**NAME………………………………………………………………………………………CLASS……………INDEX NO.………….. CANDIDATES SIGNATURE………………………………… DATE……………………………………………………………..**

**AGRICULTURE**

**PAPER 2**

**444/2**

**TIME 2 HOURS**

**FORM 4**

**INSTRUCTIONS TO CANDIDATES:**

* Write your name and index number 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**.
* Answer two questions in Section **C** in the spaces provided.

 **FOR EXAMINER’S USE ONLY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Question** | **Maximum****Score** | **Candidate’s****Score** |
| **A** | **1 - 22** | **30** |  |
| **B** | **23 - 26** | **20** |  |
| **C** | **27 - 29** | **20** |  |
|  | **20** |  |
| **Total Score** | **90** |  |

**SECTION A (30 MARKS)**

**Answer all questions in this section.**

**1.** Name **two** methods of identification of livestock that do cause pain to the animal. **(1 mark)**

**………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………**

**2.** Mention **two** ways in which the gizzard is adapted to its function**. (1 mark)**

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**3.** Name **four** main dairy breeds of goats reared in Kenya**. ( 2 marks)**

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**…………………………………………………………………………………………………………**

 **4.** Name **four** farm implements taken to obtain power from the power take off shaft. (PTO) of a tractor. **(2 marks)**

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**…………………………………………………………………………………………………………**

**5.** State **three** reasons for castrating a billy goat. **(1 ½ marks)**

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**6.** State **four** desirable qualities of whole milk. **(2 marks)**

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**…………………………………………………………………………………………………………**

**7.** Differentiate the following terms as used in livestock management;

 Mothering ability and prolificacy **(1 mark)**

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**…………………………………………………………………………………………………………**

 Flushing and steaming up **(1 mark)**

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**…………………………………………………………………………………………………………**

**8.** State the function of the following parts of a moldboard plough. **(2 marks)**

 Shear

 Landside

**9.** Give **one** main reason for withering lucerne (Medicagosative) before feeding to livestock.

 **(1/2mark)**

**……………………………………………………………………………………………………………………………………………………………………………………………………………………**

**10.** Give **four** disadvantages of natural mating in a dairy cow. **(1 ½ marks)**

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**11.** State **four** qualities of a good honey. **(1 ½ marks)**

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**12.** Name **two** examples of the harvesting machines commonly used the farm. **(1 mark)**

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**13.** Give **two** disadvantages of using thatch as a roofing material. **(1 mark)**

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**…………………………………………………………………………………………………………**

**14.** Give **three** reasons of spreading a polythene paper ( PVC) on the slab of a permanent. **( 1 ½ marks)**

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**15.** State **two** functions of a footbath in a plunge cattle dip. **(1 mark)**

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**16.** State **three** reasons for debeaking birds in poultry . **(1 ½ marks)**

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**17.** Give **four** reasons for raising rabbits hatch above the general level. **(1 mark)**

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**18.** State the use of a stir up pump. **(½ mark)**

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**19.** List **two** additives in livestock nutrition. **(1 mark)**

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**20.** State the function of the guard rails in a farrowing pen. **(1 mark)**

**………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………**

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**21.** State **two** reasons why air is undesirable in the process of making silage.

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**22.** Give **four** reasons for culling a breeding boar.  **(2 marks)**

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**SECTION B (20 MARKS)**

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

**23**. Study the diagram of a biogas plant below and answer the questions that follow.

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 **(a)** Name the main component of biogas that is trapped in the part labeled L. **(1 mark)**

**………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………**

 **(b)** Give the name and use of the materials deposited in the part labeled M **(1 mark)**

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 **(c)** State **three** uses of biogas on the farm **(3 marks)**

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**24.** The diagram below shows some management practices done in farm animals study it and answer

 the questions that follow.



1. **(i)** What operation is usually carried out on the part labeled A during a sheep’s early stages

of life? **(1 mark)**

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 **(ii)** Why is it necessary to carry out the operation in (i) above? **(1 mark)**

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 **(iii)** At what stage of sheep should the operation in (i) above be carried out? **(1 mark)**

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 **(iv)** Give **two** methods of carrying out the operation in (i) above. **(1 mark**)

**………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………**

 **(b**) **(i)** Which operation is usually carried out on part labeled B. **(1 mark)**

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  **(ii)** What problem would occur if the operation in (bi)) above is not carried out? **(1mark)**

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 **(c)** What practice is done on the ram in the part labeled C to control breeding **. (1 mark)**

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**25**. The diagram below shows a type of a farm gate. Study the diagram and answer the questions that

 follow.



 **(a)** Identify the type of gate shown **(1 mark)**

**……………………………………………………………………………………………………………………………………………………………………………………………………………………** **(b)** Name the parts labeled C, D and E. **(3 marks)**

 C

 D

 E

 **(c)** **(i)** State **one** function of the part labeled F. **(1 mark)**

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 **(ii)** State **two** functions of the gate illustrated above. **(2 marks)**

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**26.** The illustration below shows a life cycle of an internal parasite.

 **(a)** Identify the parasite **(1/2 mark)**

**…………………………………………………………………………………………………………**

  **(b)** Give **one** forms in which the parasite is found in livestock. (**1/2 mark)**

**…………………………………………………………………………………………………………**

  **(c)** Name the intermediate host of the above parasite. **(½ mark)**

**…………………………………………………………………………………………………………**

 **(d)** State **one** way through which the above parasite can be passed to man. **(1 mark)**

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**SECTION C (40 marks).**

**Answer two TWO questions from this section**.

**27. (a)** Describe the procedure of wool shearing in sheep. **(10marks)**

 **(b)** Stating the practices explain ten appropriate methods of handling livestock **(10 marks)**

**28.** **(a)** Explain **five** factors that influence the choice of building materials. **(5 marks)**

 **(b)** Describe the Procedure of bull castration using burdizzor.  **(5 marks)**

 **(c)** Describe ten management practices carried out on cattle during parturition. **(10 marks)**

**29**. Describe the rearing of one day old chicks from the day they arrive on the farm to the point of

 laying. **(20 marks)**

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