

Name: ..... Index No. .....

School: ..... Date: ..... Candidate's Sign .....

**443/2**

**AGRICULTURE**

**PAPER 2**

**FORM 4**

**MARCH / APRIL 2013**

**TIME: 2 HOURS**

## **WESTERN ZONE JOINT EXAMINATIONS - 2013 (WEZOJE)**

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

### **INSTRUCTIONS TO CANDIDATES**

1. Write your name, School and Index Number in the spaces provided above.
2. Sign and write the date of examination in spaces provided above.
3. Answer all the questions in section A and B and ANY TWO questions in from section C.

### **FOR EXAMINER'S USE ONLY**

<b>SECTION</b>	<b>MAXIMUM SCORE</b>	<b>CANDIDATE SCORE</b>
A	30	
B	20	
C	40	
<b>TOTAL</b>	<b>90</b>	

*This paper consists of 8 printed pages.  
Candidates should check the question paper to ensure that all pages are  
printed as indicated and no questions are missing.*

**SECTION A: (30MARKS)**

**Answer all questions in this section**

1. State **Four** conformation features for dairy cows. (2marks)

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2. List **Four** features of the landrace breed of pigs. (2marks)

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3. Give **Two** soil conditions which would make sub-soilers more suitable for cultivation. (1mark)

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4. Which tools should a farmer use to carry out the following operations?

a) Relieving bloat in ruminants. (½ marks)

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b) Opening blocked teats of cows. (½ marks)

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c) If a farmer does not have an ear notcher to make identification marks on pigs which other tool can be used. (½ marks)

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5. Give **Three** signs of heat in rabbit (1½ marks)

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6. Give **Three** advantages of feeding colostrum to a newborn calf. (1½ marks)

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7. Give **Two** design considerations which ensure that litter is kept dry in a deep litter poultry house (1mark)

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8. State **Four** methods of controlling liverflukes on a farm. (2marks)

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9. State **Four** uses of a crush on a farm (2marks)

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10. State **Two** advantages of flushing in sheep production (1mark)

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11. State **Two** functions of feed additives (1mark)

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12. State the meaning of the following terms as used in Animal breeding

a) Epistasis (1mark)

b) Hybrid vigour (1mark)

13. Give **Three** reasons why animals are handled in a farm (1½ marks)

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14. Give **Four** symptoms of Anaplasmosis (2marks)

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15. a) Name **Two** pest that attack timber (1mark)

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b) What is the importance of seasoning in timber (1mark)

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16. State **Four** sources of power that can be used for cultivation on a farm (2marks)

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17. State **Three** disadvantages of embryo transplant (1½ marks)

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18. Enumerate **Three** factors that inhibit milk let down in a lactating cow (1½ marks)

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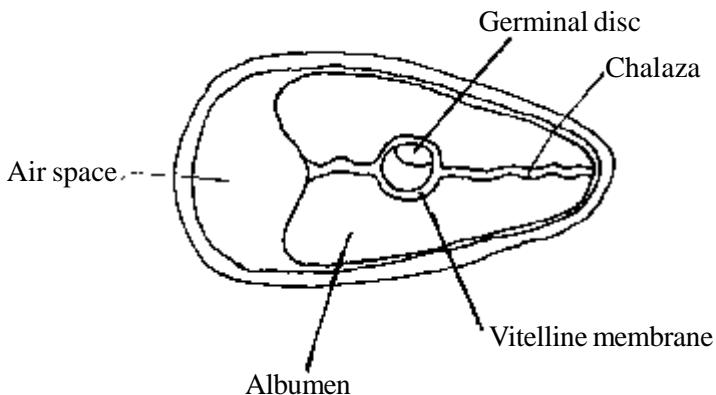
19. Explain how a farmer would stop broodiness in a hen among a flock of layers. (1mark)

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### **SECTION B: (20MARKS)**

**Answer all questions in this section.**

20. Below is a diagram of poultry egg. Use it to answer the questions that follow.



- a) State the functions of the following parts

- i) Germinal disc. (1mark)

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- ii) Vitelline membrane. (1mark)

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- iii) Air sac.

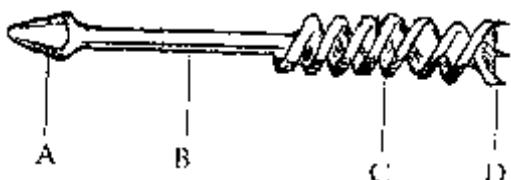
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- b) Differentiate between Egg candling and Egg incubation as used in poultry management

(2marks)

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21. Study the diagram of an auger bit below and answer the questions that follow;



a) State the use of tool shown above.

(1mark)

b) Identify the parts labelled. (4marks)

A: .....

B: .....

C: .....

D: .....

22. Below are diagrams of four types of saws labelled A, B, C and D.



A



B



C



D

a) Identify each type of saw

(2marks)

A: .....

B: .....

C: .....

D: .....

b) Describe the procedure of using the saw labelled B to cut a piece of wood. (3marks)

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23. Cheptoo wants to mix feed for her calves containing 20% DCP. She intends to use sorghum meal containing 8% DCP and soya bean meal containing 38% DCP.

a) Calculate the quantities of each feed Cheptoo would require to mix 100kg of feed. (Use Pearson's square method) (4marks)

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b) What other feed ingredient should she add to the mixture to balance it? (1mark)

(1mark)

## **SECTION C: (40MARKS)**

~~Answer ANY TWO questions in this section~~

24. a) Describe the life cycle of a two host tick. (6marks)  
b) Give the physical methods used to control ticks in a herd of cattle. (4marks)  
c) Describe digestion of grass in a ruminant animal. (10marks)

25. a) Give the advantages of animal power in the farm. (4marks)  
b) Mention **Six** maintenance practices of a tractor battery. (6marks)  
c) Give **Four** components of an engine. (2marks)  
d) Explain **Four** strokes of a petrol engine in a tractor. (6marks)

26. a) Explain the factors considered when siting farm structures. (10marks)  
b) Name any **Five** parts of a plunge dip and for each named ,explain the importance of including it in the construction of the dip. (10marks)

