**NAME………………………………ADMNO.……………SIGNATURE………………..DATE………….**

**AGRICULTURE**

**PAPER 2**

**444/2**

**TIME 2 HOURS**

**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 - 13** | **30** |  |
| **B** | **14 - 20** | **20** |  |
| **C** | **21 - 23** | **20** |  |
|  | **20** |  |
| **Total Score** | | **90** |  |

**SECTION A (30 MARKS)**

**Answer all questions in this section**

**1.** Differentiate the following terms

**i)** A ram and a ewe. **(1 mark)**

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**ii)** Quarantine and prophylaxis **(1 mark)**

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**iii)**Mortality rate and incubation period. **(1 mark)**

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**2.**Give **two** reasons for steaming up in dairy cattle management **(1 mark)**

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**3.**State the parturition period of the following animals kept in the farm. **(2 marks)**

Cow- …………………………………………………………………

Goat-………………………………………………………………….

Rabbit-………………………………………………………………..

Sow-…………………………………………………………………..

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

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**b)**State **two** methods of carbonization in cocks.  **(1 mark)**

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**5. a)**State **four** signs of infestation by external parasites in livestock? **(2marks)**

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**b)** Name **four** insect parasites in livestock. **(2 marks)**

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**c)** Name **four** vector borne diseases in livestock. **(2 marks)**

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**6.** Give **two** qualities of creep feed that makes it suitable for piglets. **(2 marks)**

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**7.**State **two** main types of roughages for livestock. **(1 mark)**

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

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**9.** State the functions of the following parts of a fish pond.  **(3 marks)**

Spillway- Spillway-

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

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

Out let-

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

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

Inlet – allows water in the fish pond

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

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

Out let-

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

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**10.**A student from Pavement academy saw a brown cow with a white patch on the face, on the legs part below the knees, below the tail switch and flank. Identify the breed of the cow. **(1 mark)**

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**11.** State **four** structural requirements of a deep litter. **(2marks)**

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**12.** **a)**State **four** symptoms of anthrax infection in the carcass of a cow. **(2 marks)**

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**b)** What is meant by providing a feedstuff ad libitum. **(1 mark)**

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

**c)** Factors that enable ruminants to break down fibrous feed material. **(1½ marks)**

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**13.**Give **two** reasons for treating timber to be used in construction of farm buildings **(1 mark)**

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**SECTION B (20 MARKS)**

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

**14.**A farmer is required to prepare 100 kg of ration of 30% digestible crude protein ( DCP) from simsim seed cake containing 50% DCP and maize meal 10% DCP. Using Pearson’s square method calculate the amount of simsim and maize the farmer requires. **(4marks)**

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**15.**The diagram below illustrates a hoof of a sheep. Study it carefully and answer the questions that follow

1. Name the routine management practice that should be carried out on the hoof illustrated above. **(1 mark)**

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**(b)** State **two** reasons for carrying out the management practice in (a) above. **(2 marks)**

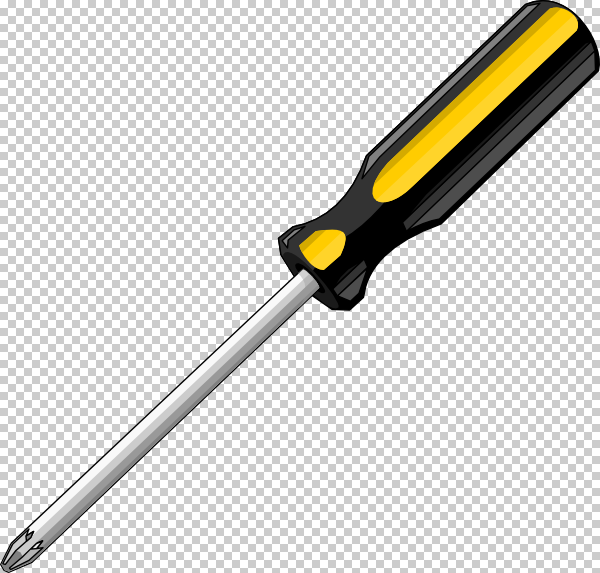
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**16.**The photographs below are workshop tools. Study them and answer the questions that follow.



L M

1. Identify the tools Land M **(1 mark)**

L………………………………………………………………..

M…………………………………………………………………..

**ii)** Give the functional difference between the following tools labeled Land M. **(2 marks)**

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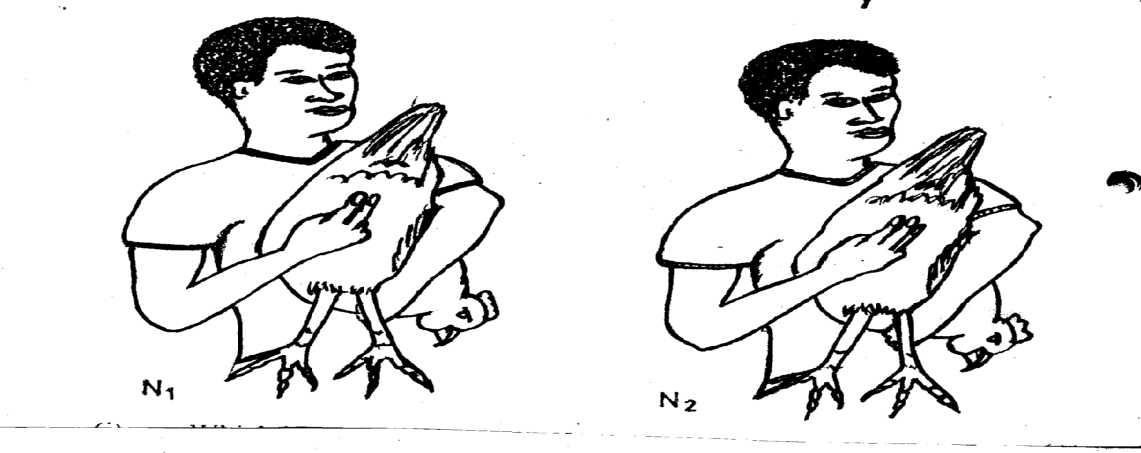
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**17.** Diagrams**N1** and **N2** below show the fingers fitted between pelvic bones as a practice used in examining layers during culling

1. Which layer would be culled **(1 mark)**

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**ii)** Give **two** other characteristics that can be examined when culling. **(1 mark)**

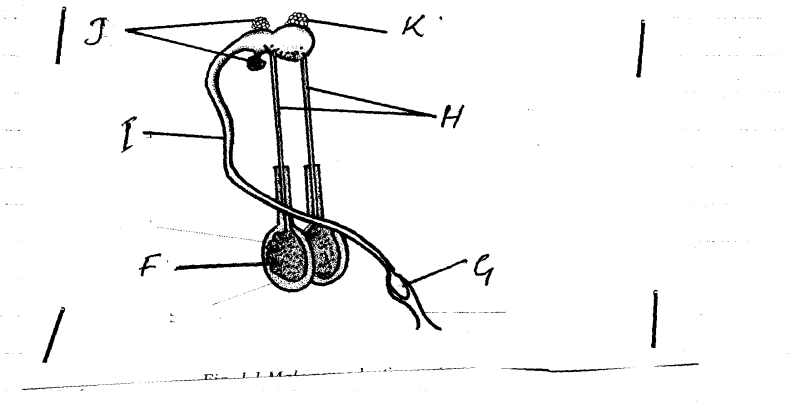
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**18.** The illustration below shows a male reproductive system in cattle. Study it and answer the questions that follow.



1. Identify the parts labeled **I, J, K** and **G** **(2marks)**

**I………………………………………………………………………….**

**J …………………………………………………………………………**

**K………………………………………………………………………..**

**G………………………………………………………………………….**

1. Give the functions of the parts labeled F and H

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**19.**The photographs labeled D and E are pig breeds. Study them and answer the questions that follow.

 G

D E

1. Identify the breeds D and E **(1 mark)**

D-…………………………………………………………..

E- ………………………………………………………..

1. Name the part labeled G on the diagram E **(1 mark)**

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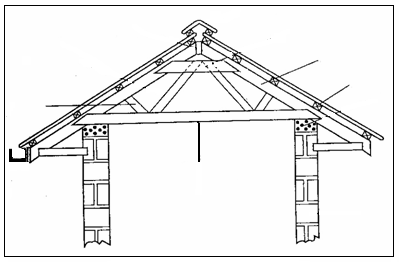
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**c)** State the **main** product got from breed **D (1 mark)**

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

**20.** The diagram **below** represents roof of a building.



A

D

C

B

**(i)** Identify the parts labeled A, B, C. **(3marks)**

A ……………………………………………………..

B**……………………………………………………..**

C………………………………………………….. ….

**ii)** State **four** factors considered when sitting farm buildings and structures. **(2marks)**

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**SECTION C (40 marks)**

**Answer TWO questions from this section**.

1. **a) i)** Precautions to be observed during transportation of fingerings. **(5 marks)**

**(ii)** Procedure of stocking fingerlings **(5 marks)**

**b)**Describe the factors a farmer should consider when selecting a heifer for breeding. **(6 marks)**

**c)**Explain the functions of workers bees in a bee colony.  **(4marks)**

**22.** **a)** Describe the process of egg formation in the reproduction system of hen. **(10 marks)**

**b)** Describe the management of piglets from birth to weaning. **(10 marks)**

**23**. **a)** Explain **five** reasons as to why it is important of keeping livestock healthy. **(5 marks)**

**b)** Procedure of harvesting honey. **(5 marks)**

**c)** Explain functions of any **five** parts of a zero grazing unit in dairy farming. **(10 marks)**

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