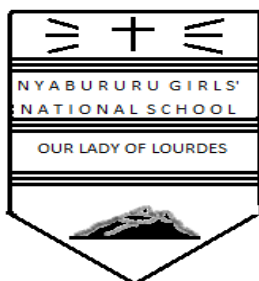


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DATE RETURNED.....
DATE REVISED.....

Kenya Certificate of Secondary Education

AGRICULTURE PAPER 443/2

PAPER 2

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided above.
- This paper consists of **THREE** sections: A , B and C
- Answer **ALL** the questions in sections A and B and any **TWO** questions in section C
- ALL answers **MUST** be written in the spaces provided.
- This paper consists of 8 printed pages.
- Candidates should check to ensure that all pages are printed as indicated and no question is missing

FOR EXAMINER'S USE ONLY

	Questions	Maximum score	Candidate's score
A	1 - 20	30 marks	
B	21 - 24	20 marks	
C	25 - 27	40 marks	
Total		90	

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SECTION A (30 MARKS)

Answer all the questions in this section in the spaces provided

1. State two practices that should be carried out on ewes in preparation for mating. (1mark)
2. Give two cultural uses of livestock (1mark)
3. Give two uses of the land wheel in an ox-drawn plough (1mark)
4. Give two reasons for candling incubated eggs. (1mark)
5. (a) What is the purpose of a sieve placed at the mouth of the inlet in a fishpond (1mark)

(b) Name the structure that allows passage of human beings across a fence but prevents livestock (1mark)
6. State two methods of identifying poor layers in a flock. (1mark)
7. State two conditions under which a farmer can only use ox-drawn implements and not tractor drawn implements (1mark)
8. State two roles of piston rings in an engine. (1mark)

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9. State two functions of a piglet creep area in a farrowing pen (1mark)
10. Name two cattle diseases whose outbreak calls for quarantine (1mark)
11. State the appropriate use of each of the following tools and equipment (1 ½ marks)
- (a) Center punch.
 - (b) Stirrup pump.
 - (c) Elastrator.
12. (a) Give two roles of litter in a deep litter poultry house. (1mark)
- (b) What is the use of a footbath in a poultry house (1mark)
13. (a) Give three reasons for docking in sheep management. (1 ½ marks)
- (b) State the most appropriate method of castration in pigs. (1mark)
14. Name two exotic dairy breeds of goats. (1mark)

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15. Give four components of a water cooling system in an engine. (2marks)

16. Give three qualities that make colostrum suitable for feeding a young calf (1 ½ marks)

17. State three uses of a rotavator. (1 ½ marks)

18. Name the livestock diseases caused by the following micro-organisms. (3marks)

(a) Clostridium chauvei.

(b) Irido virus.

(c) Salmonella gallinarum.

19. (a) What does the term 'digestibility of feed' mean? (1mark)

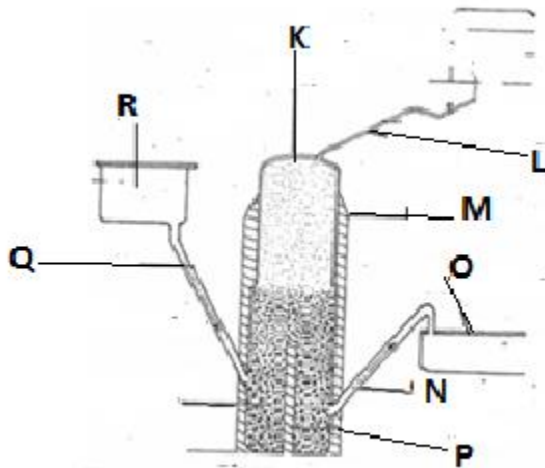
(b) State four factors that affect digestibility of a feed. (2marks)

20. State two types of concentrates in livestock nutrition. (1mark)

SECTION B (20 MARKS)

Answer all the questions in this section in the spaces provided

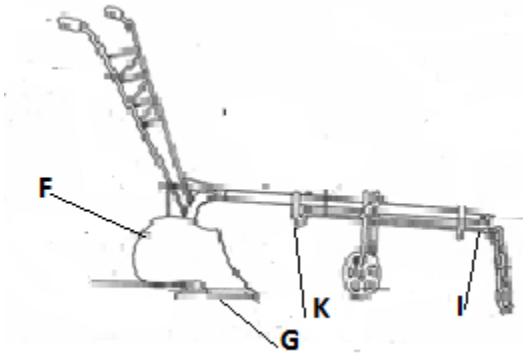
21. The illustration below is a biogas plant. Study it carefully and answer the questions that follow



- (a) Name the main raw material used in biogas production (1mark)
- (b) Name the parts labeled (4marks)
- K
L
M
N
O
P
Q
R
- (c) State two uses of biogas in the farm (1mark)
- (d) State two limitations of using biogas as a source of farm power (1mark)

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22. Below is an illustration of an ox-plough. Study it and answer the questions that follow



(i) Give the functions of the parts G and F (2marks)

G

F

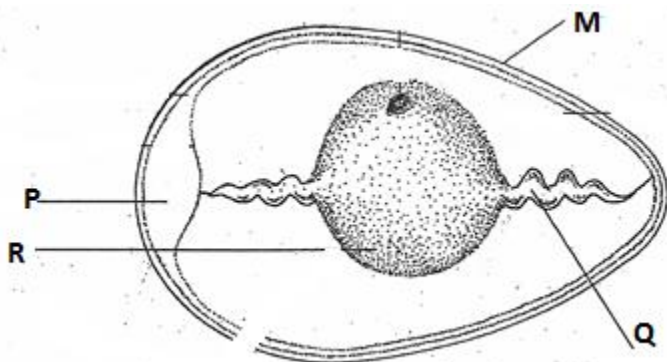
(ii) Name the parts labeled K and I (1mark)

K

I

(iii) Mark on the diagram using letters M and N the two parts used to adjust the depth of ploughing. (1mark)

23. The diagram below shows the internal structure of an egg. Use it to answer the that questions follow



(a) Name the parts labeled P and Q (1mark)

P

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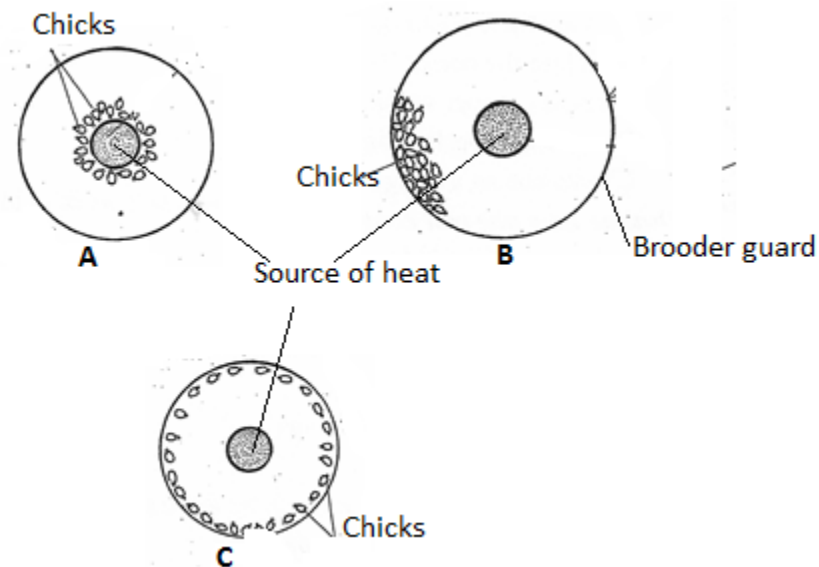
Q

(b) Give two defects that may be found on part M that make the egg unsuitable for incubation (1mark)

(c) State one role of the part labeled R (1mark)

(d) State how the egg is packed in a tray (1mark)

24. The diagrams below show the behavior of chicks in a brooder in response to heat



(a) Explain the behavior of the chicks in each case (3marks)

A

B

C

(b) Draw a diagram to show the behavior of the chicks if the temperature in the brooder is the correct one (1mark)

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(c) Explain why the brooder guard is rounded

(1mark)

SECTION C (40 MARKS)

Answer Only two questions in this section in the spaces provided

25. (a) Explain the factors that influence the work output of a draught animal (10marks)

(b) Describe artificial brooding of layer chicks from day old up to eight weeks. (10marks)

26. (a) Describe the prerequisites of clean milk production (10marks)

(b) Describe the factors that influence milk composition in a dairy cow (10marks)

27. Describe foot rot disease in sheep under the following sub-headings

(i) Causal organism (1mark)

(ii) Predisposing factors (3marks)

(iii) Symptoms of attack (6marks)

(iv) Control measures (5marks)

(b) Explain the importance of keeping livestock health (5marks)