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

**School.: …………………………………………………………. Candidate’s Sign:……………………...**

**Date:…..……………..…………………………….........................**

**443/2**

**AGRICULTURE**

**PAPER 2**

**JULY/AUGUST - 2015**

**TIME: 2 HOURS**

**TRANS-NZOIA COUNTY JOINT EVALUATION EXAM – 2015**

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

**AGRICULTURE**

**PAPER 2**

**2 HOURS**

**INSTRUCTIONS TO THE CANDIDATES**

* Write your ***name, index number,*** and ***school*** 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*** questions in section ***A*** and ***B***.
* All answers should be written in spaces provided

 **For Examiner’s Use Only:-**

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **QUESTION** | **MAXIMUM SCORE** | **CANDIDATE’S SCORE** |
|  A |  1 – 18 |  30 |  |
|  B |  19 – 22 |  20 |  |
|  C | 23 – 25 |  20 |  |
|  |  20 |  |
|  | **Total Score** |  **90** |  |

*This paper consists of 8 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 the questions in this section in the spaces provided.***

**1.** State **four** practices that should be carried out on wooden fencing post to make them last. (2 mks)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii) ……………………………………………………………………………………………………...

 (iv) ……………………………………………………………………………………………………...

**2.** Give **two** harmful effects of kids *(melophagus orinus)* in sheep. (1 mk)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

**3.** State **four** construction features necessary in a fish pond. (2 mks)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii) ……………………………………………………………………………………………………...

 (iv) ……………………………………………………………………………………………………...

**4.** List **two** appropriate hand tools needed to finish off the handle of a fork jembe. (1 mk)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

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

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii) ……………………………………………………………………………………………………...

 (iv) ……………………………………………………………………………………………………...

**6.** Name **two** functions of the crop in the digestive system of chicken. (1 mk)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

**7.** State **two** reasons why proper nutrition is important in animals’ health. (2 mks) (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

**8.** Give **four** functions of vitamins in livestock production. (2 mks)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii) ……………………………………………………………………………………………………...

 (iv) ……………………………………………………………………………………………………...

**9.** Give **three** reasons why honey harvesting should be discouraged at night. (1½ mks)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii) ……………………………………………………………………………………………………...

**10.** (a) Name the causal organism of fowl typhoid. (1 mk)

 …………………………………………………………………………………………………………..

 (b) List **three** signs on a carcass which shows that an animal died of Anthrax. (1 ½ mks)

 ………………………………………………………………………………………………………

 ……………………………………………………………………………………………………..

**11.** Differentiate between cropping and harvesting in fish farming. (1 mk)

 …………………………………………………………………………………………………………

 …………………………………………………………………………………………………………..

**12.** Give **four** characteristics of a good site for a bee hive. (2 mks)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii) ……………………………………………………………………………………………………...

 (iv) ……………………………………………………………………………………………………...

**13.** Distinguish between inbreeding and line breeding as used in livestock production. (2 mks)

 …………………………………………………………………………………………………………

 …………………………………………………………………………………………………………..

**14.** State **two** maintenance requirements of a jack plane. (1 mk)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

**15**. (a) Give **two** features of a good laying nest. (1 mk)

 …………………………………………………………………………………………………………

 …………………………………………………………………………………………………………

 (b) State **two** reasons why a young calf should feed on colostrum during first few days. (1 mk)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

**16.** State **two** reasons why calcium and phosphorus are important in the diet of young livestock. (1mk)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

**17.** State **four** factors that determine the depth and size of a foundation in a farm building. (1 ½ mks)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii) ……………………………………………………………………………………………………...

 (iv) ……………………………………………………………………………………………………

**18.** State **four** abnormalities of eggs that can be detected during egg candling. (2mks)

 (i)………………………………………………………………………………………………………..

 (ii) ………………………………………………………………………………………………………

 (iii)………………………………………………………………………………………………………

 (iv)………………………………………………………………………………………………………

 **SECTION B (20 MARKS)**

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

**19.** The diagram below shows the petrol fuel system of a tractor engine. Study it carefully and answer

 the questions that follow:



**D**

**Engine block**

**Exhaust pipe**

**Primary filter**

**Fuel tank**

**Throtile valve**

**C**

**A**

**B**

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

A …………………………………………………………………….

B………………………………………………………………………

C ……………………………………………………………………….

D ……………………………………………………………….............

1. State the functions of the parts labeled A, C, and D. (3 mks)

A ……………………………………………………………………………………………………

C ……………………………………………………………………………………………………

D ……………………………………………………………………………………………………

**20.** The diagram below illustrates a breeding management practices

1. Identify the practice. (1 mk)

………………………………………………………………………………………………………

1. Give **two** reasons for carrying out this practice. (2 mks)

(i)……………………………………………………………………………………………………

(ii) …………………………………………………………………………………………………..

1. State **two** causes of infertility in farm animals. (2 mks)

(i)……………………………………………………………………………………………………

(ii) …………………………………………………………………………………………………..

**21.** The diagram below illustrates a method of identification in livestock production. Study the diagram

 and answer the questions that follow:



**5**

**5**

**2**

**2**

**3**

**3**

1. Name the type of identification illustrated in the diagram. (1 mk)

………………………………………………………………………………………………………

1. Give the identification number of the animal illustrated in the diagram. (1 mk)

………………………………………………………………………………………………………

1. Using the diagram, illustrate how you can identify animal numbers 24 and 36 using the method above (draw and label). (2 mks)

 24 36

**22.** Below are illustrations of farm tools.

1. Identify the farm tools labelled **E, F, G** and **H**. (2 mks)

**E** …………………………………………………………

**F** …………………………………………………………

**G** …………………………………………………….......

**H** …………………………………………………………

1. State the use of tools labelled **E, F** and **G** (3 mks)

**E** ………………………………………………………………………………………………….

**F** …………………………………………………………………………………………………….

**G** ……………………………………………………………………………………………………

1. Give **one** maintenance practice of the tool labelled **F**. (1 mk)

………………………………………………………………………………………………………

**SECTION C: (40 MARKS)**

 ***Answer any two questions from this section on the spaces provided.***

**23.** (a) Describe **ten** components of a plunge dip for cattle. (10 mks)

 (b) Give **four** predisposing factors of foot rot in sheep. (4 mks)

 (c) State and explain **six** methods of controlling internal parasites in livestock. (6 mks)

**24.** (a) Describe mastitis under the following sub-headings.

 (i) Animals affected (2 mks)

 (ii) Pre-disposing factors (4 mks)

 (iii) Symptoms of attack (4 mks)

 (b) Describe the preparation done before farrowing in pigs. (10 mks)

**25.** (a) Describe hand milking in a diary cow. (11 mks)

 (b) Describe body conformation features of beef cattle. (4 mks)

 (c) Describe **five** factors which affect quantity of honey. (5 mks)

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