**Name: ………………………………………………………………...…Index No: ……………………..……………….… School ……………………………………………….............………………Candidate’s Signature:……………………...**

**Date: ……………….……………….……**

**443/2**

**AGRICULTURE**

**PAPER 2**

**TIME: 2 HOURS**

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

**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 the questions in section* ***A*** *and* ***B***
* *Answer any* ***two*** *questions in section* ***C***
* *All the questions should answered in the spaces provided*
* ***This paper consists of 9 printed pages.***
* ***Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.***

**FOR EXAMINER’S USE ONLY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Questions** | **Max score** | **Candidates score** |
| **A** | **1-17** | **30** |  |
| **B** | **18-21** | **20** |  |
| **C** | **22** | **20** |  |
| **23** | **20** |  |
| **24** | **20** |  |
| **Total** |  |  |

1. Mention any **two** examples of meat goats in Kenya (1mark)

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1. Differentiate between
2. Gestation period and incubation (1mark)

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1. Kid and kindling (1mark)

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1. State **three** factors that affect digestibility of a feeds in dairy animals (1 ½ marks)

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1. State **three** factors to consider when selecting eggs for sale (1 ½ marks)

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1. Give **four** factors that may cause infertility in dairy cows. (2marks)

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1. Differentiate between out crossing and cross breeding as used in livestock production. (2marks)

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1. State **three** reasons for weighing livestock at weaning stage (1 ½marks)

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1. State **four**  functions of vitamins (2marks)

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1. State **two** advantages of using wood as a construction material (2marks)

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1. Mention **four**  safety precautionary measures when using electric power in the farm (2marks)

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1. Give **two** functions of queen bee in a colony. (1mark)

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1. Give **two** uses of footpath in a plunge dip (2marks)

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1. Outline **four** signs of heat in sows. (2marks)

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1. State **two** disadvantages of using hurricane lamps and lanterns as providers of heat in a brooder (2marks)

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1. Give **four** ways of stimulating milk let down in a dairy cow. (2marks)

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1. State **two** reasons for raddling in sheep management. (2marks)

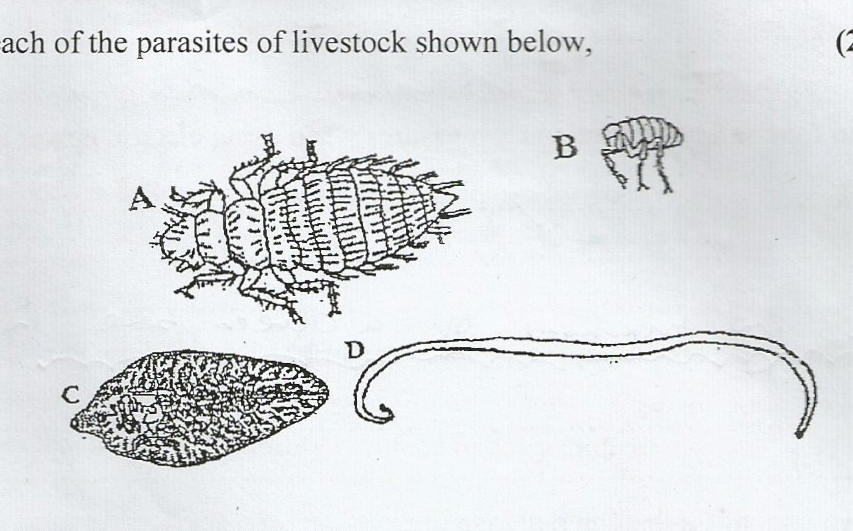
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1. State the uses of the following tools and equipments (1 ½ marks)
2. Chipping harmer
3. Tin snip
4. Router

**SECTION B (20MARKS)**

***Answer all the question in this section in the spaces provided***

1. (a) Identify each of the parasites of livestock shown below. (2marks)



**A**……………………………………………………………………………………………………………

**B**……………………………………………………………………………………………………………

**C**……………………………………………………………………………………………………………

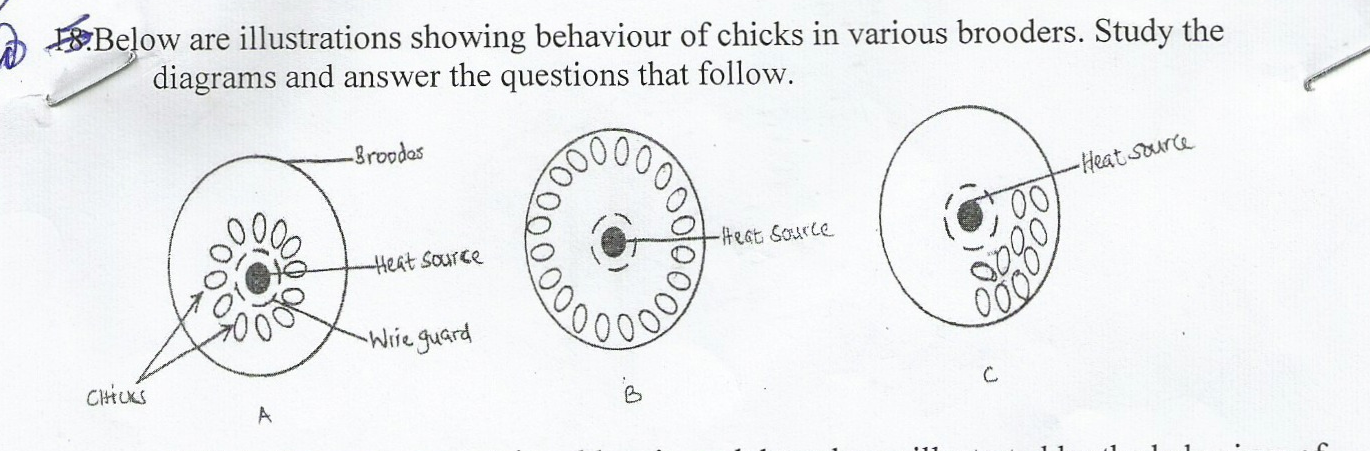
**D**……………………………………………………………………………………………………………

(b) What is the difference between parasites **A** and **B** and parasites **C** and **D**? (1mark)

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(c ) Suggest an effective control measure of the parasites labelled **C**  (1mark)

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1. Below are illustrations showing the behavior of chicks in various brooders. Study the diagrams and answer the questions that follow.
2. State the environmental problem in each brooder as illustrated by the behavior of the chicks (3marks)

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

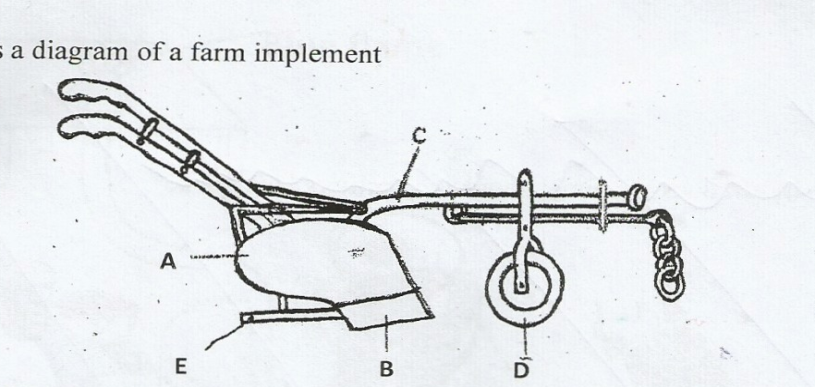
B………………………………………………………………………………………………………

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

1. State **two** ways of overcoming the problem in **B** (2marks)

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1. Below is a diagram of a farm implement



1. Identify the implement

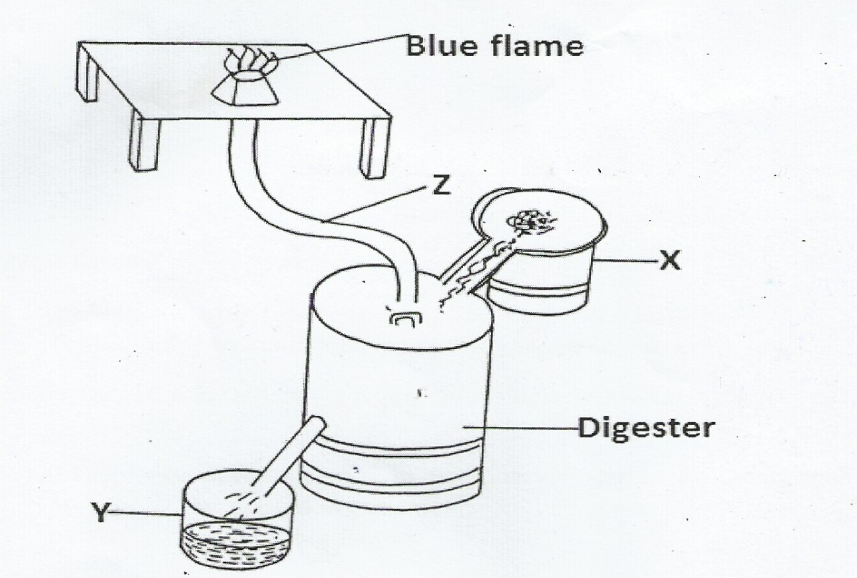
(½ mark)

(b) Label the parts marked **A, B, C, D** and **E**. (2 ½ marks)

**A**……………………………………………….…….……………………………………………………  
**B**…………………………………………………….…………………………………………………….  
**C**……………………………………………………….………………………………………………….  
**D**……………………………………………………………..……………………………………………  
**E**………………………………………………………………………………………………………….

(c ) state the functions of the parts labelled **C** and **E** (2marks)

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1. The diagram below is a biogas digester
2. Name the parts labelled **X** and **Z** (1mark)

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1. Name **two** inputs periodically channeled through **X** (2marks)

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1. Name the use to which material **Y** is put (1mark)

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1. Name **two** uses of biogas on the farm. (1mark)

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**SECTION C (40MARKS)**

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

1. (a) Discuss the importance of keeping livestock healthy. (8marks)

(b) State the daily maintenance and servicing of a tractor (10marks)

(c) Explain **two** maintenance practices carried out in a fish pond (2marks)

1. (a) Describe the structural requirement to be considered when constructing a calf pen (10marks)

(b) Describe mastitis disease in dairy cattle under the following sub headings

(i) **Two** causal organisms (2marks)

(ii) Predisposing factors (8marks)

1. (a) Explain the factors to consider while sitting farm structure (10marks)

(b) Describe the process of training a calf to drink milk from a bucket (4marks)

(c) Explain **three** methods of acaricide application (6marks)

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