

FORM 4 MID TERM 2 2020

AGRICULTURE PAPER 1

SECTION A (30 MARKS)

Answer all questions from this section in the spaces provided.

1. Name **three** physical agents of weathering (1 ½ mks)
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2. Outline **three** methods of breaking seed dormancy (1 ½ mks)
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3. List **three** signs shown by crops when they are attacked by nematodes (1 ½ mks)
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.....
4. Differentiate between Net Revenue and Marginal Revenue as used in production economics (1mk)
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.....
5. Give **one** use of each of the following materials in the preparation of compost manure (1 ½ mks)
(a) Top soil
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(b) Wood ash
.....
(c) Organic manure
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6. List **three** advantages of using polythene sleeves in raising seedlings (1 ½ mks)
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.....
7. State **three** disadvantages of commercial land tenure system (1 ½ mks)
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8. Outline **four** methods used to improve efficiency and productivity of farm labour (2mks)
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.....
9. State **four** factors that determine the choice of an irrigation system to use in a farm. (2mks)
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.....
.....
10. Mention **four** characteristics of shifting cultivation as a method of farming (2mks)
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.....
11. Differentiate between thinning and pricking out as used in crop management (1mk)
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.....
12. List **three** books of account used in the farm (1 ½ mks)
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13. State **three** cultural measures taken by farmers to control weeds in the field (1 ½ mks)
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14. State **three** precautions taken when harvesting pyrethrum (1 ½ mks)
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15. Mention **four** advantages of minimum tillage (2mks)
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16. Name **three** crop diseases caused by viruses (1 ½ mks)
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17. Outline **three** examples of joint products in crop production (1 ½ mks)

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18. State **three** advantages of land fragmentation (1 ½ mks)

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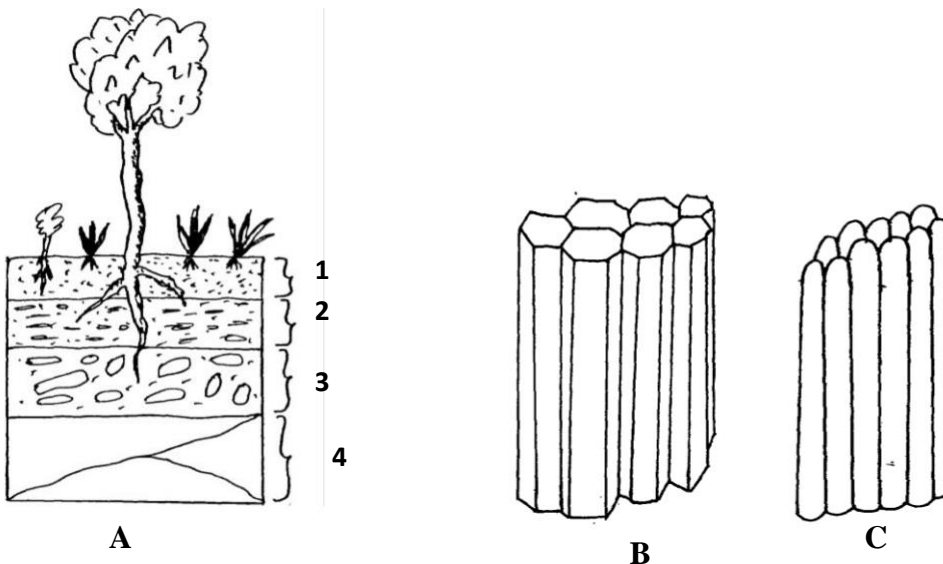
19. Give **four** advantages of using zero grazing system of grazing (2mks)

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SECTION B (20 MARKS)

Answer ALL questions in this section in the spaces provided

20. The following are diagrams illustrating a soil profile labeled **A** and **two** types of soil structure labeled **B** and **C**. Use them to answer the questions that follow.



(a) Identify the strata of the soil profile labeled **1, 3** and **4** (1 ½ mks)

1.....
3.....
4.....

(b) Identify the types of soil structure labeled **B** and **C** (1mk)

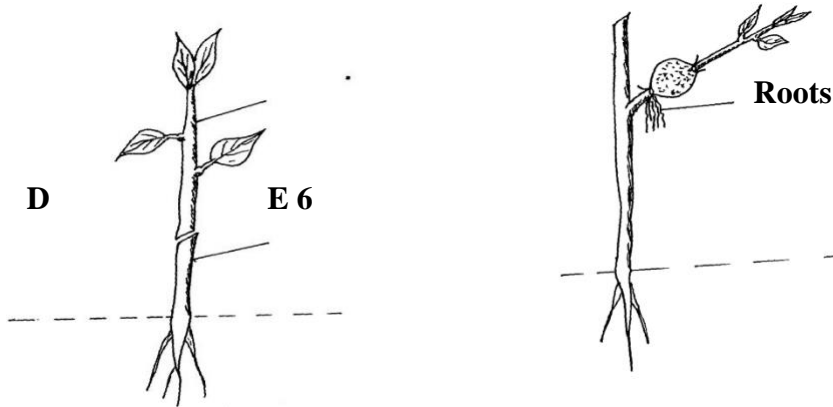
B.....
C.....

(c) Name a natural process that may change soil structure **B** into structure **C** (½ mk)

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.....
(d) State two limitations of the hard layer of soil that develops in layer 2 (1mk)

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(e) List two farming practices that may destroy structure B (1mk)

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21. The following are illustrations of methods of vegetative crop propagation labeled D and E. use them to answer the questions that follow



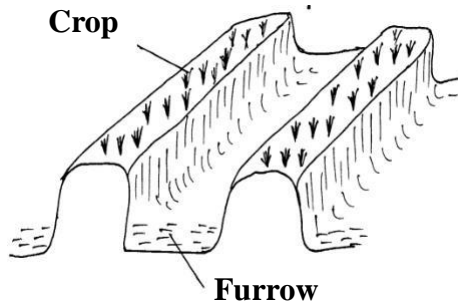
(a) Identify methods of crop propagation labeled D and E (1mk)

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(b) Identify parts of D labeled 5 and 6 above (1mk)

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.....
(c) When does method E become necessary in crop production (1mk)

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.....
(d) Outline four characteristics you would desire part 6 to have (2mks)

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.....
22. The following diagram is of a method of draining waterlogged land for crop production. Study it carefully and answer the questions that follow.



(a) Identify the methods of drainage illustrated above (1mk)

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(b) Apart from the above method of drainage, name **two** other methods of draining farm/land (2mks)

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(c) Give **two** reasons for draining farm/land (2mks)

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23. A farmer was advised to top-dress his maize crop with C.A.N at the rate of 200 kg/ha. CAN contains 20% Nitrogen.

(a) Calculate the amount of Nitrogen applied per hectare (show your working) (3mks)

(b) Name **two** methods the farmer may have used to top-dress the maize crop (2mks)

SECTION C (40 MARKS)

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

24. (a) Outline problems facing agriculture in Kenya (10mks)

(b) Explain the importance of the following soil constituents (3mks)

(i) Soil air

(ii) Mineral matter (2mks)

(c) State the uses of water in the farm (5mks)

25. (a) Explain how **five** factors lead to loss of soil fertility (10mks)

