**Name: ……………………………………………... Index no ……..…......................................**

**School: …………………………………………….. Candidate’s sign …………………….......**

**Date: ……………………………………………….. Class…………………………………….**

**443/2**

**AGRICULTURE**

**PAPER 2**

**21ST MARCH 2018**

**TIME: 2 HOURS**

**MOI HIGH SCHOOL-KABARAK**

**FORM FOUR MOKASA I MOCK**

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

**Agriculture**

**Paper 2**

**INSTRUCTIONS TO CANDIDATES:**

* *Write your* ***name, index number,******school*** *and* ***admission number*** *in the spaces provided.*
* *Sign and write the date in the spaces provided above.*
* *Answer* ***all*** *the questions in section* ***A*** *and* ***B***
* *Answer any* ***two*** *questions in section* ***C.***
* *Answers should be written in the spaces provided in this booklet.*

***For Examiner’s Use Only:***

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| --- | --- | --- | --- |
| **SECTION** | **QUESTIONS** | **MAXIMUM SCORE** | **CANDIDATES SCORE** |
| A | 1-19 | 30 |  |
| B | 20-23 | 20 |  |
| C |  | 20 |  |
|  | 20 |  |
|  | **TOTAL** | **90** |  |

*This paper consists of 12 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.*

**SECTION A (30MARKS)**

1. State **four** factors that determine the quality of honey. (2mks)

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1. Name **two** types of bacterial diseases in cattle that are controlled by the administration of blanthax vaccine. (1mk)

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1. Name the component on a tractor used for each of the following purposes. (2mks)
2. Checking the level of oil in the sump.

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1. Connecting and disconnecting the drive shaft to or from the engine.

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1. Regulating the temperature of water in the cooling system.

…………………………………………………………………………………………

1. Stepping up the battery voltage from 12 volts to about 6000volts

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1. State **four** reasons for seasoning timber before using it for construction. (2mks)

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1. State **two** ways in which barbed wire fence may be reinforced in the farm. (1mk)

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

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1. Liverfluke

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1. State **three** advantages of using thatch as a roofing material in farm structures.

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1. State **four** precautions observed when using workshop tools and equipment. (2mks)

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1. Name **two** hormones that influence milk let down. (1mk)

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1. State **four** conditions a farmer would prefer to use an ox-cart instead of a tractor drawn trailer. (2mks)

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1. Give **two** ways in which proper nutrition helps to control livestock diseases. (1mk)

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1. Give the meaning of the following terms as used in livestock breeding. (2mks)
2. Progeny testing

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1. Heterosis

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1. Name **four** implements that are operated by the tractor P.T.O shaft. (2mks)

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1. State **four** reasons for castration in pig production. (2mks)

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1. State **four** characteristics of roughage livestock feeds. (2mks)

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1. Give **two** reasons why it is necessary to have guard rails in a farrowing pen. (1mk)

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1. Give **four** advantages of using a disc plough over a mouldboard plough in primary cultivation. (2mks)

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1. State **four** characteristics of a dairy cow. (2mks)

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1. Give **one** reason as to why it is important to understand the life cycle of parasites.

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**SECTION (20MARKS)**

1. Study the illustration showing a livestock management practice and answer the questions that follow.

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1. Identify the livestock management practice illustrated above. (1mk)

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1. Name the tool being used in carrying out the practice illustrated above. (1mk)

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1. Describe the procedure of carrying out the above practice. (3mks)

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1. The illustration below shows a cow suffering from a disease.Study it and answer the questions that follow.



1. Identify the disease. (1mk)

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1. State the cause of the disease illustrated above. (1mk)

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1. Give **three** symptoms of the disease the animal is suffering from. (3mks)

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1. The illustration below shows a disc plough.Study it and answer the questions that follow.

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1. Name the partslabelled E, F, G and H. (2mks)

E……………………………………………………………………………………………

F……………………………………………………………………………………………

G……………………………………………………………………………………………

H……………………………………………………………………………………………

1. Give the function of each of the parts labelled F and H. (2mks)

F………………………………………………………………………………………….…………………………………………………………………………………………………

H……………………………………………………………………………………………

1. State one adjustment that can be carried out on the plough to decrease the ploughing depth. (1mk)

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1. Study the illustrations below and answer the questons that follow.
2. Explain the behaviour of the chicks in the diagrams A, B, C and D. (2mks)

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

B………………………………………………………………………………………….…………………………………………………………………………………………………

C………………………………………………………………………………………….…………………………………………………………………………………………………

D………………………………………………………………………………………….…………………………………………………………………………………………………

1. Give **one** reason why dim light is recommended in a brooder. (1mk)

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1. State **two** advantages of artificial brooding. (2mks)

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**SECTI ON C (40MARKS)**

1. a) State and explain any **five** pre-disposing factors of livestock diseases. (10mks)

b) State **six** differences between digestion in Ruminants and non-ruminants. (6mks)

c) Using the Pearsons square method, compute a 300kg ration with 25% DCP from wheat

which contains 15% DCP and sunflower seedcake containing 30% DCP. (4mks)

1. a) Describe t*rypanosomiasis* (nagana) under the following sub headings.

i) Animals attacked (2mks)

ii) Causal organism and the vector (2mks)

iii) Symptoms (4mks)

iv) Control measures (2mks)

b) State **six** structural requirements of a calf pen. (6mks)

c) State **four** main components of a tractor fuel system and a function for each. (4mks)

1. a) Describe **ten** practices that a dairy farmer must carry out to achieve clean milk production. (10mks)

b) Outline **six** causes of stress to a flock of layers. (6mks)

c) State **four** disadvantages of inbreeding in livestock. (4mks)

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