**NAME ……………………………………..………INDEXNO.…………….……….……..…**

**CANDIDATE’S SIGNATURE …………..…..………..**

**DATE …………………………………**

**443/2**

**AGRICULTURE**

**PAPER 2 (THEORY)**

**TIME: 2 HOURS**

**Pre Kcse Trial 1 2016**

*Kenya Certificate of Secondary Education*

443/2

AGRICULTURE

PAPER 2 (THEORY)

JULY/AUGUST 2016

TIME: 2 HOURS

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the spaces provided above.
2. This paper has **THREE** sections: A , B and C
3. Answer **ALL** the questions in section A and B and any **TWO** questions in section C
4. ALL answers **MUST** be written in the spaces provided.
5. Do not remove any pages from this booklet.
6. This paper consists of 11 printed pages. Candidates should check to ensure that all pages are printed as indicated and no questions are missing

**FOR EXAMINER’S USE ONLY**

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| --- | --- | --- | --- |
|  | **Questions** | **Maximum score** | **Candidate’s score** |
| A | **01 - 23** | **30 marks** |  |
| B | **24 - 27** | **20 marks** |  |
| C | **28 - 30** | **40 marks** |  |
|  | **Total score** |  |

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Agriculture

Paper 2 (theory)

**SECTION A (30 MARKS)**

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

1. Name the breed of goat that produces high quality wool. (1mark)

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1. State two advantages of using wood in the construction of a farm building (1mark)

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1. State two functional differences between petrol and diesel engines. (2marks)

|  |  |
| --- | --- |
|  Petrol |  Diesel engine |
|  |  |

1. Name the intermediate host of the following parasites (1mark)
2. Tapeworm

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1. Liver fluke

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1. Differentiate between (1mark)
2. Drift lambing

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1. Pen lambing

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1. Give two reasons why the walls of the dairy shed should be white washed instead of painting with water or oil paints. (1 marks)

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1. Mention four pre-disposing factors of scours in calves. (2marks)

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1. Outline three reasons why calves should be fed on colostrums. (1½ marks)

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

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1. List two groups of vitamin as applied to livestock nutrition. (1mark)

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1. Give four advantages of using a spray in tick control in livestock. (2 mark)

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1. Give three importance of flushing in sheep management. (1½ marks)

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1. State three adjustments that should be carried out on a tractor-mounted mould board plough in preparation for ploughing (1½ marks)

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1. State two demerits of live fences. (1mark)

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1. Give two ideal conformation features of beef cattle (1mark)

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1. State three factors that dictate livestock distribution in Kenya. (1½ marks)

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1. Name three reasons that necessitate handling of livestock in the farm. (1½ marks)

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1. List three non chemical control measures in livestock production. (1½ marks)

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1. Under what condition would a farmer prefer to use an ox- cart instead of a tractor-drawn trailer? Give three reasons (1½ marks)

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1. State four grades into which Kenya Meat Commission may classify the carcasses (2marks)

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1. Why is it not recommended to use saw dust in an incubator (1 marks)

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1. List two tools used in closed castration (1mark)

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1. State four qualities of good creep feed. (2marks)

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 **SECTION B (20 MARKS)**

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

1. The diagram below represents farm tools.
2. Identify the tools labeled A and B (1mark)

A

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B

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1. Give one use of each tools mentioned in (i) above. (2marks)

A

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1. Give the two maintenance practices which should be carried out on tool C (2marks)

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1. A farmer in Makueni County owns 16 milking cows. In addition to feeding these animals with nippier grass, the farmer prepares home mixed ratio in them. During this dry season, the farmer has decided to mix 600kg of the ratio using oats DCP 40% and sim sim cake DCP 60% using the Rearsons square method.
2. Determine the quantities of each feed the farmer will need to make a ratio containing 20% DCP for the animals. (4 marks)

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1. State two factors affecting feed digestibility. (1mark)

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1. The diagram below shows an animal drawn implement. Use it to answer the following questions



1. Label parts

 H

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 J

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 K (1½ marks)

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1. Name the part that requires regular sharpening (1½ marks)

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1. State three advantages of using animal power (1½ marks)

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1. Below are illustrations of animal hooves and activity being done

i)

1. What activity is going on in diagram F (1mark)

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1. Which of the above hooves is likely to predispose foot rot infection? (1mark)

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1. Name an appropriate tool for carrying out the above activity (1mark)

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1. Other than protecting animals from foot rot give another one reason for carrying out the activity. (1mark)

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ii Give three reasons for seasoning timber before use (1½ marks)

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**SECTION C (40 MARKS)**

Answer ***only two*** questions from this section in the spaces provided

1. a) Describe the features of ideal calf pen. (10marks)

b) Distinguish between cropping and harvesting as used in fish farming (2marks)

c) Describe the maintenance practices on a fish pond or describe management practices that would ensure maximum fish harvest from a fish pond. (8marks)

1. a) Discuss coccidiosis disease under the following headings
2. Causal organism (1mark)
3. Livestock species attacked (4marks)
4. Symptoms of attack (4marks)
5. Control measures. (3marks)

 b) Describe the procedure of obtaining clean milk from a cow (10marks)

1. a)

i) Describe the life cycle of a two host tick (6marks)

1. Describe digestion in a rumen of ruminant (8marks)
2. Explain three methods of acaricide application (6marks)

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