

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

Candidate's Signature:.....

Date: .....

**443/1**  
**AGRICULTURE**  
**PAPER 1**  
**JULY/AUGUST-2015**  
**TIME: 2 HOURS**

## KAKAMEGA CENTRAL SUB-COUNTY JOINT EVALUATION EXAM

### *Kenya Certificate of Secondary Education*

**443/1**  
**Agriculture**  
**Paper 1**  
**2 hours**

#### INSTRUCTIONS TO CANDIDATES:

- This paper contains **three** sections A, B and C
- Answer **ALL** the questions in section A and B
- Answer any **Two** questions from section C
- All answers should be written in the spaces provided.

#### FOR EXAMINERS USE ONLY

SECTION	QUESTIONS	MAX SCORE	CANDIDATES SCORE
A	1-19	30	
B	20-23	20	
		20	
		20	
<b>TOTAL</b>		<b>90</b>	

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

**SECTION A (30 MARKS)**

*Answer ALL questions in this section in the spaces provide*

- 1. State **three** physical characteristic used in soil classification (1 ½mks)  
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.....  
.....
- 2. Give **two** types of metal pipes used on the farm to convey water (1mk)  
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.....
- 3. List **four** methods of drainage (2mks)  
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.....
- 4. Distinguish between minimum tillage and sub-soiling as used in agricultural production (2mks)  
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.....
- 5. Name the branches of horticulture that deal with the following (1 ½ mks)  
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.....
- 6. Name **two** methods used in preparation of compost manure (1mk)  
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.....
- 7. Name **three** types of farm records that a sheep farmer should keep (1 ½mks)  
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.....
- 8. Give **three** symptoms of sulphur deficiency (1 ½ mks)  
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.....
- 9. Name **three** vegetative materials used in propagation of pineapples (1 ½ mks)  
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.....
- 10. State **three** materials used to prepare rooting mixture to fill polythne sleever (1 ½ mks)  
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11. Give **three** disadvantages of mulching in crop production ( 1½ mks)

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12. State **three** that result in tomatoes due to application of too much nitrogenous fertilisers (1 ½ mks)

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13. Outline **four** causes of land fragmentation and subdivision in Kenya. (2mks)

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14. Differentiate between settlement and resettlement as used in agricultural economics (2mks)

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15. State **four** factors influencing mass wasting / solifluction (2mks)

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16. Name **four** types of terraces (2mks)

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17. a) State **five** environmental factors that affect the selectivity and effectiveness of herbicides ( 2mks)

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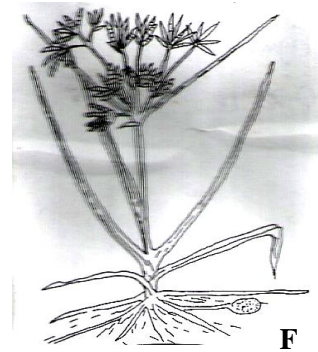
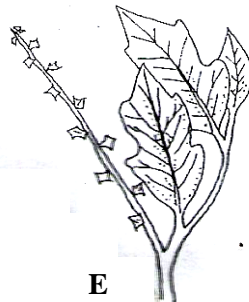
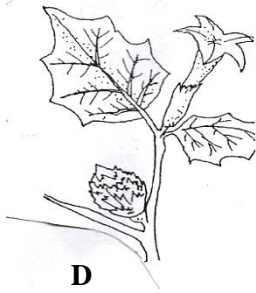
b) State **three** methods of weed control in paddy rice (1 ½ mks)

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**SECTION B (20 MARKS)**

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

18. The diagrams below illustrate common weeds on the farm. Study them carefully and answer the questions that follow



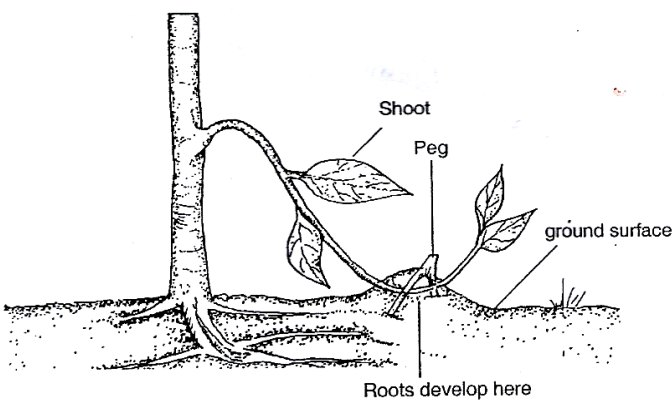
a) Name the weeds illustrated by figures **D**, **E**, and **F** (3mks)

- D**.....
- E**.....
- F**.....

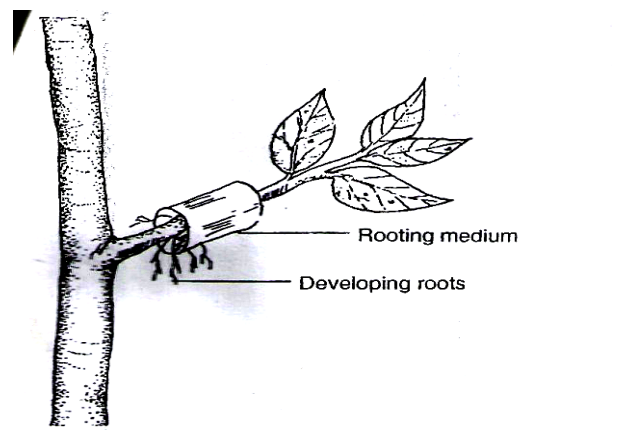
b) Why is control of weed **F** difficult (1mk)

.....  
 .....

19. The diagrams below illustrate methods of crop propagation. Study them carefully and answer the questions that follow



**L**



**K**

b) State **two** methods of budding (2mks)

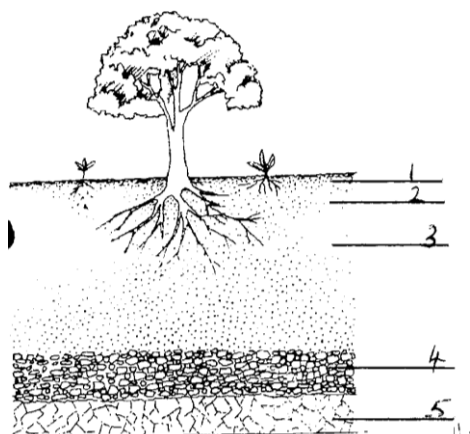
.....  
 .....

20 a) What is plant population? (1mk)

.....

- b) Patricia was advised to plant her maize crop at a spacing of 90 x 30cm. Calculate the plant population if her plot measures 93m x 42 m. (2mks)  
Show your working (3mks)

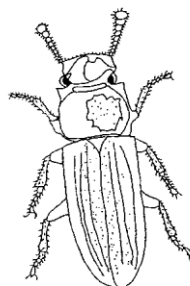
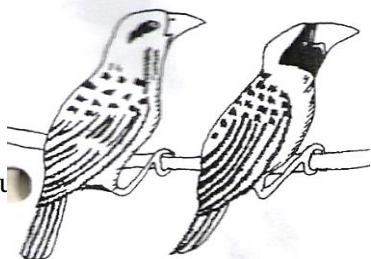
21. The diagram below illustrates a soil profile. Study it carefully and answer the questions that follow



- a) Name the layers represented by numbers 2,3,4, and 5
- 2.....
- 3.....
- 4.....
- 5.....

- b) State **two** characteristics of the layer marked 2 (2mks)
- .....
- .....

22. The diagrams below illustrate common crop pests on the farm. Study them carefully and answer the question that follow.













NAME: .....INDEX NO: .....

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

DATE: .....

443/2

AGRICULTURE

PAPER 2

JULY/AUGUST-2015

TIME: 2 HOURS

# KAKAMEGA CENTRAL

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

## SUB-COUNTY JOINT

# EVALUATION EXAM-2015

443/2

AGRICULTURE

PAPER 2

JULY/AUGUST-2015

TIME: 2 HOURS

### INSTRUCTIONS TO CANDIDATES:

1. Write your **name** and **index number** in the spaces provided.
2. **Sign** and **write the date** of examination in the spaces provided
3. This paper consists of **three** section **A,B** and **C**

- 4. Answer **all** the questions in section **A** and **B**
- 5. Answer any **two** questions in section **C**
- 6. All the questions should answered in the spaces provided

**FOR EXAMINER’S USE ONLY**

SECTION	QUESTIONS	MAX SCORE	CANDIDATES SCORE
<b>A</b>	<b>1-18</b>	<b>30</b>	
<b>B</b>	<b>19 - 23</b>	<b>20</b>	
<b>C</b>		<b>20</b>	
		<b>20</b>	
	<b>TOTAL</b>		

*This paper consists of 8 printed pages.*

*Candidates should check the question paper to ascertain all the pages are printed as indicated*

*And no questions are missing.*

**SECTION A (30 MARKS)**

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

1. (a) What is a notifiable disease (1mk)

.....  
.....

- (b) Name **two** notifiable diseases of cattle (1mk)

.....

2. Give **four** faults in the eggs that are detected during egg candling (2mks)

.....  
.....

.....  
.....

3. Give **two** reasons for maintaining farm tools (1mk)

.....  
.....

4 (a) Give **two** roles of litter in a deep litter poultry house (1mk)

.....  
.....

(b) State **one** role of footbath in a poultry house (½ mk)

.....  
.....

5. Mention **four** advantages of embryo transplant (2mks)

.....  
.....  
.....  
.....

6. Give functional difference between the following tools (2mks)

(a) Stock and die and pipe cutter

.....

(b) Ball pein hammer and claw hammer

.....

7. State **four** features of an ideal calf pen (2mks)

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.....  
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.....

8. State **four** signs of furrowing observed in pigs (2mks)

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.....  
.....

9. State **three** methods of restraining cattle ( 1 ½ mk)

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.....  
.....

10. List **four** structural requirements of a grain store (2mks)

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.....  
.....  
.....

11. Name **two** types of mowers a farmer can use in the farm (1mk)

.....  
.....

12. Name the dairy breed of cattle which (1mk)

(a) Produces the highest yield of milk

.....

(b) Produces milk with the highest butterfat content

.....

13. State **four** pre-disposing factors of mastitis (2mks)

.....

.....

.....

.....

14. Name any **two** renewable sources of power in the farm (1mk)

.....

.....

15. State **four** factors considered when computing a ration for livestock on the farm (2mks)

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**SECTION B (20MARKS)**

*Answer all questions in the spaces provided*

16. State **two** ways in which digestion of food in pigs differs from that in Ruminants (2mks.)

.....

.....

17. State **two** conditions which would make it necessary to feed bees (1mk)

.....

.....

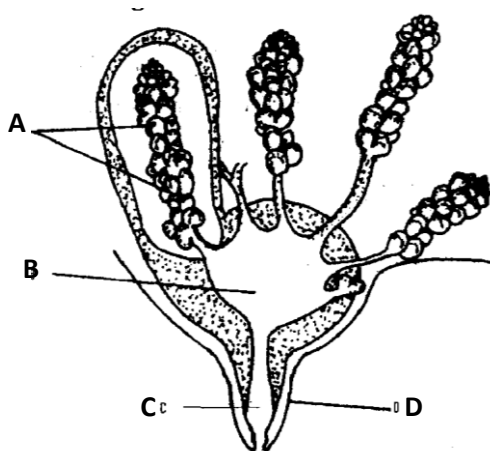
18. State **four** disadvantages of natural mating as a method of breeding in dairy cattle management (2mks)

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.....  
.....

**SECTION B (20 MARKS)**

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

19. The diagram below is a cross section of part of a cow's udder.



a) Label the parts marked **A,B,C** and **D** (2mks)

**A**.....

**B**.....

**C**.....

**D**.....

b) Name **two** hormones that control milk - let down in a dairy cow. (2mks)

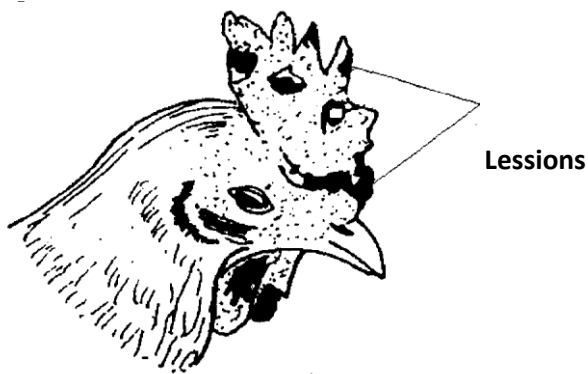
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(a) What is a dry cow therapy? (1mk)

.....

20. The diagram below shows the head of a chicken having symptoms of a poultry disease.



21. A diagram of a sheep is shown below. Study the diagram and answer the questions that follow

(a) Identify the disease. (1mark)

.....

b) Give **two** reasons why the disease is of economic importance. (2marks)

.....

.....

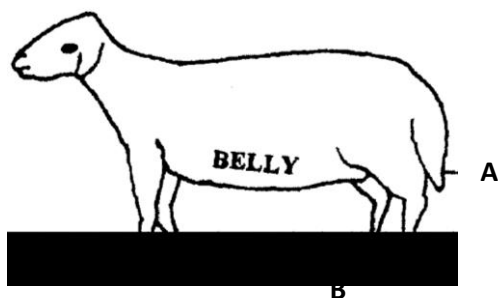
c) Outline **two** methods of controlling the above disease. (2marks)

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.....



21. A diagram of a sheep is shown below. Study the diagram and answer the questions that follow



i) What operation is usually carried out on the part labeled **A**? ( 1 mark)

.....

ii) Give **two** reasons for carrying out the operation stated in a(i) above? (2 mark)

.....

.....

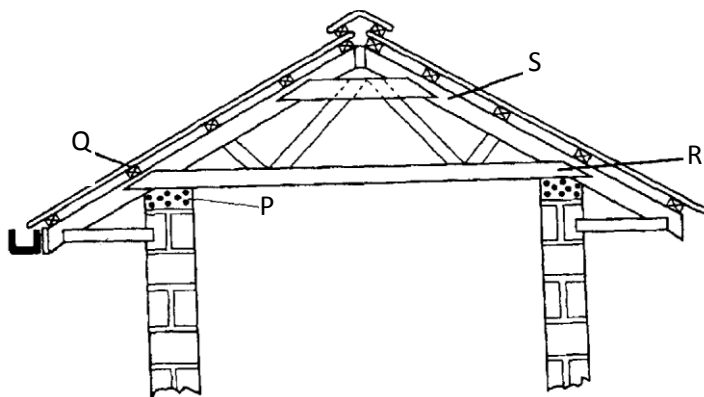
iii) Which routine is usually carried out on the part labeled B. (1 mark)

.....

iv) Name the disease that is likely to affect the sheep if the operation stated in a(iii) above is not carried out. (1 mk)

.....

22. The following diagram shows parts of a roof. Study it carefully and answer the questions that follow.



(a) Name the parts labeled **P, Q, R** and **S** (2mks)

**P**.....

**Q**.....

**R**.....

**S**.....

(b) State the functions of **P** and **Q** (2mks)

**P**.....

**Q**.....

(c) State **two** ways of treating timber (1 mks)

.....

.....

**SECTION C (40 mks)**

**Answer any two questions from this section in the spaces provided after question**

23. (a) Discuss the management of layers from one day old to the start of laying in a deep litter

system. (14 mks)

(b) Explain management practices that would improve fish production. (6 mks)

24 (a) Discuss mastitis disease under the following subheading:

(i) Specific causal organisms (2 mks)

(ii) Predisposing factors (5 mks)

(iii) Symptoms (4 mks)

(iv) Control and treatment (5 mks)

(b) State **four** ways by which a farmer can identify an animal suffering from worm infestation. (4 mks)

25. a) Discuss the importance of farm fences. (9mks)

b) State the factors considered when siting farm structures. (11 mks)

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