**NAME:………………………………………….. INDEX NO…………………………**
**SCHOOL:……………………………………… CANDIDATE’S SIGN ……………..**

**DATE ………………………………**

443/2

**AGRICULTURE**

**Paper 2**

2021
**Time: 2 Hours**

**ELDORET DIOCESE EXAM 2021**

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

443/2

**AGRICULTURE**

**Paper 2**

2021
**Time: 2 Hours**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the spaces provided above

2. Sign and write the date of examination in the spaces provided above.

3. This paper consists of three sections: A, B and C

4. Answer all the questions in section A and B and any **two** questions from section C

5. Answers should be written in the spaces provided.

**For Examiner’s Use Only**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Question** | **Maximum Score** | **Candidate’s Score** |
| A | 1 – 20 | 30 |  |
| B | 21-24 | 20 |  |
| C | 25-27 | 20 |  |
|  |  | 20 |  |
|  | **Total Score** | **90** |  |

**SECTION A (30 MARKS)**

***(Answer all the questions in this section in the spaces provided)***

1. Name **two** kinds of livestock which can be castrated using a rubber ring. (1mark)

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1. Define the term “breach of birth” as used in livestock production. (1 mark)

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1. a) Name the camel breed that is adapted to cooler regions and has a wooly body covering. ($\frac{1}{2}$ mark)

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 b) Give **three** ways used to improve production in indigenous cattle. ($1\frac{1}{2}$ mark)

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1. Give **four** methods of administering vaccines to livestock. (2 marks)

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1. State **two** uses of bedding materials in a poultry house in deep litter system. (1mark)

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1. Give any **two** pairs of livestock tools which are always used together. (1 mark)

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1. List **two** types of feed additives. (1 mark)

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1. State **three** factors that may lead to dip wash being exhausted or weakened while in the dip tank. ($1\frac{1}{2}$ marks)

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1. State **four** practices which are carried out to control mastitis in lactating cows.

(2 marks)

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1. Give **two** signs of heat in rabbits. (1 mark)

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1. State **four** maintenance practices carried out on the water-cooling system of a tractor

(2 marks)

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1. State **four** observations on the behavior of chicks which would indicate that the temperature in the brooder is too high. (2 marks)

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1. Highlights **four** desirable characteristics that should be considered when selecting a heifer for milk production. (2 marks)

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1. Give **four** functions of calcium in dairy cows. (2 marks)

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1. Name **two** notifiable diseases in cattle. (1 mark)

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1. State any **two** channels through which beef is marketed in Kenya. (1 mark)

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1. State **four** factors that may influence the pulse rate of a sheep. (2 marks)

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1. List **three** properties of concrete that make it suitable for constructing farm building.

(1$\frac{1}{2} $mark)

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1. Give **four** reasons why breeding boar may be culled. (2 marks)

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

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**SECTION B (20 MARKS)**

***(Answer all the questions in this section in the spaces provided)***

1. The diagram below represents an implement.



(i) Identify the implement. (1 mark)

…………………………………………………………………………………………

(ii) Name the parts labelled U and V and give one function of each. (2 marks)

U………………………………………………………………………………………

V………………………………………………………………………………………

(iii)State two ways of adjusting the depth of ploughing when using the implement. (2 marks)

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1. Study the diagram of an egg below and answer the questions that follow.



1. Name the parts labeled O, and P (2 marks)

O …………………………………………………………………………………

P ……………………………………………………………………………………

1. State the functions of the parts M and L. (2 marks)

M

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

L

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

iii) Why should the egg be turned during incubation. (1 mark)

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1. Below is an illustration of a farm structure.



a) Identify the structure above. (1 mark)

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b) State **Six** livestock routine practices which may be carried out in the structure above (3 marks)

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c) Give **Two** maintenance practices which should be carried out in the structure above. (1 mark)

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1. The diagram below shows the farm equipment. Study it carefully and use it to answer the questions that follow.



(a) Name the parts labeled A, B and C (3 marks)

A………………………………………………………………………………………

B………………………………………………………………………………………

C………………………………………………………………………………………

(b) State the use of the equipment shown above. (1 mark) ……………………………………………………………………………………………………………………………………………………………………………………

(c) Give one maintenance practice carried out on the equipment. (1 mark) ……………………………………………………………………………………………………………………………………………………………………………………

**SECTION C**

***(Answer any two questions in this section on the spaces provided)***

1. a) Describe the live cycle of a named tapeworm (*Taenia spp*). (10 marks)

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b) Describe the management practices that would ensure maximum yield of fish in a fish pond. (5 marks)

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c) Explain **five** functions of water in nutrition. (5 marks)

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1. (a) Discuss the management of layers from one day old to the start of laying in a deep litter system. (l0 marks)

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(b) State any**five** advantages of using animal power in the farm. (5 marks)

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(c) Describe **five** importance of keeping animals healthy. (5 marks)

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1. Discuss mastitis disease under the following subheading:

(i) Causal organism (1 mark)

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(ii) Predisposing factors (4 marks)

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(iii) Symptoms (4 marks)

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(iv) Control and treatment (3 marks)

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b) Explain **eight** factors that affect milk composition in dairy farming. (8 marks)

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