**Name: …………………………………………………………Index No: ……………………..……………**

Candidate’s Signature:……………………………….

Date: ……………….……………….…

**443/2**

**AGRICULTURE**

**PAPER 2**

**TIME: 2 HOURS**

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

**44//2**

**Agriculture 2**

**Paper 2**

**2 hours**

**INSTRUCTIONS TO CANDIDATES:**

* *Write your* ***name*** *and* ***index number*** *in the spaces provided.*
* ***Sign*** *and* ***write the date*** *of examination in the spaces provided*
* *This paper consists of three section* ***A,B*** *and* ***C***
* *Answer all questions in section* ***B*** *and* ***C***
* *Answer any two questions in section* ***C***
* *All the questions should answered in the spaces provided*

**FOR EXAMINERS USE ONLY**

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| --- | --- | --- | --- |
| **SECTION** | **QUESTIONS** | **MAX SCORE** | **CANDIDATES SCORE** |
| **A** | **1-16** | **30** |  |
| **B** | **17-20** | **20** |  |
| **C****TOTAL** | **21-23** | **20** |  |
| **20** |  |
| **90** |  |

*This paper consists of 8 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.*

**SECTION A. (30 MARKS)**

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

1. Name a breed of pig which has the following characteristics: black body with a white patch in the

 shoulders. (1 mark)

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2. State **four** aims of livestock breeding. (2 marks)

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3. State **four** ways of controlling tsetse flies (2 marks)

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4. Identify **three** different ways by which farmers can apply accaricides when controlling ticks in

 livestock. (1 ½ mks)

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5. a) What name is given where hind legs comes out first during parturition. (1 mk)

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 b) Give **four** factors that would affect digestibility of food in livestock. (2mks)

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6. Differentiate between prepotency and prolificacy as used in selection of breeding stock (2marks)

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7. List **four** routes through which pathogens can enter the body of an animal (2 marks)

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8. Name **four** causes of pecking and cannibalism (2 marks)

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9. State the use of the following plumbing tools (2 marks)

 a. Stock and die

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 b. Pipe wrench

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10. Name **two** functions of the crop in the digestive system of chicken. (1mark)

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11. State how the following practices can be used to control livestock diseases

 (a) Quarantine (1 mark)

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 (b) Prophylactic measures (1 mark)

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12. List the **three** methods that dairy farmers can use in out breeding. (1 ½ mks)

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13. Identify **four** different ways by which vaccines can be administered to farm livestock. (2mks)

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14. State **two** reasons why proper nutrition is important in animal’s health. (2 marks)

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15. Why are die following conditions maintained during artificial incubation of eggs in poultry

 Production. (2 marks)

 (a) Proper ventilation

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 (b) Relative humidity at 60%

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16. List any **four** farm structures that are necessary for holding dairy animals. (2 marks)

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**SECTION B. (20 MARKS)**

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

17. The illustration below shows the major parts of a tractor ignition system. Study it carefully and answer the questions that follow.



a) What are the functions of the parts of the system labeled 1, 2, and 3? (3mks)

1 ……………………………………………………….………………………………………………………….

2 ……………………………………………………….………………………………………………………….

3 ……………………………………………………….………………………………………………………….

c) State the maintenance practices that should be carried out on the ignition system of a tractor. (3mks)

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18. The diagram below shows a plunge dip.



(a) State **one** use of each of the parts of the dip labeled J, K and L (3 marks)

 J………………………………………………………………………………………

 K……………………………………………………………………………………..

 L ……………………………………………………………………………………..

(b) State **two** precautions a farmer should take on the dip wash to ensure effective dipping. (2marks)

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(c) State **two** uses of the roof of the dip. (1 mark)

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19. You are provided with the following feed stuffs.

 • Maize meal

 • Blood meal

 Assume that maize meal contains 8% crude protein and blood meal contains 28% crude protein. Calculate the quantity of maize meal and blood meal that should be mixed to make 200kg of feed

 containing 16% crude protein. Use Pearson square method. (4 marks)

20. Outline **four** structural requirements of a deep litter house (4 marks)

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**SECTION C. (40 MARKS)**

***Answer only TWO questions from this section in the spaces provided after question 21.***

21. a) Explain the factors considered when selecting materials for constructing a calf pen. (10marks)

 b) Describe the general methods of controlling livestock diseases. (10 marks)

22. a) Describe the uses of farm fences. (l0mks)

 b) State and explain **six** methods of controlling internal parasites in livestock (6marks)

 (c) State **four** disadvantages of natural mating as a method of breeding in dairy cattle production

 (4 mks)

23. (a) Outline **ten** daily maintenance practices that should be carried out on a farm tractor. (10 marks)

 (b) Describe the body conformation features of beef cattle (4 marks)

 (c) Outline **six** causes of stress to a flock of layers. (6 marks)

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