**Name** ………………………………..…… **Index No**. …….……………/…… **Class** ……….…...

 **Candidate’s Signature** …….…….…………

 **Date** ………..…………..

**Kenya Certificate of Secondary Education**

**Mock Examinations, 2013**

**443/2**

**Agriculture**

**(Paper 2)**

**July, 2013**

2 hours

*Write your name, index number and class 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*** *the questions in sections* ***A*** *and* ***B****, in the spaces provided.*

*Answer* ***ANY TWO*** *questions in section* ***C*** *in the foolscaps provided.*

**For Examiner’s Use Only**

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| --- | --- | --- | --- |
| **Section** | **Question** | **Maximum Score** | **Candidate’s****Score** |
| **A** |  **1 - 19** | **30** |  |
| **B** |  **20 - 24** | **20** |  |
| **C** |  | **20** |  |
|  | **20** |  |
| **Total Score** | **90** |  |

**This paper consists of 14 printed pages.**

**Candidates should check the question paper to ascertain that all**

**the pages are printed as indicated and no questions are missing.**

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**Section A (30 marks)**

***Answer ALL questions in this section in the spaces provided***

1. Give the gestation and lactation periods in camels **(1 mark)**

**Gestation** ………………………………………………………………………….…………

**Lactation** ………………………………………………………………………….…………

1. Name **one** species of fresh, warm water fish reared in Kenya **(½ marks)**

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

1. What is meant by lambing percentage? **(1 mark)**

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

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1. **(a)** How long is the oestrous cycle in cattle? **(½ mark)**

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

**(b)** How long is oestrous in cattle? **(½ mark)**

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

1. State **three** indicators of respiratory tract infection in livestock **(1½ mark)**

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1. List **four** non-chemical tick control measures **(2 marks)**

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1. Name **one** poisonous / anti-nutritional chemical compound found in each of the following livestock feedstuffs **(1½ marks)**

1. Cassava roots …………………………………………………………………………………….
2. Groundnut seeds …………………………………………………………………………………….

1. Cotton seed cake …………………………………………………………………………………….
2. State **four** reasons for constructing a fish pond on gently-sloping land **(2 marks)**

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1. Give **one** functional difference between a tape measure and a garden line **(1 mark)**

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1. Name **three** livestock diseases associated with deficiency of calcium **(1½ marks)**

………………………………………………………, ……………………………………………………….

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1. Differentiate between mothering ability and prolificacy as used in livestock breeding

**(1 mark)**

Mothering ability …………………………………………………………………………………………..

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

Prolificacy ……………………………………………………………………………………………….…..

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1. State **two** reasons for applying oil and grease on a mower **(1 mark)**

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1. What is meant by providing a feedstuff, to an animal, *ad libitum*? **(1 mark)**

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1. State **three** limitations of embryo transfer technology **(1½ marks)**

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1. Give **three** reasons why calves should be fed on colostrum **(1½ marks)**

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1. Define each of the following, as used with reference to livestock
2. Quarantine **(1 mark)**

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

1. Predisposing factor **(1 mark)**

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

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1. How can a farmer improve each of the following?

1. Hardness of egg shells **(½ mark)**

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

1. Yellowness of the egg yolk **(½ mark)**

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

1. State **four** disadvantages of natural mating as a method of breeding in dairy cattle

**(2 marks)**

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1. Shown below are diagrams of livestock parasites. Study the diagrams carefully an answer the questions that follow

**  **

 **P1 P2 P3**

1. Identify each of the parasites shown **(1½ marks)**

**P1** …………………………………………………………………

**P2** …………………………………………………………………

**P3** …………………………………………………………………

1. **(i)** Name the disease transmitted by the parasite labelled **P1** to **(1 mark)**

**Man** …………………………………………………………………………………………..

**Livestock** ……………………………………..………………………………………………

1. Give **three** control measures of the parasite labelled **P1 (1½ marks)**

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1. State **three** effects of the parasite labelled **C** on livestock infested by this parasite

**(1½ marks)**

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1. What is the general name of the chemicals used to control the parasite labelled **P3**?

**(½ mark)**

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

**Section B (20 marks)**

***Answer ALL questions in this section in the spaces provided***

1. Shown below are diagrams of farm tools/ equipment. Study the diagrams carefully and then answer the questions that follow

**T1 T2**

**T3 T4**

1. Name each of the tools/ equipment labelled **T1**, **T2**, **T3** and **T4** above **(2 marks)**

**T1** ……………………………………………….. **T2** ………………………………………………..

**T3** ……………………………………………….. **T4** ………………………………………………..

1. Distinguish between the uses of the tools labelled **T3** and **T4** **(1 mark)**

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

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

1. **(a)** Name each of the parts labelled **A**, **B**, **C** and **D** on the image of a Zebu animal shown below

(on page **7**) **(2 marks)**

**A** ……………………………………………….. **B** ………………………………………………..

**C** ……………………………………………….. **D** ………………………………………………..

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1. **(i)** Using letter **B**, mark **three** areas most suitable for branding / inscribing marks,

 numbers, letters on – the bull **(11/2 marks)**

1. Give **one** reason for your answer in **(a)** above **(1/2 mark)**

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1. Name **two** equipment used for branding **(1 mark)**

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1. Illustrated below is the digestive system of a rabbit



On the illustration, name each of the parts labelled **A1**, **A2**, **A3**, **A4** and **A5** **(21/2 marks)**

1. **(a)** Shown below (on page **8**) is a section through the mammary gland of a cow. Study the

section carefully and then answer the questions that follow

1. Onthe diagram,name each of the parts labelled **K1**, **K2**, **K3**, **K4**, **K5**, **K6**, **K7** and **K8**

**(4 marks)**

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1. Indicate **one** letter representing the part responsible for lactogenesis **(½ mark)**

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

1. Lactogenesis is controlled by a hormone called ………………………….……………… which is secreted by the pituitary gland **(1 mark)**
2. Shown below is a diagram of a farm implement. Study the diagram carefully and answer the questions that follow

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1. Identify the farm implement above **(½ mark)**

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

1. Give **one** function of each of the parts labelled **N** and **S** **(2 marks)**

**N** …………………………………………………………………………………………………………

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

**S** …………………………………………………………………………………………………………

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

1. State **one** function of the part labelled **P (½ mark)**

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

1. Name each of the parts labelled **L**, **M**, **Q** and **R** **(2 marks)**

**L** ……………………………………………….. **M** ………………………………………………..

**Q** ……………………………………………….. **R** ………………………………………………..

**Section C (40 marks)**

***Answer ANY TWO questions in this section in the spaces provided after question***

1. **(a)** Outlinethecauses of stress in a flock of laying birds **(10 marks)**

**(b)** Discuss the maintenance requirements of the battery of a tractor **(10 marks)**

1. **(a)** Outline thequalities of clean milk **(8 marks)**

**(b)** Outline the variouspractices carried out to produce milk with the qualities outlined in **(a)(i)**

 above **(12 marks)**

1. Describe the component parts of a plunge dip for cattle **(20 marks)**

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