

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

CANDIDATES SIGN.....

DATE.....

443/1
AGRICULTURE
PAPER 1
MARCH/APRIL 2015
2 HOURS

MOKASA JOINT EVALUATION

AGRICULTURE PAPER I

Paper I
Theory
(2 Hours)

INSTRUCTIONS TO CANDIDATES

- [a]Write your name and index number in the spaces provided above.
 - [b]Sign and write the date of examination in the spaces provided above.
 - [c]This paper consists of three sections: A, B and C.
 - [d]Answer all the questions in sections A and B.
 - [e]Answer any two questions in section C.
 - [f]All answers should be written in the spaces provided.
 - [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 should answer the questions in English.
- For Examiners

SECTION	QUESTIONS	MAX.SCORE	CAND.SCORE
A	1-----18	30	
B	19-----23	20	
C		20	
		20	
	TOTAL SCORE	90	

SECTION A: (30 MARKS)

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

1. State **four** limitations of pastoral farming (2 marks)

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2. Give **four** benefits of timely planting of crops (2 marks)

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3. State **four** factors of soil which influence productivity of crops (2 marks)

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4. Give **four** conditions of land that would make it necessary to carryout reclamation practices (2 marks)

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5. State **two** factors that influence the quantity of water used in the farm (1 mark)

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6. State **four** reasons for keeping health records (2 marks)

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7. Give **two** types of inventory records (1 mark)

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8. Name **two** situations in which opportunity cost does not exist (1 mark)

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9. State **three** ways in which flooded water is important in the growing of paddy rice (1½ mks)

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10. State **four** ways of maintaining a healthy and high yield grass pasture after planting (2 marks)

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11. Give **three** factors considered while determining the size of a silo (1½ mks)

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12. Give **two** ways in which overheating can be avoided during silage making (1 mark)

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13. State **four** factors that will determine the depth of ploughing a maize field using tractor drawn implements (2 marks)

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14. Give **four** ways in which cover crops help in soil and water conservation (2 marks)

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15. List **five** biotic factors that affect livestock negatively (2½ mks)

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16. State **three** characteristics of soil that are influenced by its texture (1½ mks)

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17. Distinguish between contact and systemic herbicide (2 marks)

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18. Give **two** reasons why phosphatic are applied at planting time (1 mark)

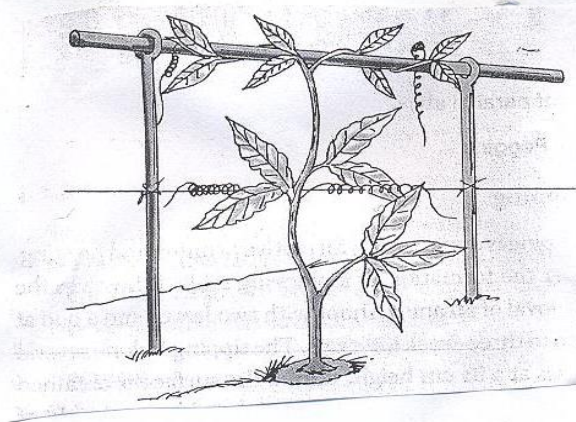
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SECTION B: (20 MARKS)

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

19. The diagram below shows a practice in crop production.



a)i) Give the identity of the field management practice illustrated above (½ mark)

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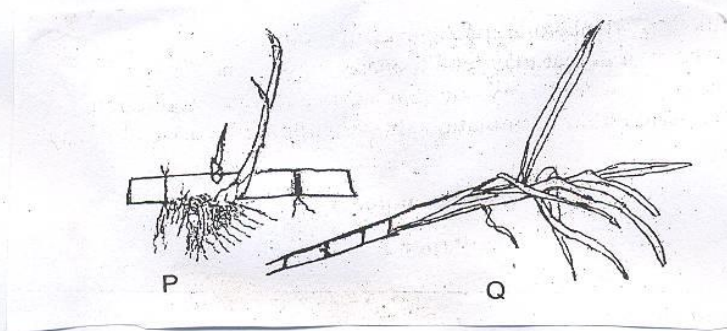
ii) Give **two** reasons for carrying out the above field management practice (2 marks)

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b) A plot measuring 4m x 3m was prepared for planting cabbages at a spacing of 60cm x 60cm. Calculate the plant population in the plot (1½ mks)
Show your working.

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20. a) Identify the illustration P and Q which are materials used in propagation of sugarcane



P

Q

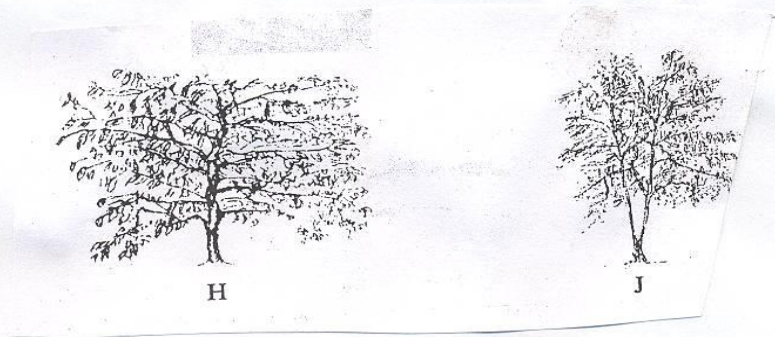
b) Giving reasons which of the above is more suitable as a planting material in sugar cane? (2 marks)

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.....

c) How is planting material in sugarcane treated to control ratoon stunted disease (1 mark)

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21. The diagrams below labelled H and J are illustrations of coffee plants established using two different pruning systems. Examine them closely and answer the questions that follow.



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

H

J

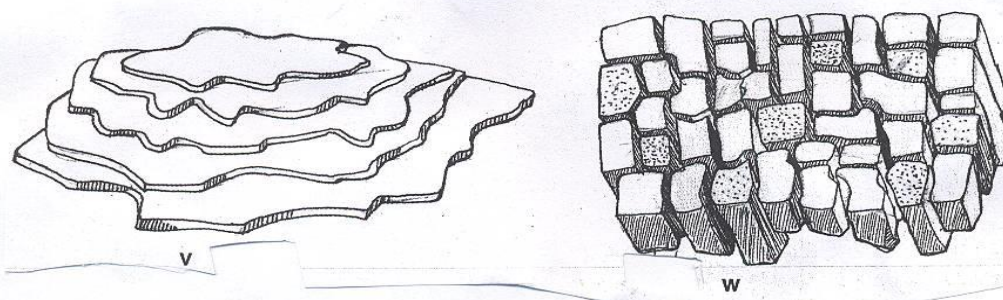
b) Give **two** advantages of pruning system illustrated by diagram H over that one illustrated by diagram J (2 marks)

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c) Name **two** types of pruning that should be carried out after the coffee bush has been established using the system J (2 marks)

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22. The diagrams V and W illustrate some soil structures. Study the diagrams and answer the questions that follow.



a) Identify the **two** structures labelled V and W (1 mark)

V

W

b) Name the types of soils from which structures labelled V and W can be found (1 mark)

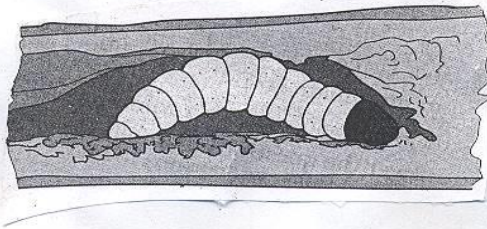
V

W

c) State **two** ways through which structure V may influence crop production (2 marks)

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



a) Identify the pest (½ mark)

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b) Give **two** types of damages caused to crops by the above pest (2 marks)

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.....

c) Other than maize name one other crop attacked by the pest (½ mark)

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SECTION C: (40 MARKS)

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

24. a) Describe the field production of tomatoes under the following subheadings
- (i) Field management practices (7 marks)
 - (ii) Grading of tomato fruits (3 marks)
- b) Explain **five** factors considered when designing a crop rotation programme (10 marks)
25. a) Explain **ten** factors that influence soil erosion (10 marks)
- b) Describe **six** benefits of land consolidation (6 marks)
- c) Explain **four** main objectives of establishing the early African settlement schemes (4 marks)
26. a)i) Explain the difference between stocking rate and carrying capacity (2 marks)
- ii) Discuss the advantages of rotational grazing system (5 marks)
 - iii) Describe the precautions when harvesting coffee (3 marks)
- b)i) Explain harmful effects of weeds in the main field (5 marks)
- ii) Discuss the cultural methods of controlling crop diseases (5 marks)

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

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CANDIDATES SIGN.....

AGRICULTURE PAPER 2

DATE.....

MARCH/APRIL 2015

2HOURS

MOKASA K.C.S.E. AGRICULTURE PAPER 2

INSTRUCTIONS TO CANDIDATES

[a]Write your name and index number in the spaces provided at the top of this page .

[b]Sign and write the date of the examination in the spaces provided above .

[c]This paper consists of three sections A ,B ,and C .

[d]Answer all the questions in sections A and B .Answer two questions in section C

[e]Answers should be written in the spaces provided on the question paper.

FOR EXAMINERS USE ONLY .

SECTION	QUESTIONS	MAX.SCORE	CANDIDATES SCORE
A	1---24	30	
B	25—29	20	
C	30 ,31 ,32	20	
	30 ,31 ,32	20	
TOTAL SCORE		90	

SECTION A [30 MARKS]

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

1.Name a breed of goats that has long hair .[0.5mks.]

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2.Give three factors that should be considered when sitting a bee-hive in the farm[1.5marks]

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3.State four management practices that would ensure maximum harvest of fish in a fish pond [2marks]

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4.Give two reasons why walls of dairy sheds should be white –washed instead of painted with water or oil paint .[1mark]

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5.What is the intermediate host for liver fluke .[0.5mks.]

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6.What is the duration of estrus cycle in a cow ? [0.5mks.]

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7.If a dairy cow was noticed to be showing first signs of heat at 6.00am.What time should she be inseminated ? [1mark]

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8Give four factors that determine the amount of water required by an animal .[2marks]

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9.Name three holding tools and equipment .[1.5marks]

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10.Give three functions of a combination squire . [1.5marks]

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11.State three functions of the differential in a tractors power transmission.[1.5mks]

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12.State three factors that contribute to a high working efficiency of a disc harrow.[1.5marks]

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13. List three products obtained from dromedary camel. [1.5marks]

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14. If the records showed that a rabbit doe was served on 27th September 2014 what date did she give birth/kindle? [0.5marks]

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15. Give two signs that would show that a rabbit doe is about to parturate. [1mk.]

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16. Under what conditions would it be necessary to use a file to smoothen a piece of wood instead of using a smoothing plane? [0.5marks]

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17. What is the use of a plumb-bob? [0.5marks]

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18. State four characteristics of a Corriedale sheep breed. [2marks]

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19. State any two disadvantages that may arise from inbreeding in livestock production. [1mark]

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20. Name four cattle diseases caused by bacteria. [2marks]

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21. Name any two methods recommended for identifying goats. [1mark]

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22. State three field conditions under which a disc plough should be used instead of a mould board plough. [1.5marks]

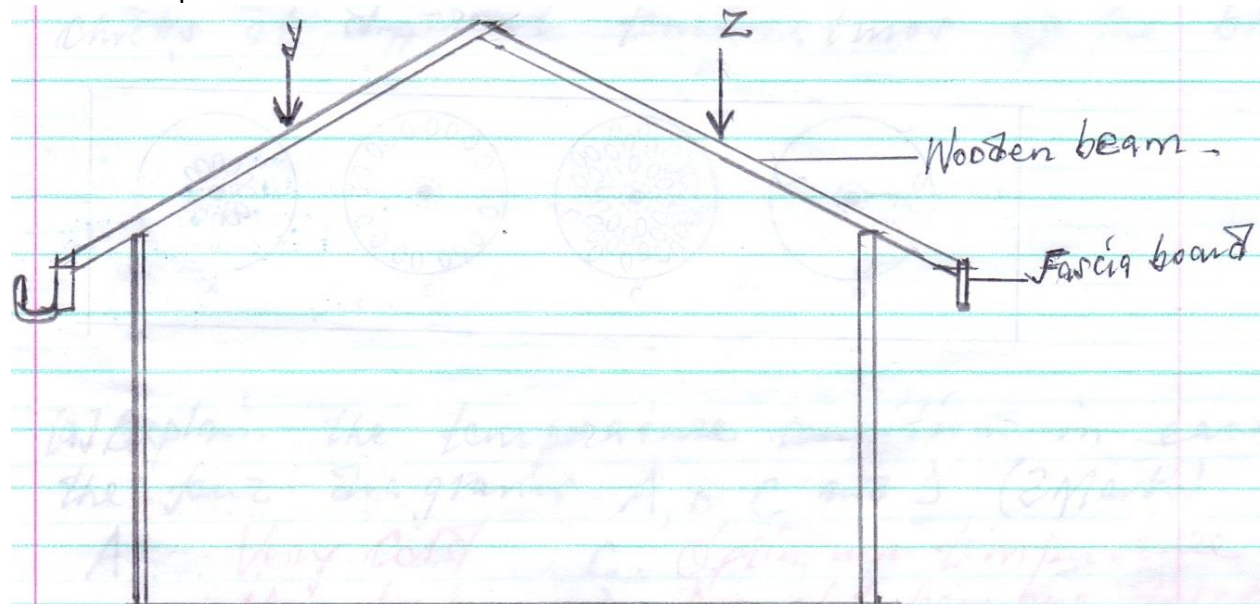
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23. Give three symptoms of milk fever in dairy cattle. [1.5marks]

.....
24. Give four reasons for steaming-up dairy animals. [2marks]

SECTION B [20MARKS]

Answer all questions in this section in the spaces provided .

25.The drawing below shows the cross-section of a house under construction. Study it carefully and answer questions that follow .

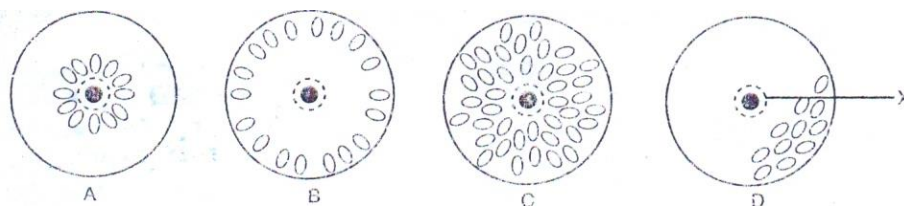


[a]Assuming that the wooden beams are strong enough to hold the roof load .What is the most likely thing to happen when the roof load exerted presses at point Y and Z .[1mark]

[b]On the diagram provided draw and label two constructional features you would add to this structure in order to make it more efficient.[2marks]

[c]State two importance of the fascia board in the farm building.[2marks]

26.The following illustration show the behavior of chicks at different temperatures of the brooder.



[a] Explain the temperature conditions in each of the four diagrams A ,B ,C ,and D.[2marks]

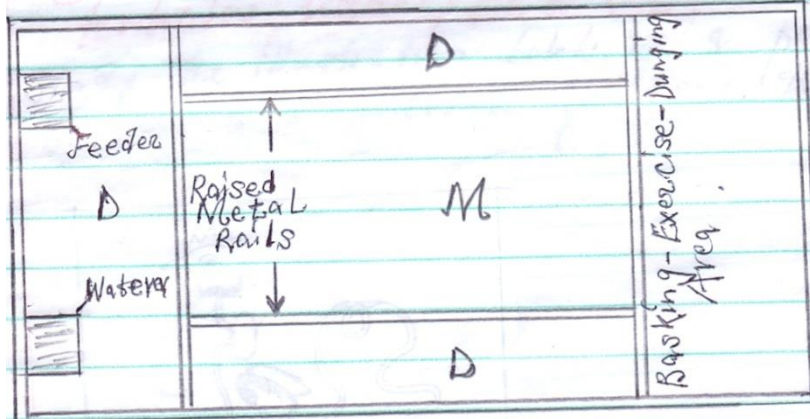
A.....B.....

C.....D.....

[b] Give one method of assessing temperature in the brooder.[1mark]

[c] Name two other behavioral observations on chicks when temperature is very high in the brooder.[2marks]

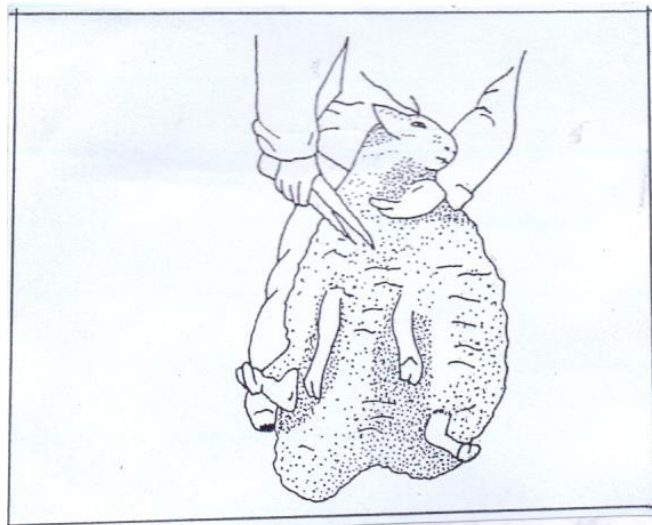
27. The illustration below shows a pig farrowing pen .Study it and answer questions that follow.



[a] What is the use of the raised metal rails.[1mark]

[b] Give two uses for the parts labeled D[2marks]

28. Below is an illustration representing a practice carried out in sheep. Study it and answer questions that follow.

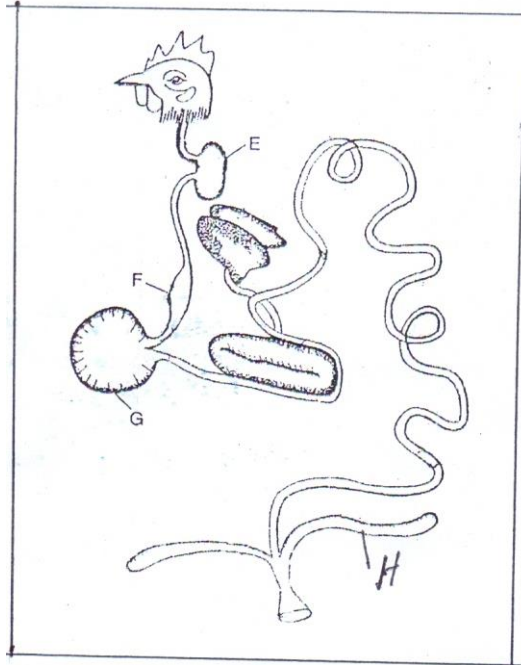


[a] Identify the practice illustrated above.[1mark]

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[b]State three precautions taken when carrying out the above practice.[3marks]

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29.Study the illustration below of a poultry digestive system and answer questions that follow.



[a]Give two functions of part E.[2marks]

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[b]State one function of part H.[1mark]

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SECTION C [40MARKS]

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

30.[a]Describe ten factors that are considered during the selection of a breeding stock.[10marks]

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[b]Describe five effects of parasites on livestock.[5marks]

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[c]Describe the mechanical control measures of ticks.[5marks]

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31.[a]Outline five reasons why bees swarm away.[5marks]

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[b]Discuss the preparations and practices that should be carried out on a pregnant sow 10 days before she far rows.[5marks]

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[c]Describe Gumboro disease under the following sub headings.
Causal organism [1mark]

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Livestock attacked [1mark]

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Symptoms of the disease [6marks]

.....
Control measures [2marks]

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32.[a]Explain five advantages of animal draught power.[5marks]

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[b]Discuss the importance of lubrication system in a tractor.[4marks]

[c]Explain six factors considered when selecting construction materials for farm structures
.[6marks]

[d]Give five qualities of a good calf pen.[5marks]

A series of approximately 40 horizontal dotted lines spanning the width of the page, intended for handwriting practice.