

KCSE 2023 PREDICTION CYCLES



AGRICULTURE PAPER 2



KCSE 2023 TOP PREREDICTION CYCLE 1-10

CLASS OF KCSE 2023 NOVEMBER

The set Comprises of 10 Prediction Cycles prepared by a panel of Top Writers from KNEC Nairobi HQ

Kenya Educators Consultancy is proud to announce that in KCSE 2022 National Examination, More than 55% of our predictions from the same panelists appeared in the national exam (KCSE)

All KCSE 2023 November Candidates are advised to take the questions in this package of predictions serious as they prepare for the national exams!

FOR MARKING SCHEMES AND SIMILAR RESOURCES :

CONTACT:

MR MACHUKI - 0724333200

OR

ORDER ONLINE AT:

www.kenyaeducators.co.ke

Confidential!!!

All the best to all KCSE 2023 Candidates as they prepare for the national exams

KENYA EDUCATORS CONSULTANCY

443/2

AGRICULTURE

PAPER 2

Time: 2 hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 1

Name.....Index no.....

candidate's signature

Date.....

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided
- This paper consists of three sections **A**, **B** and **C**.
- Answer all the questions in sections **A** and **B** and any other two in section **C**
- All answers must be written in the spaces provided in this booklet.

FOR EXAMINERS USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
A	1-19	30	
B	20-23	20	
C	24-26	40	
	TOTAL SCORE	90	

8. State three factors that may influence the amount of water intake by a farm animal .(1 ½ marks)

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

9. State three advantages of keeping a herd of dairy cattle healthy. (1½ marks)

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

10. Give three reasons for dehorning cattle. (1½ marks)

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

11. Give two methods of extracting honey from honey combs (1mark)

.....
.....

12. a) Give four reasons for candling eggs in poultry production. (2marks)

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

b) Give four maintenance practices that should be carried out on the mould board plough.(2marks)

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

.....
.....
13. a) List four harmful effects of internal parasites in livestock. (2marks)

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

(b) (i) Give two reasons for washing the udder with warm water before milking . (1mark)

.....
.....

(ii) Name three dairy goats kept in Kenya . (1½ marks)

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

14. Name **two** diseases that affect female animals only (1mark)

.....
.....

15. What is the function of a spillway in a fish pond (½ mark)

.....
.....

16. Name three types of lubrication systems used in tractors . (1½ marks)

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

17. Give the functions of the following parts of an ox-plough

a) Land side (½mark)

.....
b) Draft rod(½ mark)
.....

18. Give three structural requirements for a grain silo. (1½ marks)

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

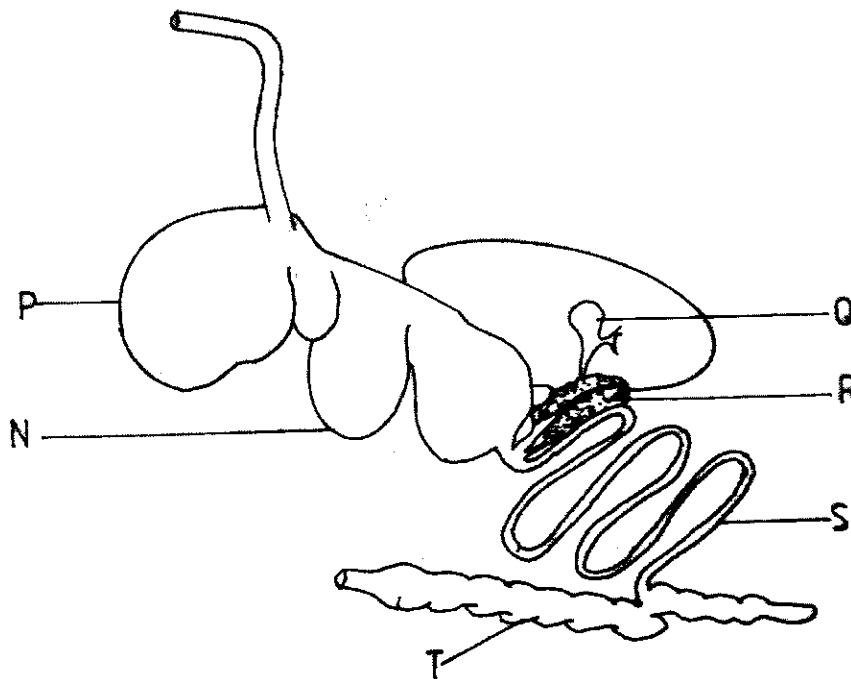
19 State three advantages of natural feeding in calf rearing. (1½ marks)

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

SECTION B (20 MARKS)

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

20. The diagram below shows the digestive system of cattle. Study it and answer the questions that follow.



a). Name the parts labelled N, P and Q.

N (1 mark)

P (1 mark)

b). State one function for each of the parts labelled S and T.

S..... (1 mark)

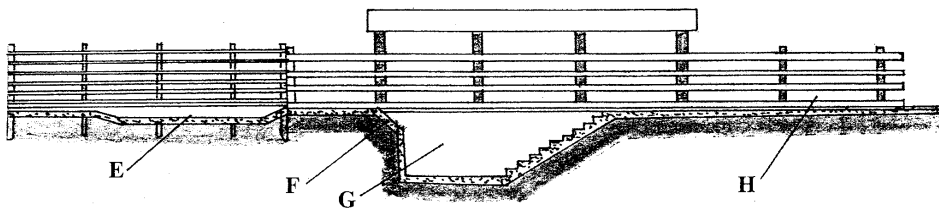
T (1 mark)

c). Give one enzyme produced by each of the parts labelled R and S.

R ($\frac{1}{2}$ marks)

S ($\frac{1}{2}$ marks)

21. The illustration below shows a cross section of a cattle dip.



a) Name the parts labelled E and G.

E..... (1mark)

G..... (1mark)

b) State one use for each of the parts labelled E, F and H. (3marks)

E.....

F.....

H.....

22. The following diagrams show animals with deficiency symptoms of some minerals. Study the diagrams carefully and answer the questions that follow.



(a) State the nutrients lacking in the diet of each animal shown above.

Animal **G** (1mark)

Animal **H**..... (1mark)

(b) Name the disease whose symptoms are shown by the animal labeled G above. (1 mark)

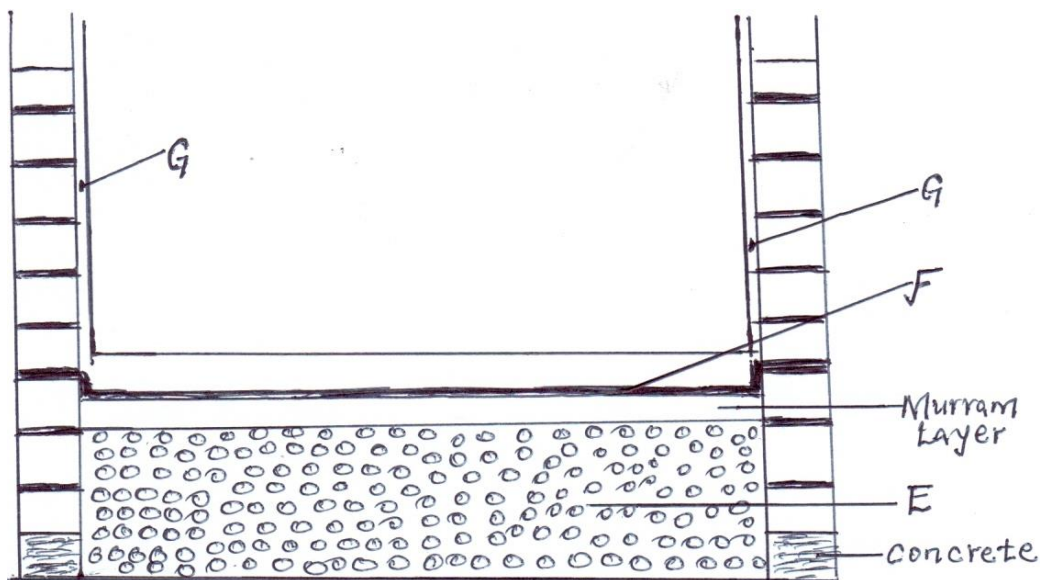
.....

(c) Give **two** reasons why the disease named in (b) above should not be controlled by giving medicine through the mouth. (2marks)

.....

.....

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



(a) Identify the parts labeled E and F .

E..... (1mark)

F..... (1mark)

(b) State two uses of part labeled F in a foundation structure . (2marks)

.....
.....
(c) What ingredients are used to complete part G (1mark)

SECTION C (40 MARKS)

Answer any two questions in this section in the spaces provided at the end of each question.

24. (a) Describe the uses of fences on the farm. (10 marks)

(b) Describe Newcastle disease under the following sub-headings

(i) causal organism; (1 mark)

(ii) signs of infection; (7 mark)

(iii) control measures. (2 marks)

25. a) Describe the rearing of lambs from lambing up to weaning time (10 marks)

b) Explain **five** causes of livestock diseases (5 marks)

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

26.a. State and explain **five** preventive measures of livestock diseases. (10 Marks)

b. Describe long term service carried out during tractor servicing. (6 Marks)

c. Outline four functions of the gearbox in a tractor. (4 Marks)

Name:Index No:

443/2
AGRICULTURE
Paper 2
2 hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 2
Kenya Certificate of Secondary Education
AGRICULTURE
PAPER 2
2 HOURS

Instructions to candidates.

- (i) Write your **name** and **index number** in the spaces provided.
- (ii) This paper consists of three sections **A, B** and **C**.
- (iii) Answer **ALL** the questions in section A and B and any two questions in section C.
- (iv) All answers must be written in the spaces provided.
- (v) Do not remove any pages from the question paper.

For Examiner`s use only

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

SECTION A (30 marks)

Answer all questions in this section in the spaces provided

1. Give two uses of the roof of cattle dip tank. (1mk)

.....
.....

2. State two causes of soft shelled eggs. (1mk)

.....
.....

3. Give four signs of farrowing in a sow. (2mks)

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

4. Outline four causes of cannibalism in a flock of layers in the deep system. (2mks)

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

5. State four maintenance practices carried out on a Jack plane. (2mks)

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

6. State three uses of solar power on the farm. (1½ mks)

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

7. Name four types of layer breeds of chicken. (2mks)

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

8. Give the distinguishing characteristics of Essex and Wessex Saddle back breed of pigs.(1mk)

.....
.....

9. Give four symptoms of brucellosis in cows. (2mks)

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

10. State four reasons why inbreeding may be useful in livestock production. (2mks)

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

11. Give two effects of Tsetse flies on livestock. (1mk)

.....
.....

12. Name two types of rabbit houses. (1mk)

.....
.....

13. List four types of vaccines used in livestock production. (2mks)

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

14. Name four types of pests that affect bees.

(2mks)

.....

.....

.....

.....

15. Outline three reasons why farmers dehorn cattle.

(1¹/₂mks)

.....

.....

.....

16. (a. Differentiate between cropping and harvesting as used in fish production.

(1mk)

.....

.....

b. Name two species of fresh warm water fish.

(1mk)

.....

.....

17. Give four reasons for steaming up dairy cattle.

(2mks)

.....

.....

.....

.....

18. List four post milking practices.

(2mks)

.....

.....

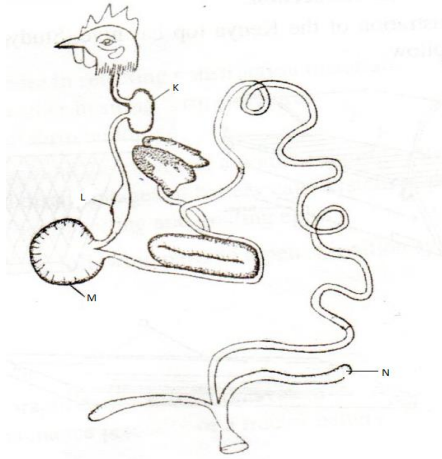
.....

.....

SECTION B (20 Marks)

Answer all questions in this section in the spaces provided.

19. The diagram below shows the digestive system of a chicken. Study it and answer question that follow.



(a) . Identify the parts labeled **K,L,M** and **N** above. (2mks)

- K
- L
- M
- N

(b) . Give the function of the part labeled **M** that makes it efficient in digesting food. (2mks)

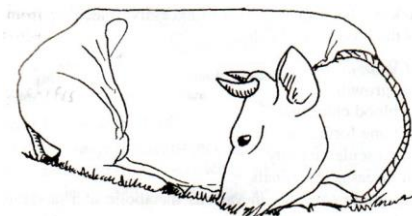
.....

(c) . Give two characteristics of the part labeled **M** that make it efficient in digesting food.(1mk)

.....

.....

20. Study the illustration below showing an animal suffering from a disease. Study it and answer question that follow.

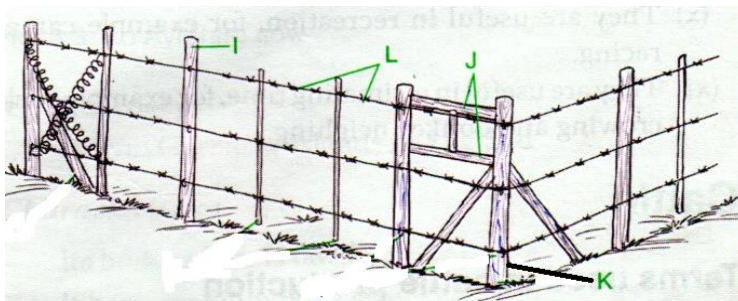


(a) . Identify the disease the animal is suffering from. (1mk)

.....
(b. What causes the disease shown above? (1mk)

.....
(c. Give three symptoms shown by a cow suffering from the disease above. (3mks
.....
.....
.....

21. Study the farm structure shown below and answer questions that follow.



(a). Identify the structure shown above. (1mk)

.....
(b) . Name the parts labeled **I,J,K** and **L**. above. (2mks)

I.....

J.....

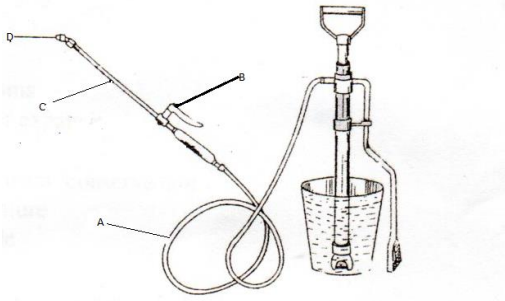
K.....

L.....

(c) . Give two disadvantages of using the structure above in pasture fields. (1mk)

.....

22. The diagram below shows a stir up pump. Study it and answer questions that follow.



(a. Name the parts labeled **A,B,C** and **D**. (2mks)

- A.....
- B.....
- C.....
- D.....

(b. State two maintenance practices that should be carried out on the equipment illustrate above (2mks)

.....

.....

(c. State one disadvantage of using the equipment above in controlling ticks. (1mk)

.....

SECTION C (20 Marks)

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

23. (a) .Describe Newcastle disease under the following sub headings

(i) Causal organism (1mark)

(ii) Symptoms (6marks)

(iii) Control measures (3marks)

(b) State and explain the requirements of a deep litter home in poultry (10marks)

24. (a) . Describe the procedure of training a calf to take milk from a bucket in artificial calf Rearing. (5marks)

(b). Outline seven factors considered when selecting eggs for incubation. (7marks)

(c) Describe management practices that would ensure clean milk production in a dairy farm.

(8marks)

25. (a). Describe the symptoms of livestock infection in livestock

(6marks)

(b) Explain the rearing of chicks from 1 day old to 8 weeks old.

(14 marks)

Name.....

Index Number.....

443/2

AGRICULTURE

Paper 2

Time: 2 Hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 3

Instructions to Candidates

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

This paper consists **THREE** sections: **A, B and C**

Answer **ALL** the questions in section **A and B** and any **Two** Questions in section **C**

Answer all the questions in the spaces provided

FOR EXAMINER'S USE ONLY

Section	Question	Maximum Score	Candidate's Score
A	1 – 16	30	
B	17 – 20	20	
C		20	
		20	

SECTION A (30 MARKS)

Answer all questions in spaces provided

1. Name three diseases that cause lameness in cattle (1½ mks)

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

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

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

3. a) Give three dual purpose cattle breeds (1½ mks)

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

b) Give three terms used to describe the following: - (1½ mks)

(i) Mature male pig

(ii) Sterilised birds

(iii) Mature female goat

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

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

.....
5. State three functions of feed additives (1½mks)

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

6. Name the fourth compartment of the stomach of a ruminant and state three of its functions (2mks)

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

7. State four factors that determine the quality of honey (2 mks)

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

8. Give four categories of livestock diseases (2 mks)

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

9. State three control measures of contagious abortion (Brucellosis) (1½ mks)

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

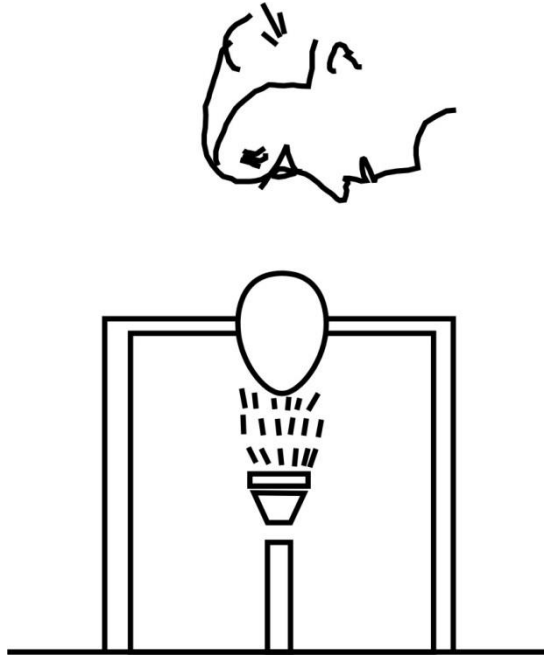
-
-
10. Name three tools used for plumbing (1½ mks)
-
-
-
11. State four maintenance practices carried out on an ox-drawn plough (2 mks)
-
-
-
-
-
12. List four sources of farm's power which are environmental friendly (2 mks)
-
-
-
-
-
13. State four functions of the lubricating system in a tractor (2mks)
-
-
-
-
-
14. State two conditions under which a farmer would prefer to use an ox-cart instead of a tractor-drawn trailer (2mks)
-
-
-
-
15. State four qualities considered when selecting a heifer for dairy purposes (2mks)
-
-
-
-

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

SECTION B (20MARKS)

ANSWER ALL QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED

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



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

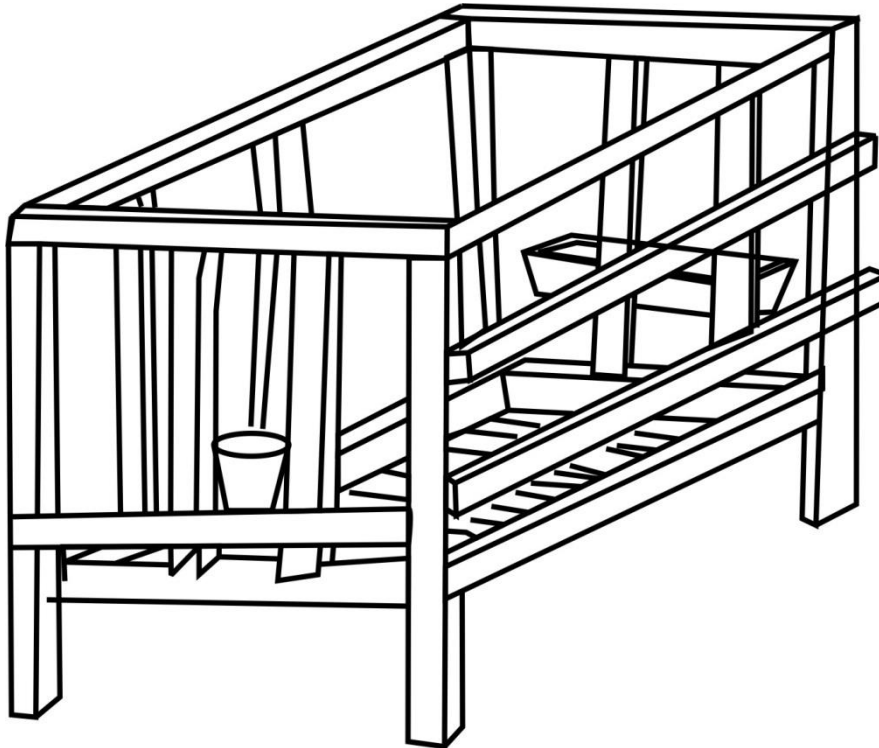
b) State three defects that can be detected by this practice (3 mks)

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

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

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

18.



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

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

.....

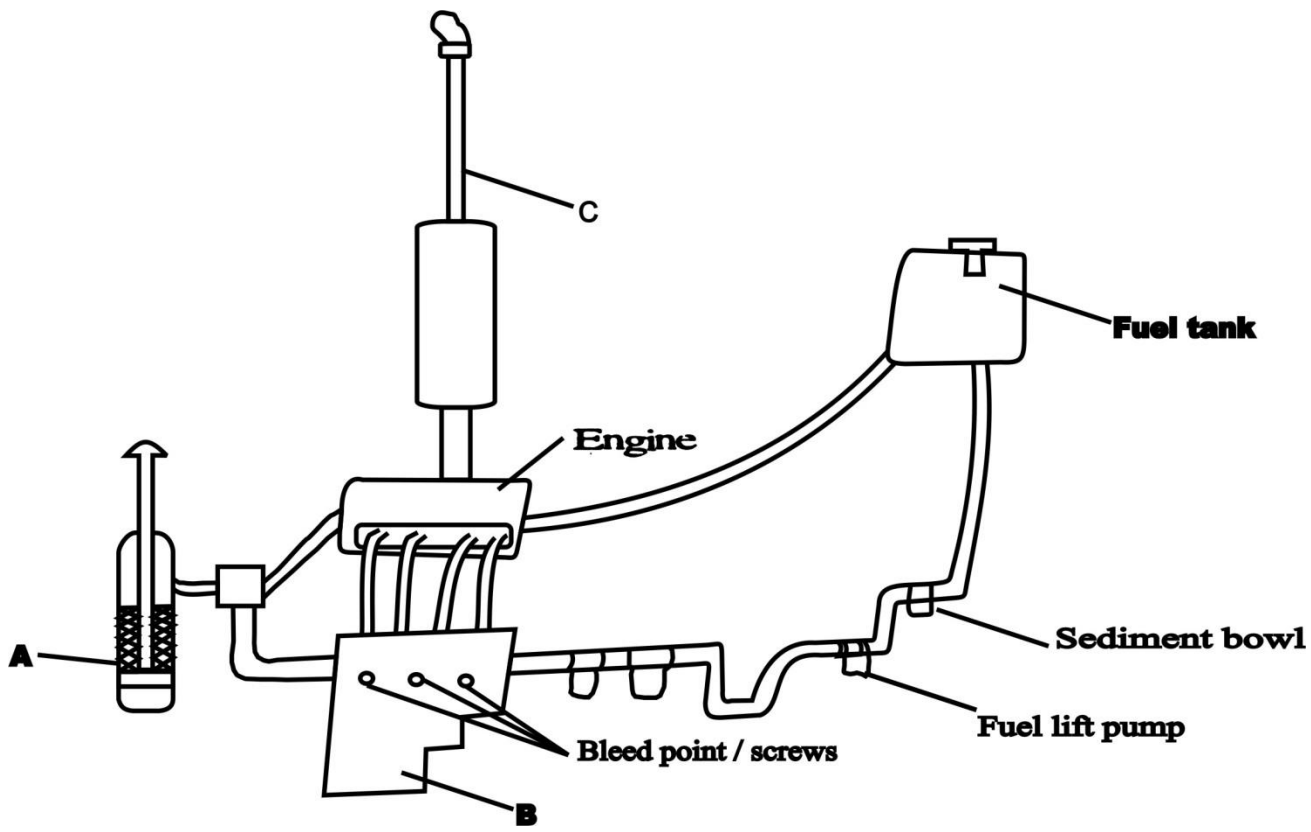
b) Give any two reasons why calves are housed singly (2mks)

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

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

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

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



a) Identify the parts labelled (3 mks)

A.....

B.....

C.....

b) State three maintenance practices carried out on the system (3 mks)

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

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

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

SECTION C (40 MARKS)

ANSWER ANY TWO QUESTIONS FROM THE SECTION

21a) Outline five signs of heat in a cow (5 mks)

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

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

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

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

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

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

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

443/2 AGRICULTURE

PAPER 2

(THEORY)

DURATION:: 2HRS

KCSE 2023 TOP PREDICTION MASTER CYCLE 4

Kenya Certificate of Secondary Education (K.C.S.E.)

Name.....

Adm No.....

Stream.....

Date

Sign

Instructions to candidates

- Write your name and index in the spaces provided above
- 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 in sections **A** and **B**.
- Answer any **two** questions in section **C**
- All** answers should be written in the spaces provided in the question paper.

For Examiner's Use Only

Section	Question	Maximum Score	Candidates Score
A	1 - 29	40	
B	30 - 35	30	
C	36 - 38	20	
Total Score		90	

1. What is apiculture? (1 mark)
.....
.....
2. **Name one** livestock disease that is transmitted by the following parasites.
(a) Brown ear tick (½ mark)
.....
(b) Tsetsefly (½ mark)
.....
3. State the intermediate host for liver fluke *Fasciola* spp. (½ mark)
.....
4. **State four** breeds of rabbits. (2 marks)
.....
.....
.....
5. **State two** functions of a crop in a digestive system of chicken. (1 mark)
.....
.....
6. **State three** ways of restraining cattle (1½ marks)
.....
.....
.....
7. **State two** livestock diseases caused by virus. (1 mark)
.....
.....
8. **State two** types of selection practiced by livestock farmers (1 mark)
.....
.....
9. **State three** ways of preventing predation in a fish pond (1mark)

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

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

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

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

.....
.....

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

.....
.....

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

.....
.....

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

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

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

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

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

.....
.....

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

.....

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

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

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

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

(i) Mature male pig

(ii) Sterilised birds

(iii) Mature female goat

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

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

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

.....
.....

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

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

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

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

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

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

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

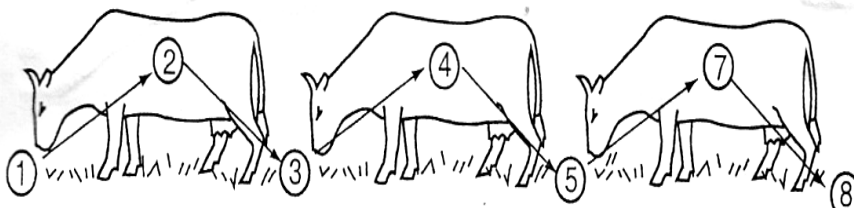
.....
.....
27. State two conditions under which a farmer would prefer to use an ox-cart instead of a tractor-drawn trailer (1mks)

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

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

SECTION B (30MKS)

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



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

- 1.....
-
- 4.....
-
- 5.....
-
- 7.....
-

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

.....

.....

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

.....

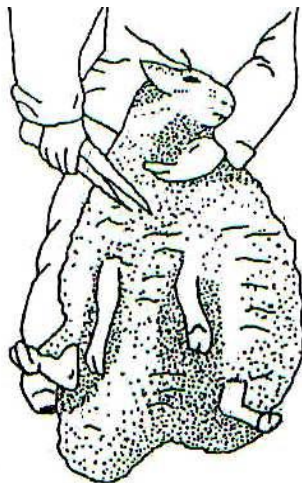
.....

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

.....

.....

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



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

.....
.....

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

(2marks)

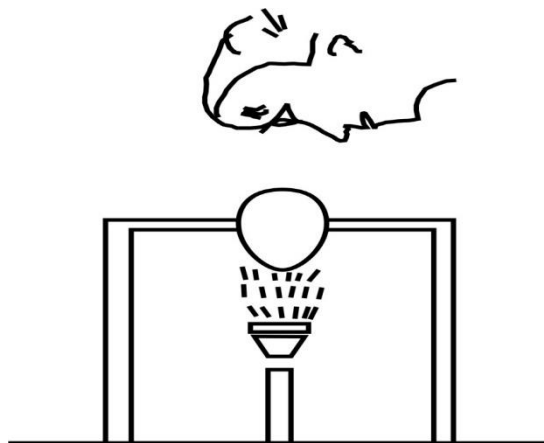
.....
.....

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

(1mark)

.....
.....

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



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

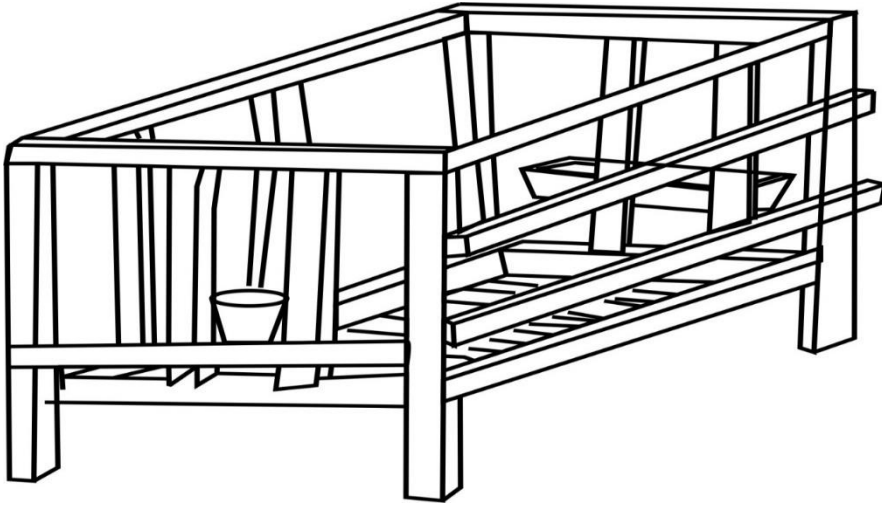
b) State three defects that can be detected by this practice (3 mks)

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

c) State two disadvantages of artificial incubation.

(2 mks)

.....
.....



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

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

.....

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

.....

.....

.....

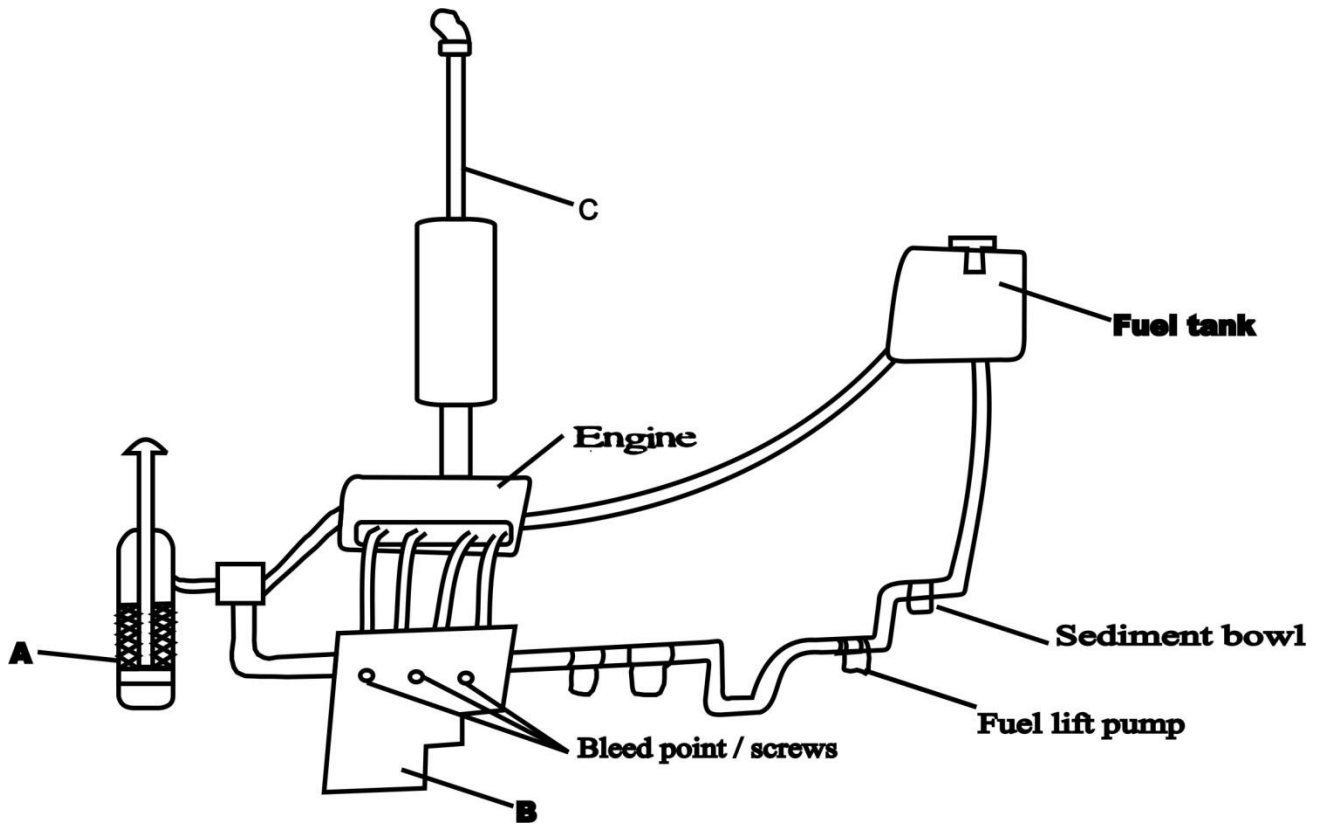
c) Why should the calf pen be near the milking parlour? (2mks)

.....

.....

.....

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



a) Identify the parts labelled (3 mks)

- A.....
- B.....
- C.....

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

-
-
-

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

-
-
-
-
-

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

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

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

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

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

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

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

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

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

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

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

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

.....
d) Describe control measures for tape worm in livestock

(6mks)

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

Name Index No
Class Candidates Signature
Date

443 / 2
AGRICULTURE
Paper 2
Time: 2 Hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 5

Kenya certificate of secondary education (K.C.S.E)

AGRICULTURE
Paper 2
Time: 2 Hours

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 questions from Section **C**.

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1 – 21	30	
B	22 – 25	20	
C	26 - 28	40	
TOTAL SCORE			

This paper consists of 10 printed pages.
Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing

SECTION A: (30 MARKS)

Answer all questions in this section in the spaces provided.

1. Differentiate between Essex and Wessex saddleback. (1mk)

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

2. Give **four** signs of heat in rabbit. (2mks)

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

3(a) Explain how parasites cause economic losses to the farmer. (1mark)

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

b) List **three** effects of Fleas to livestock. (1½ marks)

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

4. Define the following terms as used in livestock production. (1½ marks)

a) Digestibility

.....

b) Ration

.....

c) Malpresentation

.....

5. Give **three** advantages of the contemporary comparison method of selection. (1½marks)

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

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

6. What **three** conditions that may lead to culling of a breeding boar? (1½ marks)

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

7. Give **two** uses of a wood float. (1 mark)

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

8. Give **two** reasons for supplementary feeding of bees. (1 marks)

- i)
- ii).....

9. State **four** functions of water in animal's bodies. (2 marks)

- i)
- ii).....
- iii)
- iv)

10. State the functions of the following tools

- (i) Shovel.....(½mark)
- (ii)Rubber ring(½ mark)

11. Give four cultural uses of livestock. (2Marks)

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

12. Outline six importance's of fences in a farm. (3 Marks)

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

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

13. Give four reasons for maintenance of farm tools and equipment. (2 Marks)

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

14. State two methods of lambing in sheep management. (1 Mark)

.....
.....

15. What is 'hybrid vigour'? (1 Mark)

.....
.....

16. Outline four predisposing factors to diseases (2 Marks)

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

17. State four ways of restraining the movement of animals. (2 Marks)

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

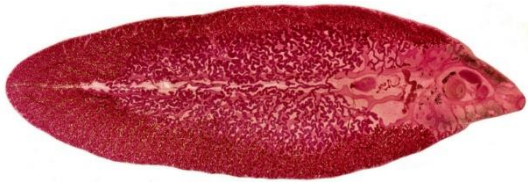
18. List four factors that influence the pulse rate of an animal (2 marks)

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

SECTION B: (20 MARKS)

Answer all questions in this section in the spaces provided.

19 a) Study the diagram below and use it to answer the question that follows



U



W

i) Identify the parasites shown above

(2mark)

...U.....

...W.....

ii) Why is it difficult to control parasite U?

(1mark)

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

iii)How can one control parasite W?

(½mark)

.....

b) A farmer wanted to mix 270kg of livestock feed containing 30% DCP by using Sorghum meal with 12%DCP and Soya bean meal containing 36% DCP. Calculate the quantities of each feedstuff he would have in the ration.

(3marks)

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

20 (a) Identify the equipment labeled X and Y below.

(1mk)



X



Y

b) State the functions of each of the equipments.

(2marks)

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

c) i) Other than the tools shown in a) above, give other tool that can be used to castrate a piglet

(½mark)

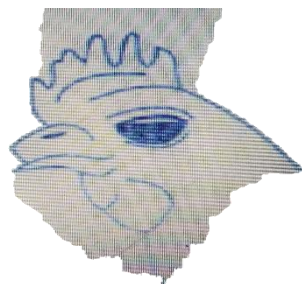
.....

ii) Give **two** reasons for castrating a male pig.

(1mark)

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

21. (a) Below is an illustration of an activity carried out in poultry management. Study it and answer the question below



i) Identify the practice illustrated above .

(1mk)

.....

ii) Give two reasons for carrying out the practice illustrated above.

(2mks)

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

b) State four factors which determine the amount of food given to an animal

(4mks)

.....
.....
23. a) Discuss milk fever disease under the following subheadings

i) Cause (1mks)

.....
.....

ii) Animals affected (2mks)

.....
.....

iii) Symptoms (5mk)

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

iv) Control measures (2mk)

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

b) Describe the factors which affect the quality of honey (5mks)

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

c) State five characteristics of exotic cattle. (5mks)

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

443/2

AGRICULTURE

PAPER 2

Time: 2 hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 7

NAME.....INDEX NUMBER.....

CANDIDATE'S SIGNATUREDATE.....

INSTRUCTIONS TO CANDIDATES

- (a). Write your name and index number in the spaces provided.
- (b) Sign and write the date of the examination in the spaces provided above.
- (c). This paper consists of three sections; A, B and C
- (d) Answer all the questions in section A and B
- (e) Answer any two questions in section C
- (f) All the answers should be written in the spaces provided.
- (g) Candidates should check the questions papers to ascertain that all the pages are printed as indicated and that no questions are missing.
- (h) Candidate should answer all questions in English.

Section	Question	Maximum score	Candidate's score
A	1- 15	30	
B	16-19	20	
C		20	
		20	
	TOTAL	90	

SECTION A (30 Marks)

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

1, Give two reasons why docking is an important practice in sheep management. (1 mark)

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

2(a) Name the camel breed that is adapted to cooler regions and has wooly body covering. (½ mk)

.....

(b) Give one reason why Fresian’s milk is more whitish while jersey milk is yellowish . (½ mk)

.....
.....

(c), Give any two uses of litter materials in a poultry house. (1 mark)

.....
.....

3. Give four advantages of using stones as construction materials. (2 marks)

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

4. Outline three methods of stocking a bee hive. (1½ mk)

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

5. List four ways in which vaccines are administered to an animal. (2 marks)

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

6. Give four predisposing factors to livestock diseases. (2 marks)

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

7. Give four functions of proteins in the body of an animal. (2 marks)

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

8, Name the tool used together with each of the following tools. (1 mark)

(a),Canula(b) Brace

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

9. Differentiate between flushing and steaming up in livestock management. (2 marks)

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

10. State two roles of drones in a bee colony. (1 mark)

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

11. State two microbial activities that occur in the rumen. (1 mark)

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

.....
12. Name three pests bees (1½ mk)

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

13. Name four mineral deficiency livestock disorders. (2 marks)

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

14. What do you understand by the term raddling as used in sheep management. (1 mark)

.....

15. Name one intermediate host in life cycle of a liver fluke. (1 mark)

.....
.....

16. Give any three maintenance practices in a green house. (1½ mk)

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

17, Give two faults of ignition system, (1 mark)

.....
.....

18. Give four conditions that the animal structure should meet in order to help in controlling livestock disease. (2 marks)

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

c). State three advantages that fence Y may have over fence X.

(3 marks)

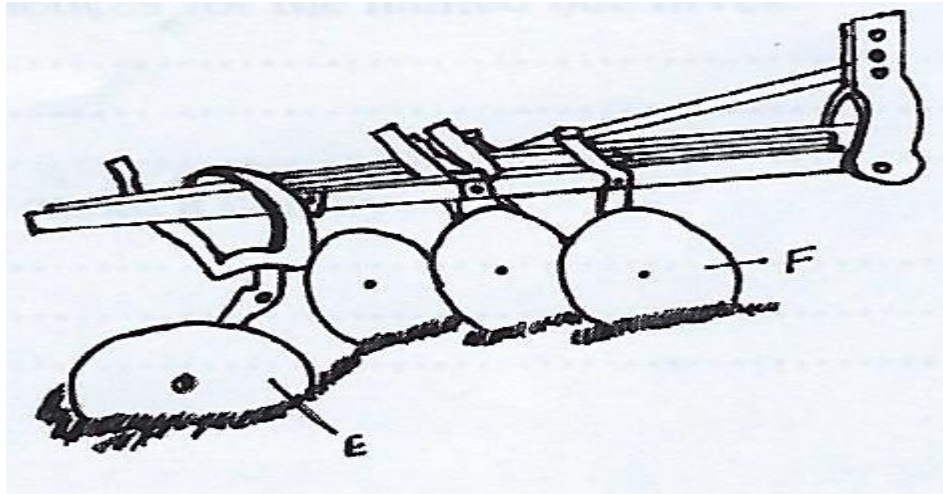
.....

.....

.....

.....;

21, The diagram below represents an implement



i.) Identify the implement.

(1 mark)

.....

.....

ii). Name the parts labelled E and F give one function of each.

(2 marks)

.....

.....

.....

iii) State four maintenance practices carried out on the implement shown in the diagram. (4 marks)

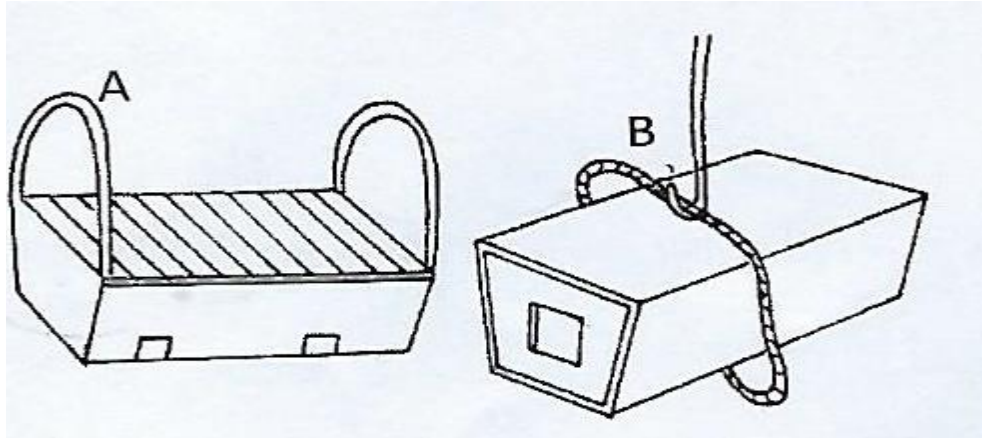
.....

.....

.....

.....;

22. The diagram labelled A and B below shows two types of bee hives. Study them carefully and answer the questions



(i). Identify the types of beehives A and B. (2 marks)

.....

.....

.....

(ii). State two advantages of A over B. (2 marks)

.....

.....

.....

(iii) Give two maintenance practices for the named bee hives. (2 marks)

.....

.....

(iv) Give one type of bee that make a colony. (1 mark)

.....

SECTION C (40 marks)

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

23. (a) Describe eight difference between petrol and diesel tractor engines. (8 marks)
- (b) Describe the principle of a four stroke (four –cycle) petrol engine. (12 marks)
24. (a). Write short notes on foot and mouth disease under the following sub-headings.
- (i) Casual organism (1 mark)
 - (ii) Mode of transmission (1 mark)
 - (iii) Symptoms of attack (4 marks)
 - (iv) Control measures (4 marks)
- (b). State five importance of keeping livestock healthy (5 marks)
- (c) State five general method of disease control (5 marks)
25. (a) Describe the procedure of establishing a fish pond. (10 marks)
- (b) Describe the life cycle of a three host-tick (5 marks)
 - (c) State five factors affecting digestibility (5 marks)

443/2
AGRICULTURE
PAPER 2
Time: 2 hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 8

Name: Index No:

Stream: Candidate's Signature: Date:.....

Instructions to candidates

- a) Write your name and index number in the spaces provided above.
- b) Sign and write the date of the examination in the spaces provided above.
- c) The paper consists of **three** sections A, B and C.
- d) Answer **all** questions in section A and B
- e) All answers should be written in the spaces provided.
- f) This paper consists of 12 printed pages.
- g) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
- h) Candidates must answer the questions in English

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1-15	30	
B	16-19	20	
C		20	
		20	
TOTAL SCORE		90	

SECTION A (30 marks)

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

1. State **two** control measures for fowl pox disease in poultry. (2 marks)

.....
.....

2.

- a) Give **two** reasons for carrying out maintenance practices on a mower. (2 marks)

.....
.....

3. Give **two** limitations of using solar power on the farm. (2 marks)

.....
.....

4. Name **two** methods used in selection of breeding stock in livestock production. (2 marks)

.....
.....

5. State **four** methods of controlling roundworms in livestock. (2 marks)

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

6. Name the type of breed into which each of the following breeds of cattle are classified.

- a) Aberdeen Angus. (1/2 marks)

.....

b) Guernsey. (½ marks)

.....

c) Sahiwal. (½ marks)

.....

d) Redpoll. (½ marks)

.....

7.

a) Give **two** ways in which proper nutrition help to control livestock diseases. (2 marks)

.....

.....

b) Name **two** nutritional diseases in cattle. (2 marks)

.....

.....

8.

a) State **two** advantages of housing calves singly in cattle management. (1 mark)

.....

.....

b) State **four** advantages of natural calf rearing. (2 marks)

.....

.....

.....

.....

9. State **four** reasons for dehorning in cattle management. (2marks)

.....

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

10. Name **two** methods of harvesting fish in fish pond. (1 mark)

.....
.....

11.

a) State **four** causes of egg eating in flock of layers. (2 marks)

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

b) State **two** advantages of fold system on poultry rearing. (1 mark)

.....
.....

12. Name **four** parts of farm building that can be reinforced using concrete. (2 marks)

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

13. State function of the following farm tools and equipment.

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

a) Pipe cutter (1 mark)

.....
.....

b) Wire strainer (1 mark)

.....
.....

14. State **four** ways in which vaccine can be administered to livestock. (2 marks)

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

15. State **two** disadvantages of using plunge dips in tick control. (1 mark)

.....
.....

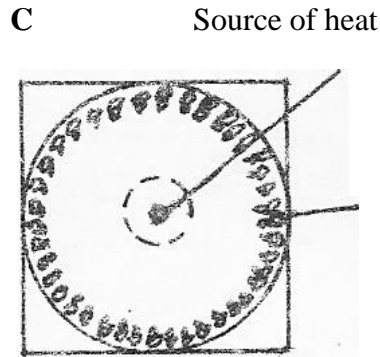
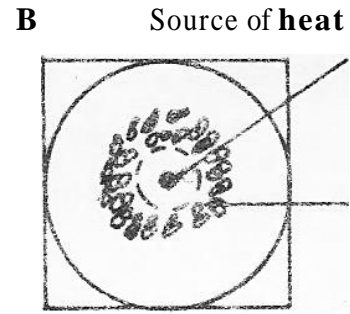
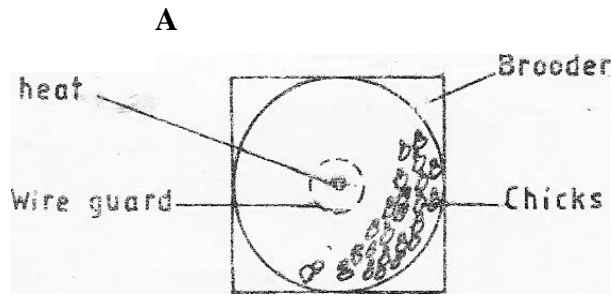
16. State **two** features on the animal which may predispose it to livestock diseases. (1 mark)

.....
.....

SECTION B (20 marks)

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

17. The following illustrations show the behavior of chicks in a brooder. Study them carefully and answer the questions that follow.



a) Explain the cause of behavior observed in chicks for each of the illustrations labeled A, B and C.

(3 marks)

.....

.....

.....

.....

.....

.....

.....

.....

b) Give a reason for making the brooder wail round in shape.

(1 mark)

.....

.....

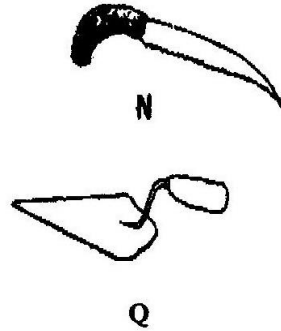
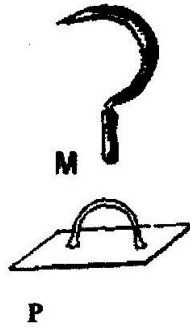
c) State **one** way of correcting the behavior of chicks shown in an above.

(1 mark)

.....

.....

18. Diagrams M, N, P and Q represents some farm tools.



a) Identify the tools; M, N, P and Q.

(2 marks)

.....

.....

.....

.....

b) Give the use of each of the tools named above.

(2 marks)

.....

.....

.....

.....

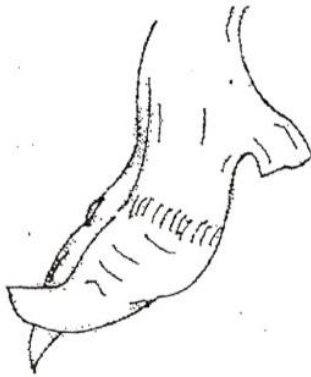
c) State **two** maintenance practices that should be carried out on tool M.

(1 mark)

.....

.....

19. The diagram below illustrate a hoof of a sheep .Study it carefully and answer the questions that follow.



a) Name the routine management practice that should be carried out on the hoof illustrated above.

(1 mark)

.....

.....

b) State **two** reasons for carrying out the management practice in (a) above. (2 marks)

.....
.....

c) Name the **two** tools used to carry out the routine management practice named in (a) above. (2 marks)

.....
.....

20. A farmer wanted to prepare a 200kg of calf rearing ration containing 20% DCP. Using the Pears Square Method, calculate the amount of Maize containing 10% DCP and Sunflower containing 35% DCP the farmer would need to prepare the ration.(Show your working) (5 marks)

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

SECTION C

Answer any two questions in this section in the spaces provided

21.

a) State **five** indicators that can be observed on a goat to confirm sickness. (5 marks)

b) Describe **eight** physical characteristics of a poor layer in a flock of hens. (8 marks)

c) Give **seven** harmful effects of liver fluke in sheep rearing. (7 marks)

22.

a) Outline **five** characteristics of a clean milk. (5 marks)

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

i) Causal organism. (1 mark)

ii) Signs of attack. (3 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

THIS IS THE LAST PRINTED PAGE.

443/2

AGRICULTURE

PAPER 2

Time: 2 hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 9

Name Index Number.....

Candidate's Signature Date

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided above.
- The paper consists of **three** sections A , B and C.
- Answer all questions in section A and B in the spaces provided
- Answer **any two** questions from section C on foolscaps provided

FOR EXAMINERS USE ONLY .

SECTION	QUESTIONS	MAX.SCORE	CANDIDATES SCORE
A	1-16	30	
B	17-21	20	
C	22-24	40	
TOTAL SCORE		90	

SECTION A (30 MARKS)

Answer ALL Questions in the Spaces Provided

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

.....
.....

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

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

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

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

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

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

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

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

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

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

7. State the causes of infertility in dairy cattle. (2marks)
.....
.....
.....
.....
8. State **two** circumstances which would lead a farmer to cull a high producing dairy cow. (1mark)
.....
.....
9. State the difference between crutching and raddling. (2marks)
.....
.....
.....
.....
10. Give **four** importance of keeping livestock healthy. (2marks)
.....
.....
.....
.....
11. How does isolation help in livestock disease control? (1mark)
.....
12. What are the effects of parasites on livestock? (2marks)
.....
.....
.....
.....
13. State **four** methods of controlling liverflukes. (2marks)
.....
.....

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

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

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

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

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

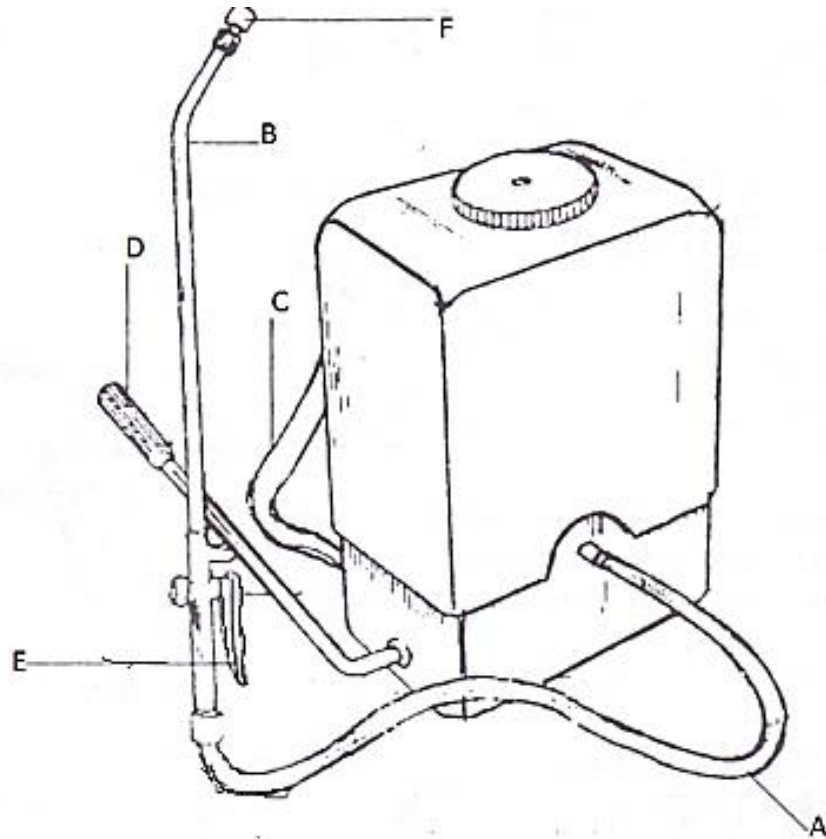
.....
.....
(b) State **three** methods used in selection of livestock for breeding. (1½marks)

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

SECTION B (20 Marks)

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

20. The following diagrams illustrate farm equipment. Study it and answer the questions that follow



Name the parts labeled A, B, C and D. (½ mark)

A.....

B.....

(½ mark)

C.....

(½ mark)

D.....(½ mark)

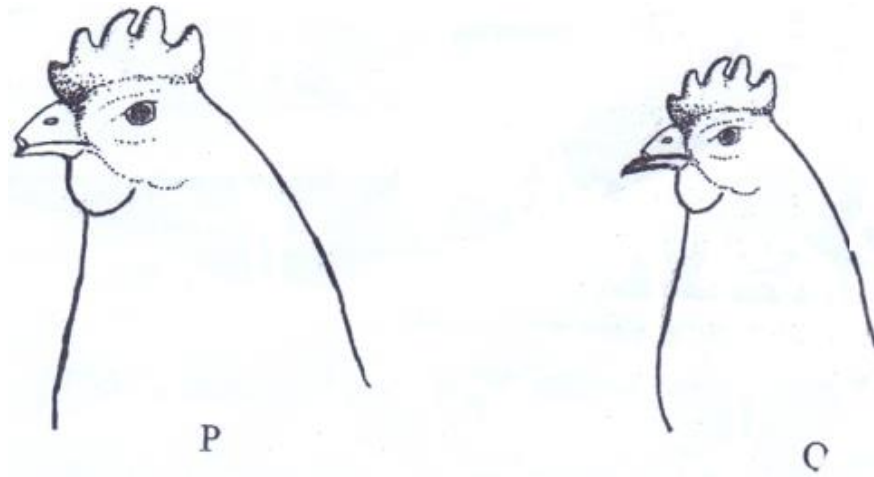
(a) Give the function of each of the parts labeled E and F.

E.....
.....
(1mark)

F.....
.....
(1mark)

(a) Give one use of the above equipment. (1mark)
.....
.....

21. The illustration below shows a practice in layer birds. Use them to answer the questions that follow.



(a) What practice is represented above? (1mark)
.....
.....

(b) Which illustrated shows the right way of carrying out the practice. (1mark)
.....
.....

(c) State three reasons for carrying out the practice in poultry. (3marks)

.....

.....

.....

.....

.....

.....

22. The diagram below shows a routine practice being carried out on an animal. Study it and answer questions that follow.



(a) Identify the practice. (1mark)

.....

.....

(b) Name the structure in which the practice is being carried out. (1mark)

.....

.....

(c) Give three advantages of using the above structure instead of a plunge dip. (3marks)

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

(a) Fill the table below for the following diseases. (5marks)

Disease	Cause	Characteristic/Symptom	Preventive measures
Coccidiosis			
Blackquater			vaccination
Rinderpest	virus		
Milk fever			

SECTION C (40 MARKS)

Answer any TWO questions from this section in the spaces provided after question 25.

23. a) State **four** major uses of a tractor in the farm. (4 marks)
- b) List **four** disadvantages of using wood fuel as a source of power in the farm.(4 marks)
- c) Name and explain functions of the main parts of a tractor that make up the transmission system of a tractor. (8 marks)
- d) Explain the functions of **four** secondary tillage implements. (4 marks)
24. a) What causes milk fever in dairy cows? (2 marks)
- b) State **five** symptoms that would show that a cow is suffering from milk fever (5 marks)
- c) How would the disease be controlled? (6 marks)
- d) Name **two** other animals that may suffer milk fever. (2 marks)
- e) Name **five** predisposing factors of diseases to livestock. (5 marks)
25. a) Describe the factors a farmer would consider when selecting a young female pig (gilt) for breeding. (5 marks)
- b) Describe **five** requirements of a deep litter system. (5 marks)
- c) Explain **five** routine management practices done on a calf. (10 marks)

443/2

AGRICULTURE

PAPER 2

Time: 2 hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 10

NAME _____ ADM No _____

CLASS _____ Candidate's Signature _____

DATE _____

INSTRUCTIONS TO CANDIDATES

- (a) Write your name, Admission number and date in the spaces provided.
- (b) This paper consists of three sections; A, B and C.
- (c) Answer **All** questions in Section A and B in the spaces provided.
- (d) Answer any **two** questions in Section C in the spaces provided.

For Examiners use only.

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-17	30	
B	18-22	20	
C		20	
		20	
		20	
TOTAL		90	

SECTION A

1. Name **four** dairy breeds of goats. (2 mks)

.....

.....

.....

.....

2. Outline **two** control measures of roundworm. (1 mk)

.....

.....

3. State **four** maintenance practice carried on a wheelbarrow. (2 mks)

.....

.....

.....

.....

4. Give **three** ways of transmitting livestock diseases. (1 ½ mks)

.....

.....

.....

5. State the appropriate use of each of the following farm tool. (1 mk)

i) Stock and die

.....

ii) Oil stone (1 mk)

.....

6. Distinguish between zoonotic disease and a notifiable disease. (2 mks)

.....
.....

7. State **four** reasons for keeping livestock healthy. (2 mks)

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

8. a) What is the intermediate host for liverfluke. (1 mk)

.....

b) What is the duration of oestrus cycle in a cow. (1 mk)

.....

9. State **two** advantages of upgrading cattle. (2 mks)

.....
.....

10. Give the functions of the following parts of a reciprocating mower.

a) swath stick (½ mk)

.....

b) Shoe (½ mk)

.....

c) Cutter bar (½ mk)

.....

11. Give **two** functions of the albumen in an egg. (2 mks)

.....

.....
12. State **four** qualities of good wool. (2 mks)

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

13. Give **two** reasons why honey harvesting is discouraged at night. (2 mks)

.....
.....

14. Which hormone stimulates milk let down? (1 mk)

.....

15. Give **two** qualities of a creep feed. (2 mks)

.....
.....

16. State **two** reasons for seasoning timber before use in construction. (2 mks)

.....
.....

17. Name the causal organisms of the following diseases. (½ mk)

a) Anthrax

.....

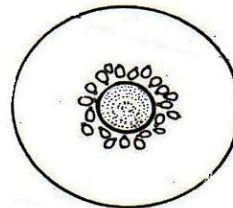
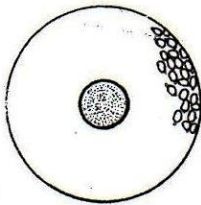
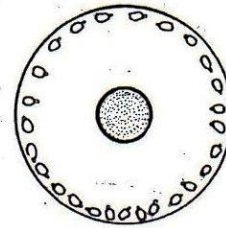
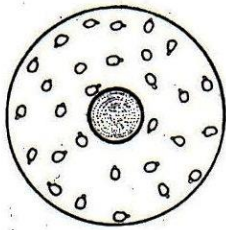
b) Nagana

(½ mk)

.....

SECTION B

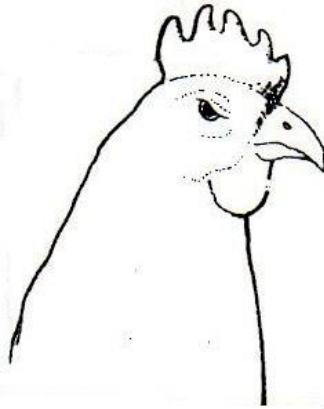
18. Study the diagram below carefully and answer the questions that follow.



Indicate below each diagram the conditions in the brooder.

(4 mks)

19. Study the diagram below and answer the questions



i) Draw a line in the diagram indicating the correct position of debeaking the birds. (1 mk)

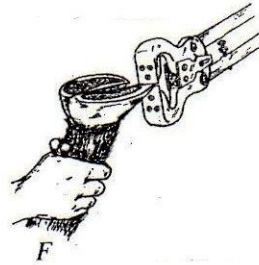
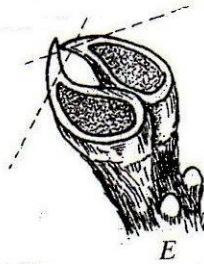
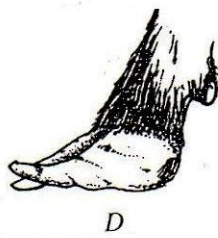
ii) Give the reasons for debeaking birds.

(2 mks)

.....

.....

20. Below are illustrations of animal hooves and an activity being done?



a) What activity is going on in the diagram F? (½ mk)

.....

b) Which of the above hooves is likely to predispose foot rot infections? (½ mk)

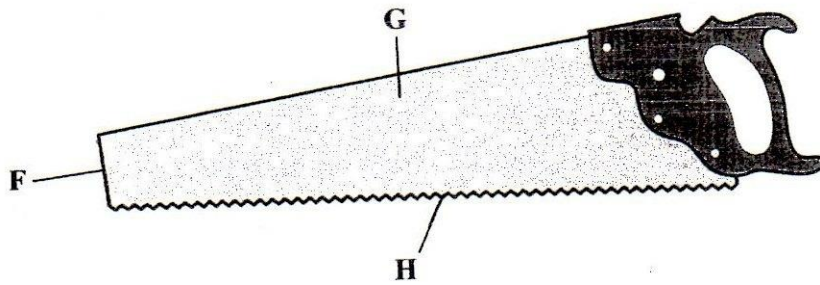
.....

c) Other than protecting animals from foot rot, give two other reasons for carrying out the above activity. (2 mks)

.....

.....

21. The following is an illustration of a handsaw. Study it carefully and answer the questions that follow.



a) Name the parts labelled.

F -

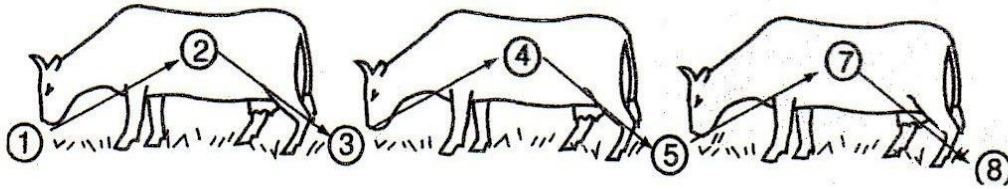
(1 mk)

.....
G - (1 mk)

b) Explain **three** maintenance practices that should be carried out on the part labelled H. (3 mks)

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

22. The illustrations below represent the different stages of development of a three host tick. Study it carefully and then answer the questions that follow.



a) Briefly explain what is happening in the following stages. (2 mks)

1 –

.....

4 –

.....

5 –

.....

7 –

.....

b) Why could it be difficult to control the above tick using acaricides? (1 mk)

.....

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

.....

.....

SECTION C

23. (a) Describe the control measures of cannibalism in layers. (10 mks)

(b) State **five** maintenance practices of a mould board plough. (5 mks)

(c) State the advantages of a four stroke engine. (5 mks)

24. (a) Describe **six** effects of parasite on livestock (6 mks)

(b) Explain **five** reasons for maintaining farm tools and equipment (5 mks)

(c) Discuss the management of layers in a deep litter system (9 mks)

