

SUNRISE EVALUATION EXAMS FORM 3 - 2021

NAME.....ADM NO..... CLASS.....

DATE:

SIGN:

443 AGRICULTURE

PAPER

(THEORY)

SEPTEMBER 2021

DURATION:: 2HRS

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

Instructions to candidates

- a) Write your name and index in the spaces provided above
- b) Sign and write the date of examination in the spaces provided above
- c) This paper consists of **three** sections **A, B** and **C**.
- d) Answer **all** the questions in sections **A** and **B**.
- e) Answer any **two** questions in section **C**
- f) **All** answers should be written in the spaces provided in the question paper.

For Examiner's Use Only

Section	Question	Maximum Score	Candidates Score
A	1 - 17	30	
B	18 - 24	40	
C	25-27	20	
Total Score		90	

1. Give **four** activities that may be undertaken in organic farming. (2 marks)
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2. State **four** harmful effects of wind on crop production (2 marks)
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3. State **four** practices that can be used to improve water logged clay soils (2 marks)
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4. State **four** factors considered when selecting planting materials (2 marks)
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5. Give **two** causes of blossom-end rot in tomatoes (1 mark)
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6. Give **four** pieces of information contained in a land title deed. (2 marks)
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7. Name **three** macro-nutrient elements whose deficiency symptom is chlorosis (1½ marks)
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8. State **two** water treatment processes that take place in the coagulation and sedimentation tank. (1 mark)
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9. State **four** reasons for pruning fruit crops (2 marks)
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10. Name **three** practices carried out to improve and maintain permanent pastures (1½ marks)
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11. State **four** advantages of timely harvesting of crops (2 marks)
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12. List **three** tertiary operations that may be carried out in a seedbed (1½ marks)
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-
13. List **four** disadvantages of using compost manure in crop production (2 marks)
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-
14. Name the camel breed with two humps. (1 mark)
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15. Name the vectors for each of the following livestock diseases. (2 marks)

- a) East coast fever.....
- b) Rift valley fever.....
- c) Trypanosomiasis.....
- d) Nairobi sheep disease.....

16. Give four factors considered when selecting a site for fish pond. (2 marks)

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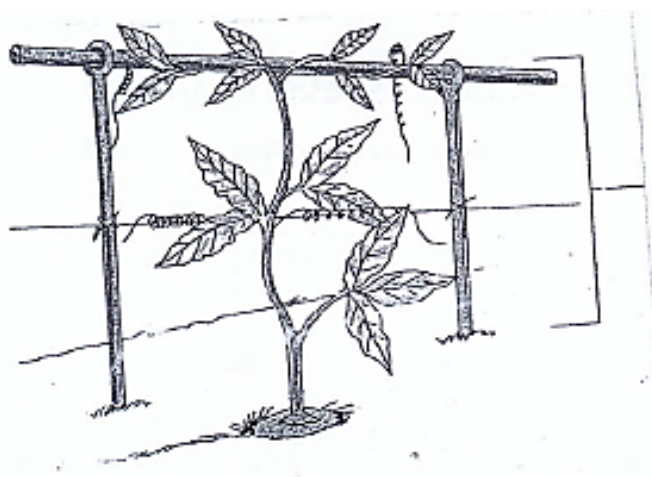
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17. Name the tools used in (2 marks)

- (i) Cutting curves on thin wood.....
- (ii) Measuring the inner diameter of a circular object/surface.....
- (iii) Cutting thin sheets of metal.....
- (iv) Tightening wires during fencing.....

SECTION B (40MKS)

18. Study the illustration below and answer questions that follow.



(a) Identify the management practice indicated above. (1 mark)

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(b) Give **three** problems that could arise if the above practice is not carried out. (3 marks)

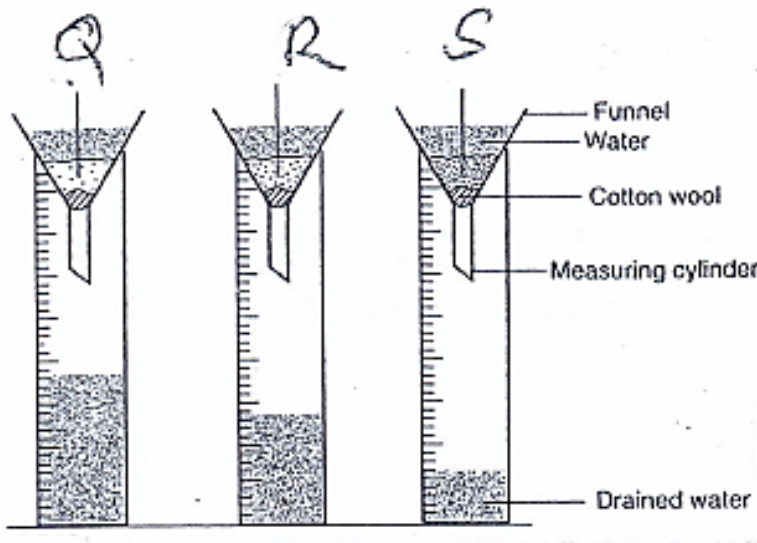
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19. The diagram below illustrates an experiment carried out by a Form one student on soil. Study it carefully and answer the questions that follow.



(a) State the aim of experiment above. (1 mark)

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(b) Identify the soil samples in each of the funnels labeled Q and R (2 marks)

Q.....

R.....

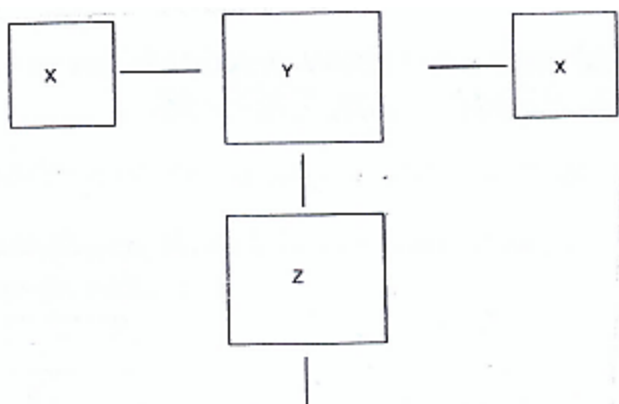
(c) Give **two** ways in which the soil structure of the sample labeled S above can be improved.

(2 marks)

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20. The diagram below illustrates a method of preparing compost manure. study it and answer the questions that follow.



(a) Identify the method illustrated above. (1 mark)

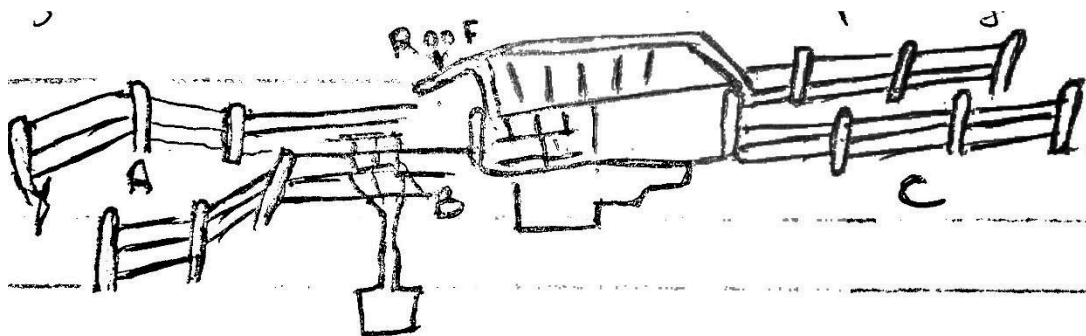
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(b) By using arrows, indicate the direction of the materials from X to the field (2 marks)

(c) State **two** desirable factors considered when siting compost manure pit. (2 marks)

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21. a) Diagram below show a plunge dip.



(a) Using a arrow on the diagram show the movement of cattle (½mark)

(b) State one use of parts A, B and C (3marks)

A.....

B.....

C.....

(c) State two precautions a farmer should take on dip to ensure effective dipping (2marks)

- (i).....
- ii).....

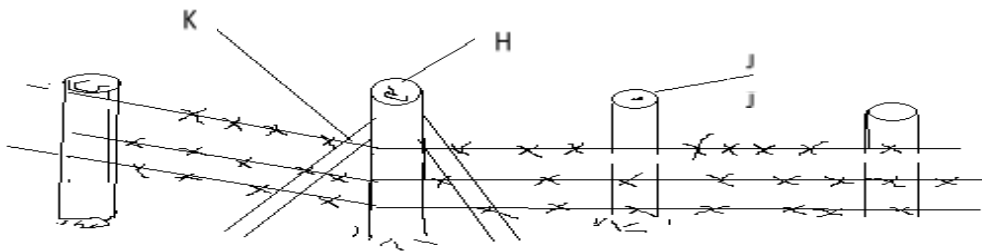
(d) State two uses of the roof of the dip (2marks)

- (i).....
- ii).....

b) State three disadvantages of a plunge dip (3marks)

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22. Below is a diagram showing parts of a fence. Use it to answer the questions that follow.



(a) Identify the type of fence above. (1mk)

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(b) Name the parts labeled H and J. (2mks)

H.....

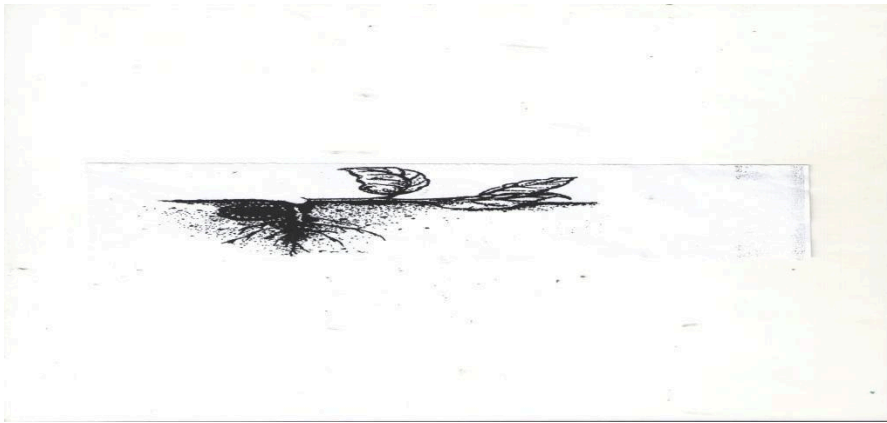
J.....

(c) What is the role of the part labeled K? (1mk)

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.....

(d) On the diagram, draw a dropper in the right position. (1mk)

23. The diagram below shows a pest and the damaged crop study it and answer the questions that follow.



a) Identify the pest illustrated above (1mk)

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b) Explain **two** ways of controlling the pest (2mks)

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c) State **two** ways in which the pest economically important. (2mks)

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24. a) Distinguish between straight and compound fertilizers. (1mk)

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b) A farmer applied 200kg of C A N (20%N) per hectare maize crop. Calculate the amount of Nitrogen applied on his 5 hectare crop. Show your working (4mks)

SECTION C (20MKS)

25. (a) Describe the production of beans under the following sub-topics;

(i) Planting (4 marks)

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(ii) Field practices

(4 marks)

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(iii) Harvesting

(4 marks)

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b) Outline **four** safety measures undertaken in the use of herbicides to minimize
environmental pollution.

(4 marks)

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c) Describe the precautions taken into account during harvesting of cotton

(4 marks)

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26. (a) Describe five pre-disposing factor of livestock diseases. (5marks)

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(b) Describe six mechanical methods of controlling ticks (6marks)

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(c) Describe the factors that affect milk composition of a cow (9marks)

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27. (a) Describe various cultural uses of livestock. (8mks)

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