks)

d. Transplanting of seedlings (8mks)

25) (a) Explain the functions of agricultural marketing boards. (10mks)

a. Explain the factors to consider when selecting farm enterprise. (10mks)

# KCSE FINAL PREDICTION

# AGRICULTURE

## **TRIAL 10 PAPER 2**

443/2

Time: 2 Hours

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

SCHOOL..... SIGN.....

DATE.....

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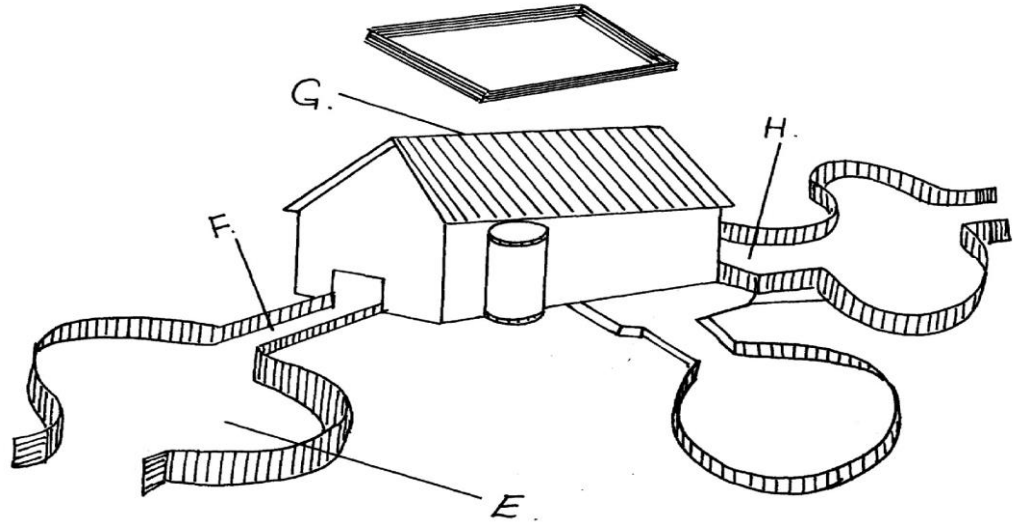
**SECTION A (30MKS)****Answer ALL the Questions in this section**

1. State the name of the tool used to widen screw holes for the screw heads to be below the surface. (½mks)
2. Name **two** tropical dairy goats. (1mk)
3. List **three** harmful effects of tsetse flies on livestock. (1½mks)
4. State **two** reasons for including roughage in the ration of non-ruminant. (1mk)
5. State **two** factors considered during tugging. (1mk)
6. Give **two** reasons why teeth clipping is important in pig management. (1mk)
7. State **two** reasons for seasoning timber before use. (1mk)
8. State any **four** ways of caring fish after harvesting. (2mks)
9. List **four** factors that may lead to egg eating in poultry. (2mks)
10. Mention **four** characteristics of quality whole milk. (2mks)
11. Name **three** channels through which beef cattle are marketed in Kenya. (1½mk)
12. State **four** limitations of wood fuel as a source of farm power. (2mks)
13. Mention **four** uses of harrows in the farm. (2mks)
14. Name **three** methods used in selection of livestock. (1½mks)
15. Mention **three** purposes of branding in cattle. (1½mks)
16. State **three** methods used in controlling lice in Kenya. (1½mks)
17. Give **four** signs of heat in a rabbit. (2mks)
18. List **four** advantages of practicing zero-grazing. (2mks)
19. Differentiate between crutching and ringing in livestock management (1mk)
20. Mention **four** areas on a hen that are frequently affected by fleas. (2mks)

**SECTION B (20 MARKS)**

**Answer all questions in this section**

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



(i) Name the parts labeled **E** and **F**. (1mk)

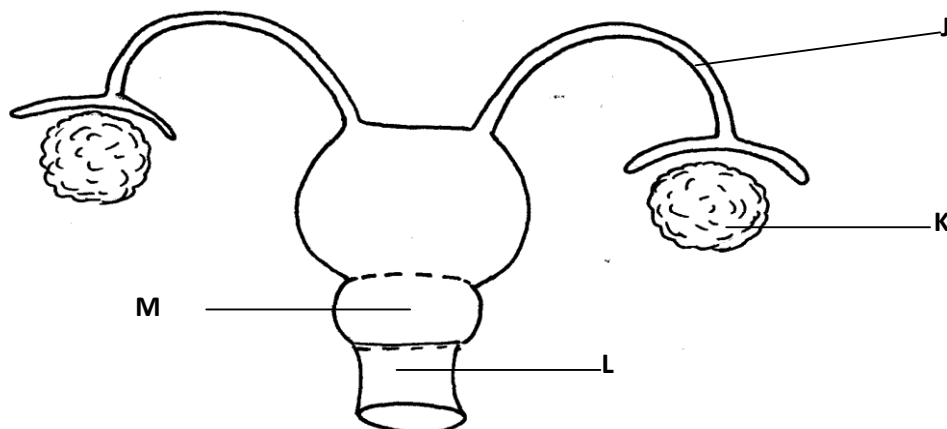
(ii) State **two** importance of part **G**. (2mks)

Give **two** reasons for holding animals for a short period in part **H** after dipping.

Outline three precautionary measures to be taken before dipping to ensure effective dipping.

(3mks)

22. The diagram below shows the reproductive system of a cow.



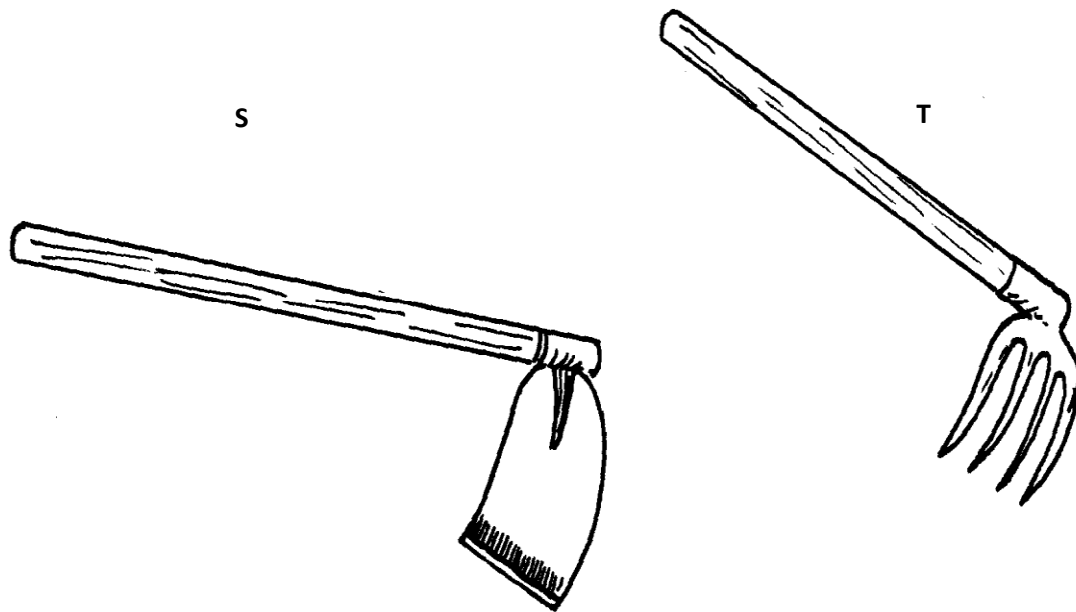
Study it carefully and answer the questions that follow.

(a) (i) Name the parts labeled **J, K, L** and **M**. (2mks)

(ii) State the function of each of the parts labeled **J** and **K**. (2mks)

(b) State **three** signs of parturition in cows. (3mks)

23. Study the diagrams **S** and **T** below and answer the questions that follow:



(a) Identify the tools **S** and **T**. (2mks)

(b) Under what conditions would you require to use tool **T** rather than tool **S**? (2mks)

(c) State **two** maintenance practices for the above tools. (1mk)

**SECTION C (40 MARKS)**

*Answer any two questions from this section*

24. (a) What are the advantages of farm mechanization? (6mks)  
(b) Describe the parts of the engine water cooling system. (12mks)  
(c) Name **two** main lubricants used in a tractor engine. (2mks)
25. (a) Differentiate between stress and vice in chicken. (2mks)  
(b) How would a farmer control stress in poultry production. (9mks)  
(c) Describe the procedure of processing wax from honey combs. (9mks)
26. (a) What is aquaculture? (2mks)  
(b) Describe the methods used in fish preservation. (2mks)  
(c) Discuss East Coast Fever under the following headings:
- (i) Causal organism (1mk)
  - (ii) Symptoms (4mks)
  - (iii) Control measures (3mks)

# **THE END**

**THIS IS THE 1<sup>st</sup> SERIES OF FINAL  
KCSE PREDICTION AGRICULTURE  
EXAMINATIONS TRIALS**



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- ✓ **CROSSCOUNTRY MOCKS**
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**IN THE EVENT YOU REALIZE PART/ALL OF  
THESE QUESTIONS WERE DIRECTLY OR  
INDIRECTLY LIFTED IN THE FINAL KCSE  
EXAMS, PLEASE, DO NOT PANIC!**

**KILA LA HERI**

***success***