

Name ..... Index Number .....

443/2  
 AGRICULTURE  
 Paper 2  
 (THEORY)  
 Nov. 2016  
 2 hours

Candidate's Signature .....

Date .....



**THE KENYA NATIONAL EXAMINATIONS COUNCIL**  
**Kenya Certificate of Secondary Education**  
 AGRICULTURE  
 Paper 2  
 (THEORY)  
 2 hours

**Instructions to candidates**

- Write your name and index number in the spaces provided above.
- Sign and write the date of the examination in the spaces provided above.
- This paper consists of **three** sections: **A**, **B** and **C**.
- Answer all the questions in section **A** and **B** and any **two** questions in section **C**.
- All answers should be written in the spaces provided on the question paper.
- This paper consists of **16** printed pages.
- Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
- Candidates should answer the questions in English.

**For Examiner's Use Only**

| Section            | Question | Maximum Score | Candidate's Score |
|--------------------|----------|---------------|-------------------|
| <b>A</b>           | 1-16     | 30            |                   |
| <b>B</b>           | 17-21    | 20            |                   |
| <b>C</b>           |          | 20            |                   |
|                    |          | 20            |                   |
| <b>Total Score</b> |          | <b>90</b>     |                   |



**SECTION A (30 marks)**

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

1. Name **four** rabbit breeds reared in Kenya. (2 marks)

.....

.....

.....

.....

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

- (a) disease (1 mark)

.....

.....

- (b) vaccination (1 mark)

.....

.....

3. State **four** advantages of artificial calf rearing in dairy cattle management. (2 marks)

.....

.....

.....

.....

4. List **four** materials that can be used in the construction of a Kenya Top Bar Hive. (2 marks)

.....

.....

.....

.....

5. Give **four** features of housing that help to control livestock diseases. (2 marks)

.....

.....

.....

.....

6. State **four** characteristics of the Duroc Jersey pig. (2 marks)

.....

.....

.....

.....

7. Give **four** characteristics of a good site for a fish pond. (2 marks)

.....

.....

.....

.....

8. Name **four** systems of a tractor engine. (2 marks)
- .....
- .....
- .....
- .....
9. What is dry cow therapy? (1 mark)
- .....
- .....
10. Give **two** reasons for steaming up in dairy cattle management. (2 marks)
- .....
- .....
- .....
- .....
11. State **four** maintenance practices for a disc plough. (2 marks)
- .....
- .....
- .....
- .....
12. List **four** preventive measures for livestock diseases. (2 marks)
- .....
- .....
- .....
- .....

13. Give **two** reasons for using litter in a poultry house. (1 mark)

.....

.....

.....

.....

14. State **four** disadvantages of fold system in poultry rearing. (2 marks)

.....

.....

.....

.....

15. State **four** practices that come immediately after complete milking in a milking shed. (2 marks)

.....

.....

.....

.....

16. List **four** tools that are used when laying concrete blocks during construction of a wall. (2 marks)

.....

.....

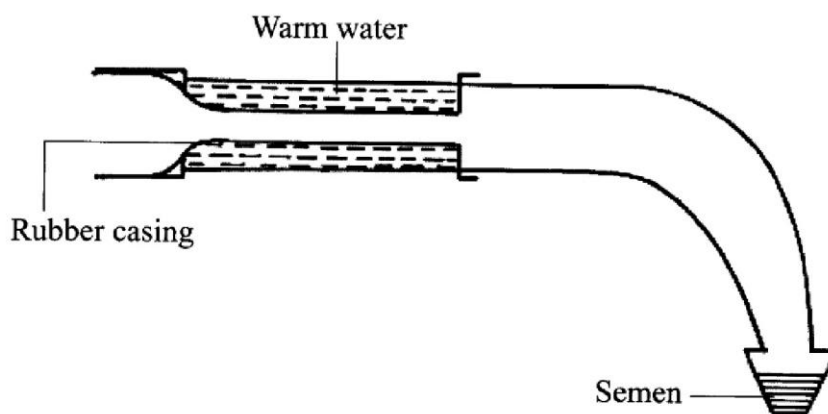
.....

.....

### SECTION B (20 marks)

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

17. Below is a diagram illustrating an instrument used in cattle breeding. Study it carefully and answer the questions that follow.



- (a) Identify the instrument. (1 mark)

.....

.....

- (b) State the role of the instrument in cattle breeding. (1 mark)

.....

.....

- (c) When should it be appropriate to serve a cow after onset of heat? (1 mark)

.....

.....

- (d) Apart from the method in which the above instrument is used, name **two** other methods of serving a cow. (2 marks)

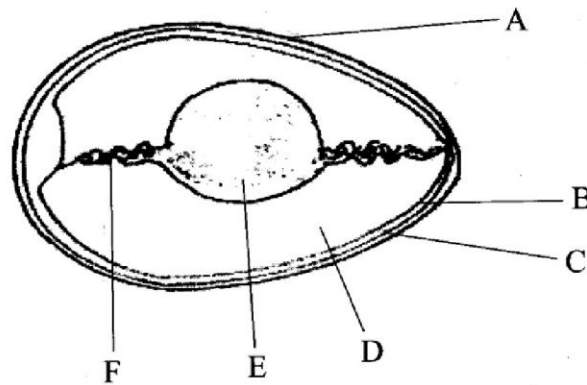
.....

.....

.....

.....

18. The diagram below is an illustration of an egg. Study it carefully and answer the questions that follow.



- (a) Name the parts labelled B, C, D and F

B ..... (½ mark)

C ..... (½ mark)

D ..... (½ mark)

F ..... (½ mark)

- (b) State **two** qualities of the part labelled A that should be considered when selecting eggs for incubation. (2 marks)

.....

.....

- (c) What is the function of the part labelled E in a fertilised egg? (1 mark)

.....

.....

19. The photograph below illustrates a method of identification labelled x in cattle. Study it carefully and answer the questions that follow.



- (a) Name the identification method. (1 mark)

.....

.....

- (b) Explain **three** disadvantages of the identification method. (3 marks)

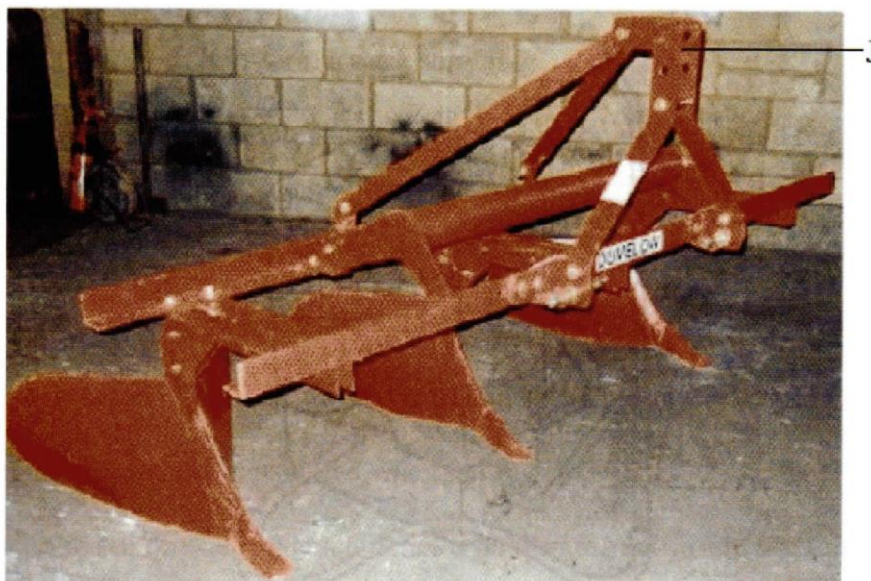
.....

.....

.....

.....

20. Below is a picture illustrating a farm implement. Study it carefully and answer the questions that follow.



- (a) Identify the implement illustrated above. (1 mark)

.....

.....

- (b) State the use of the:

- (i) Implement on the farm. (1 mark)

.....

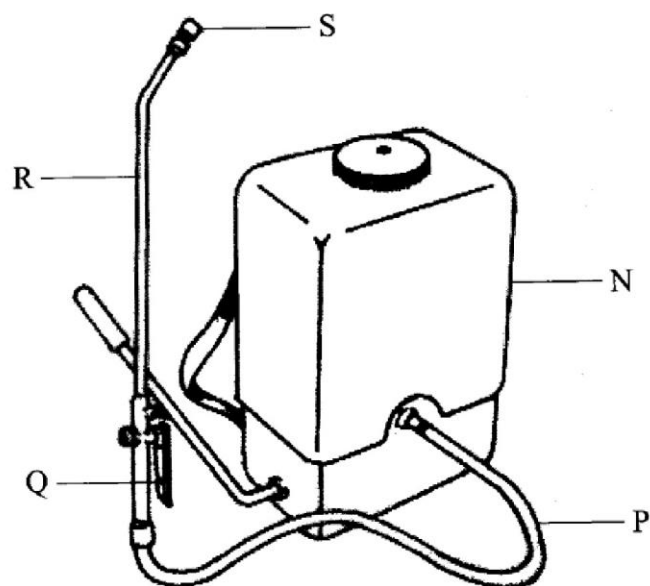
.....

- (ii) Part of the implement labelled J. (1 mark)

.....

.....

21. Below is a diagram of a knapsack sprayer. Study it carefully and answer the questions that follow.



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

N ..... (½ mark)

P ..... (½ mark)

Q ..... (½ mark)

R ..... (½ mark)

- (b) State **one** function of the part labelled S (1 mark)

.....

.....

Answer any **two** questions in this section in the spaces provided after question 24.

22. (a) (i) Describe short-term tractor servicing. (10 marks)
- (ii) Explain the maintenance practices that should be carried out on an ox-cart. (5 marks)
- (b) State **five** indicators that can be observed on a goat to confirm sickness. (5 marks)
23. (a) Describe the uses of fences on the farm. (10 marks)
- (b) Give **five** harmful effects of liver flukes in sheep rearing. (5 marks)
- (c) Explain the factors considered when culling livestock. (5 marks)
24. (a) Describe **ten** physical characteristics a poultry farmer would use to identify poor layers from a flock of hens. (10 marks)
- (b) (i) Outline **three** characteristics of clean milk. (3 marks)
- (ii) Explain **seven** factors that affect milk composition in dairy farming. (7 marks)

This image shows a full page of white paper with ten horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and extend across the entire width of the page. There is no text or other markings on the paper.