

NAME..... INDEX NUMBER.....

SCHOOL..... CANDIDATE'S SIGNATURE.....

DATE.....

**443/2**

**AGRICULTURE**

**PAPER 2**

**TIME: 2 HOURS**

**JULY/AUGUST 2018**

*Kenya Certificate of Secondary Education*

**AGRICULTURE**

**PAPER 2**

**2 HOURS**

**INSTRUCTIONS TO CANDIDATES:**

- (a) *Write your name and index number in the spaces provided.*
- (b) *Sign and write the date of examination in the spaces provided.*
- (c) *This paper consists of three sections: A, B and C.*
- (d) *Answer ALL the questions in Section A and B in the space provided.*
- (e) *Answer any two questions in section C in the space provided.*
- (f) *Candidates should check the question paper to ascertain that all the pages are printed as indicated*  
*and that no questions are missing.*
- (g) *The paper has 13 printed pages*

**For Examiners Use Only**

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
<b>A</b>	<b>1 - 17</b>	<b>30</b>	
<b>B</b>	<b>18 – 21</b>	<b>20</b>	
<b>C</b>	<b>22</b>	<b>20</b>	
	<b>23</b>	<b>20</b>	
	<b>24</b>	<b>20</b>	
<b>TOTAL SCORE</b>		<b>90</b>	

SECTION A 30 MARKS –ANSWER ALL THE QUESTIONS

- 1.) State **four** factors that affect the distribution of livestock in Kenya. (2 marks)

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- 2.) **Give** examples of each of the following types of livestock animals.

- a) Dairy cattle (1/2 mark)

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- b) Dual purpose sheep (1/2 mark)

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- c) Hair goat. (1/2 mark)

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- d) Dual purpose cattle (1/2 mark)

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- 3.) Name **four** livestock tools that are used together in complimentary manner. (2 marks)

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- 4.) **State** the function of a spoke shave. (1 mark)

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5.) State **four** reasons for maintenance practices carried out on masonry tools. (2 marks)

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6.) Outline **four** reasons for keeping livestock healthy. (2 marks)

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7)State **four** harmful effects of parasites (2 marks)

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8)Name **three** methods of selection in livestock production. (1 ½ mark)

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9)State **two** signs of parturition in pigs. (2 marks)

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10.)**Differentiate** between **steaming** up and **flushing**. (1 mark)

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11)State **four disadvantages** of using a spray race in controlling parasites in livestock. (2mks)

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12)**Outline four** structural requirements of a calf pen. (2 marks)

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13)**Differentiate** between **cropping** and **harvesting** as used in **aquaculture**. (1 marks)

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14)List **four factors** that influence the choice of poultry rearing system. (2 marks)

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15)**Outline four** rules observed when milking. (2 marks)

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16)**List four** importance of lubrication system in a tractor. (2 marks)

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17)**Outline three advantages** of setting up a biogas unit in a dairy unit. (1 ½ marks)

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SECTION B-20marks

18) Use the **Pearson square method** to formulate Duck mash 28% DCP using maize DCP 11% and fishmeal 35% DCP. Show all your working (5 marks)

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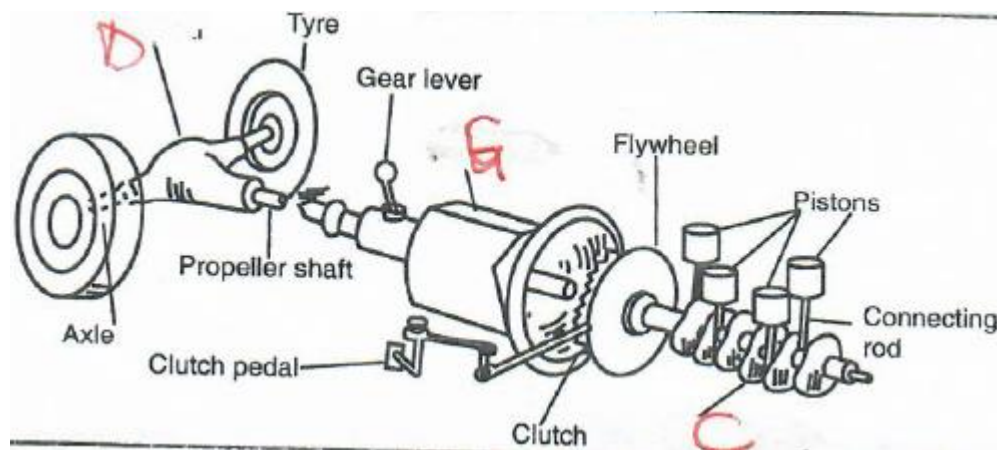
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19) The diagram below represents the **tractor power transmission system**. Study it carefully and answer the questions that follow



a) **Name three aspects** that ensure maximum traction in a tractor (1 1/2 marks)

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b) Name parts (1 ½ marks)

C.....

D-.....

G-.....

C)**State two** functions of part D (2 marks)

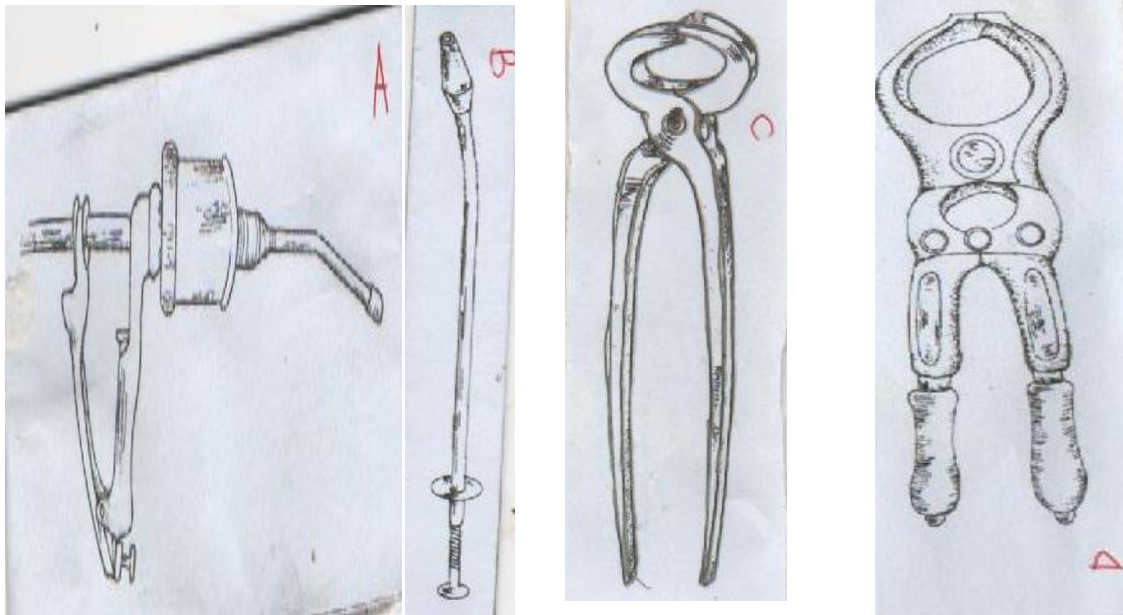
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20)The diagrams below shows various equipment used in **livestock health**



a) **Name** equipment

(2 marks)

A.....

B.....

C.....

D-.....

c) State the function of D.

(1 mark)

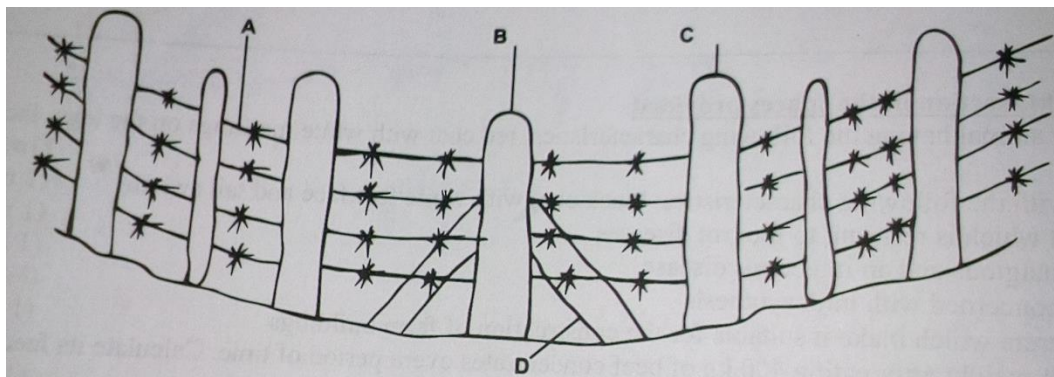
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c) Give the **functional difference** between A and B

(2 Marks)

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21) The diagram below represents an **important farm structure**. Study it and answer the questions that follow.



(i) Identify the farm structure

(1mk)

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(ii) Label the parts.

(2mks)

A.....

B.....

C.....

D.....

(iii) **State two** maintenance practices carried out in the structure above.

(2mks)

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SECTION C-Answer **any 2** questions only

22) a)**State** and **explain five factors** that increase the digestibility of feeds (10 marks)

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b)**State** and **explain** five ways of preventing diseases in livestock. (10 marks)

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23)a) **Describe five** structural requirements of modern produce store. (10 marks)

b) **Describe** the sequence of events that take place in a 4-stroke petrol engine in one cycle starting with induction, compression, power and exhaust stroke. (10 marks)

Page 11 of 14

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24 a) **Give four** reasons for inbreeding in livestock

(4 marks)

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b) **Outline four** characteristics of eggs for incubation

(4 marks)

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c) State the use of each of the following milky materials and equipment.

(i) Two towels per cow

(1 mks)

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(ii) Filter pads

(1 mks)

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(iii) Milking jelly

(1 mks)

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(iv) Strip cup

(1 mks)

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d) **Describe** bloat under the following subheadings

(i) Animals affected.

(2 marks)

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(ii) Causal agent.

(2 marks)

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(2 marks)