SUNRISE EVALUATION EXAMS FORM 2 - 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 all the 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 – 18	30	
B	19 - 25	40	
C	26	20	
Total Score		90	

1. Give **two** reasons why farmers are encouraged to practice organic farming. (1 mark)

2. State **three** advantages of shifting cultivation. (1½ marks)

3. List **four** methods of farming. (2 marks)

4. Outline **three** effects of soil organisms which benefit crop growth. (1½ marks)

5. State **two** harmful effects of strong wind on crop production. (1 mark)

6. State **three** advantages of adding organic matter to sandy soil. (1½ marks)

7. Give **three** reasons for early seed bed preparation. (1½ marks)

8. Outline **four** main reasons for secondary tillage. (2 marks)

9. Name **four** types of water pumps which can be used on a farm. (2 marks)

10. State **two** advantages of earthing up in crop production. (1 mark)

11. Give a reason for carrying out each of the following practices in a tomato nursery.
(2 marks)

    (a) Pricking out

    (b) Hardening off

12. Name **four** light breeds in poultry. (2 marks)

13. Give **four** biotic factors which influence Agriculture positively. (2 marks)

14. State **two** farming practices which enhance organic farming. (1 mark)

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15. Which chemical are used during water treatment to; (1½ marks)

(a) Coagulate solid particle_____

(b) Soften the water _____

(c) Kill pathogens _____

16. What do you understand by the following terms? (1½ marks)

(a) Seed dressing

_____

_____

(b) Seed inoculation

_____

_____

(c) Chitting

_____

_____

17. State the uses of the following farm tools and equipment.

(a) Secateurs (1 mark)

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(b) Sickle (1 mark)

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(c) Bolus gun (1 mark)

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18. State **four** maintenance practices carried out on a wheel barrow. (2 marks)

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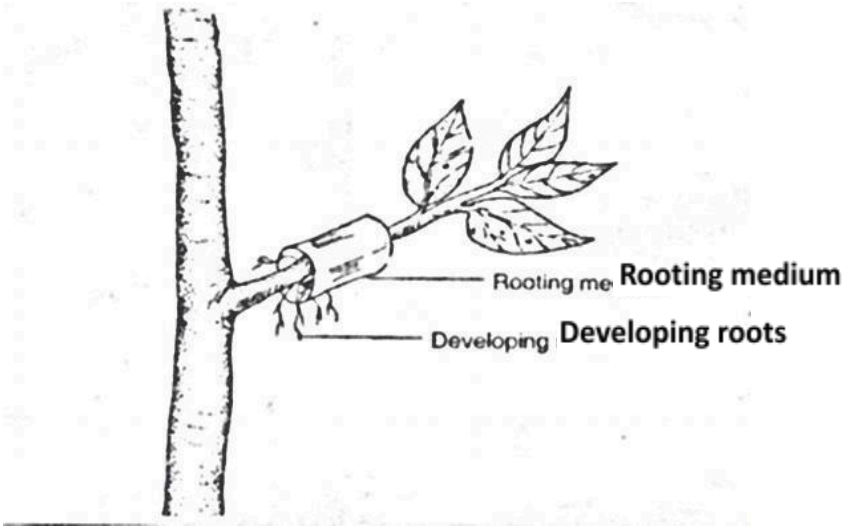
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SECTION B (40MKS)

19. The diagram below shows a method of layering. Study it and answer the questions that follow.



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

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(b) State **one** circumstance in which the method of layering indicated above is recommended. (1 mark)

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20. a) Maize requires 120kg/ha of phosphorus pentoxide (P_2O_5). How much of the compound fertilizer 20:20:10 would be applied to 0.4 hectare of land to achieve this rate. (show your working). (2 marks)

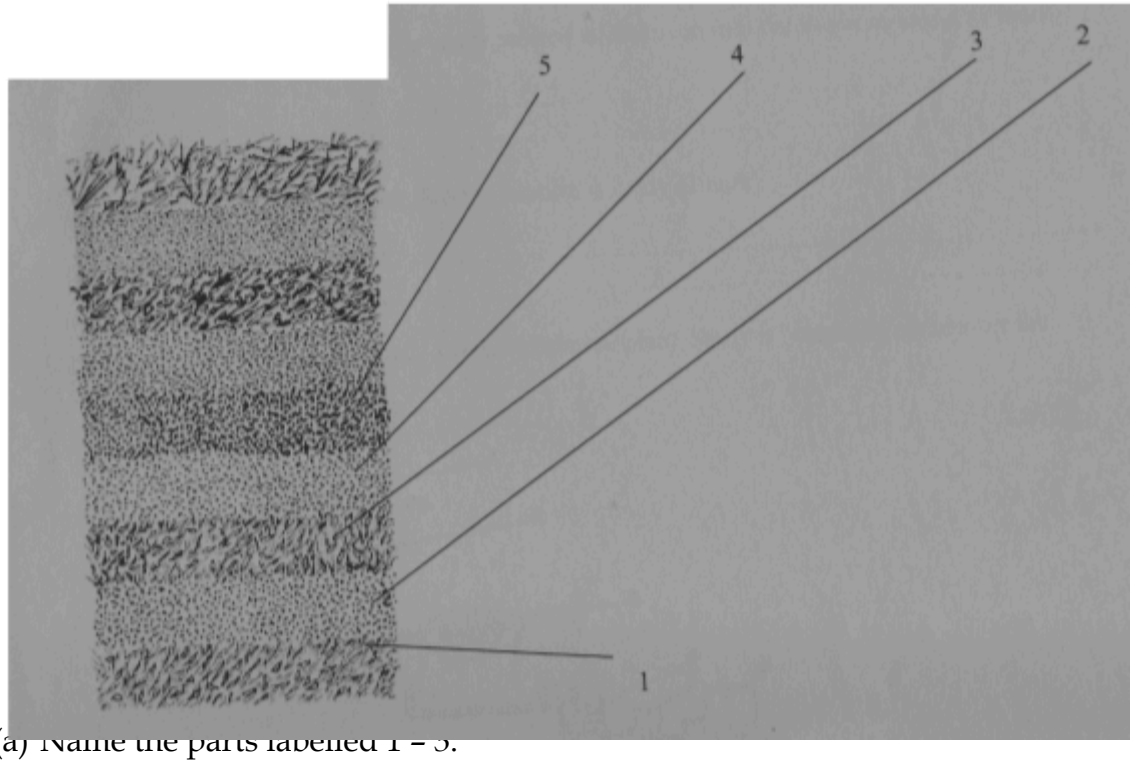
b) Distinguish between straight fertilizers and compound fertilizers. (2 marks)

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c) State **four** methods of harvesting water on the farm. (2 marks)

21. The diagram below is an illustration of a composite pit. Study the illustration and answer the questions that follow.



(a) Name the parts labelled 1 – 3. (1 ½ mark)

1 ..... ……..……

2 ..... ……..……

3 ..... ……..……

(b) Give the importance of 5, 4, and 3. (1½ mark)

5 ..... ……..……

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4 ..... ……..……

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3 ..... ……..……

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(c) (i) Why is it advisable that a long sharp pointed stick driven into the compost pit at an angle? (1 mark)

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(ii) State **two** ways of identifying that the manure is ready. (2 marks)

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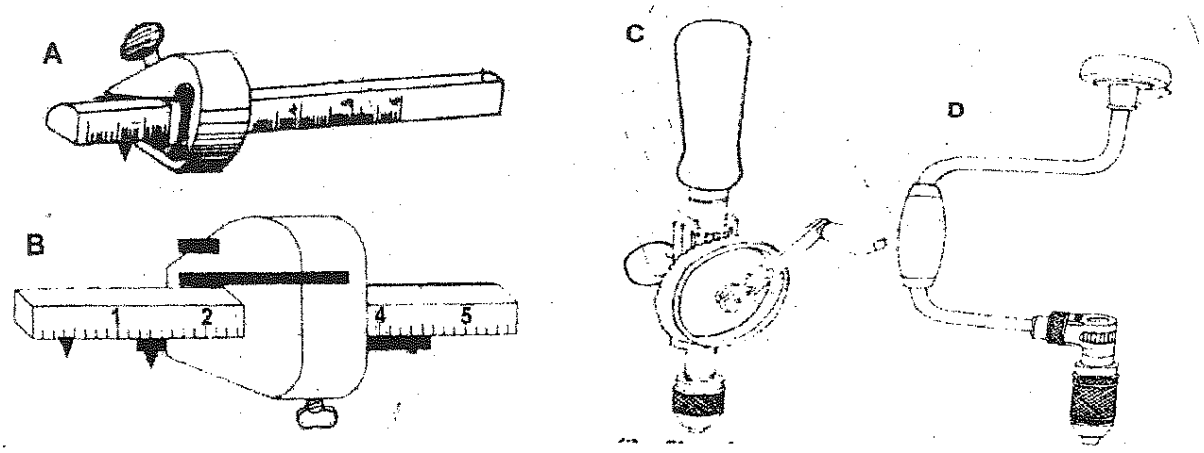
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(d) State two functions of the part labelled H in the diagram. (2 marks)

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22. Below are tools used on the farm. Study them and answer the questions that follow.



(a) Give the identity of each tools above. (2 mark)

A……

B……

C……

D……

(b) State the observable differences between tool A and B (1 mark)

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(c) State the functional difference between tool C and D. (1 mark)

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(d) State any two precaution that should be taken into account when using the above tools.

(1 mark)

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23. The diagram below is an illustration of a camel. Study it and answer the questions that follow.



i. Identify the camel species illustrated above (1 mark)

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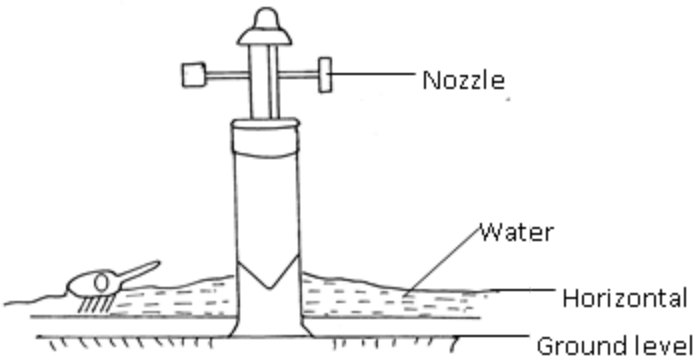
ii. Using the letter L indicate on the animal where the load is placed on the camel. (1 mark)

iii. Name two products a farmer would obtain from the camel illustrated above. (2 marks)

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24. Study the diagram below and answer the questions that follow.



a) Name the method of irrigation illustrated above. (½ mark)

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b) State **two** advantages of this method of irrigation. (1 mark)

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c) State **three** problems encountered by farmers using this method of irrigation (1 ½ marks)

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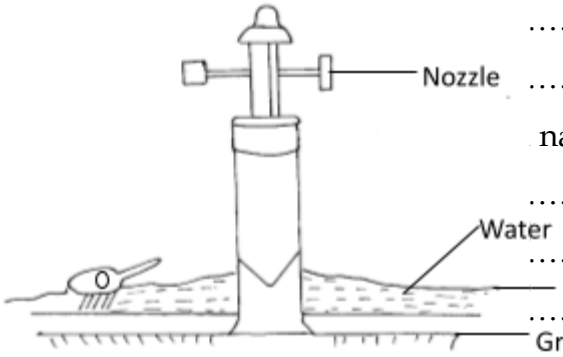
d) Give **four** factors whi named in (a) above. (2 marks)

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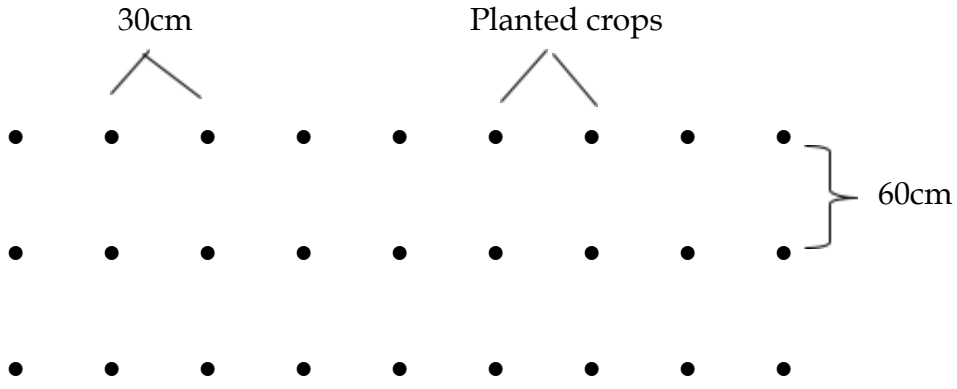
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25. The diagram below shows a method of planting used to establish a certain variety of crop



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(a) Identify the method of planting used (1mk)

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(b) Give the interplant spacing followed above (1mk)

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(c) Give three advantages of the above method of panting (3mks)

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(d) The spacing above was used to establish a crop on an area of land measuring 6m by 3m. Calculate the crop population. Show your working (5mks)

SECTION C(20MKS)

26. (a) State **four** methods of preparing planting materials in readiness for planting. (4 mks)

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(b) State **eight** practices carried out to ensure field hygiene. (8 mks)

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(c) Discuss factors that should be put into consideration while choosing suitable implements for primary cultivation. (8 mks)

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