**NAME………………………...……………….… ADM.NO……..…… CLASS/STREAM……….…… SCHOOL……….…………**

**SIGNATURE………………………. DATE ……….……………**

**443/1**

**AGRICULTURE**

**PAPER 1**

**Time: 2 HOURS**

**MAGS JOINT EXAMINATION**

**CYCLE 7 MARCH TERM 1 2020**

***INSTRUCTION TO CANDIDATES***

* *This paper consists of* ***THREE*** *sections:* ***A, B*** *and* ***C****.*
* *Answer* ***ALL*** *questions in section* ***A****.and* ***B***
* ***ANY*** *Two questions from section* ***C****.*

|  |  |  |
| --- | --- | --- |
| **SECTION** | **MARKS** | **CAND. SCORE** |
| A | 30 |  |
| B | 20 |  |
| C | 40 |  |
| **TOTAL SCORE** | **90** |  |

**SECTION A (30MKS)**

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

1. Give **two** characteristics of plantation farming. (1mk)

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1. Name **two** chemical processes of weathering. (1mk)

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1. State **two** advantages of organic farming. (1mk)

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1. Outline **two** effects of soil organisms which benefit plant growth. (1mk)

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1. Give **two** ways in which organic mulch help to conserve water in the soil. (1mk)

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1. Give **two** types of labour records. (1mk)

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1. Outline **four** ways in which land consolidation helps to improve farm management. (2mks)

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1. State **four** importance of raising seedlings in a nursery bed. (2mks)

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1. Give **four** ways of controlling weeds in a field of maize. (2mks)

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1. State **three** reasons for top dressing pasture. ( 11/2mks)

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1. Give **four** reasons for training crops as a field practice . ( 2mks)

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1. State **three** activities the farmer carries out on a store before storing grains. (11/2mks)

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1. Give **four** desirable characteristics of certified seeds. (2mks)

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1. (a) Outline **two** characteristics of nitrogenous fertilizers. (1mk)

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(b) Give the forms in which the following elements are available to plants: (1mk)

1. Phosphorous: ……………………………………….
2. Potassium: ………………………………………
3. Give **four** factors that influence the choice of tools and equipment used in Primary cultivation. (2mks)

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1. State **four** factors that contribute to competitive ability of weeds. (2mks)

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1. Define the following terms as used in crop production.

(a) Trelishing (1mk)

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(b) Stooking (1mk)

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1. Give **two** advantages of strip grazing (1mk)

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1. State **four** advantages of mixed pasture. (2mks)

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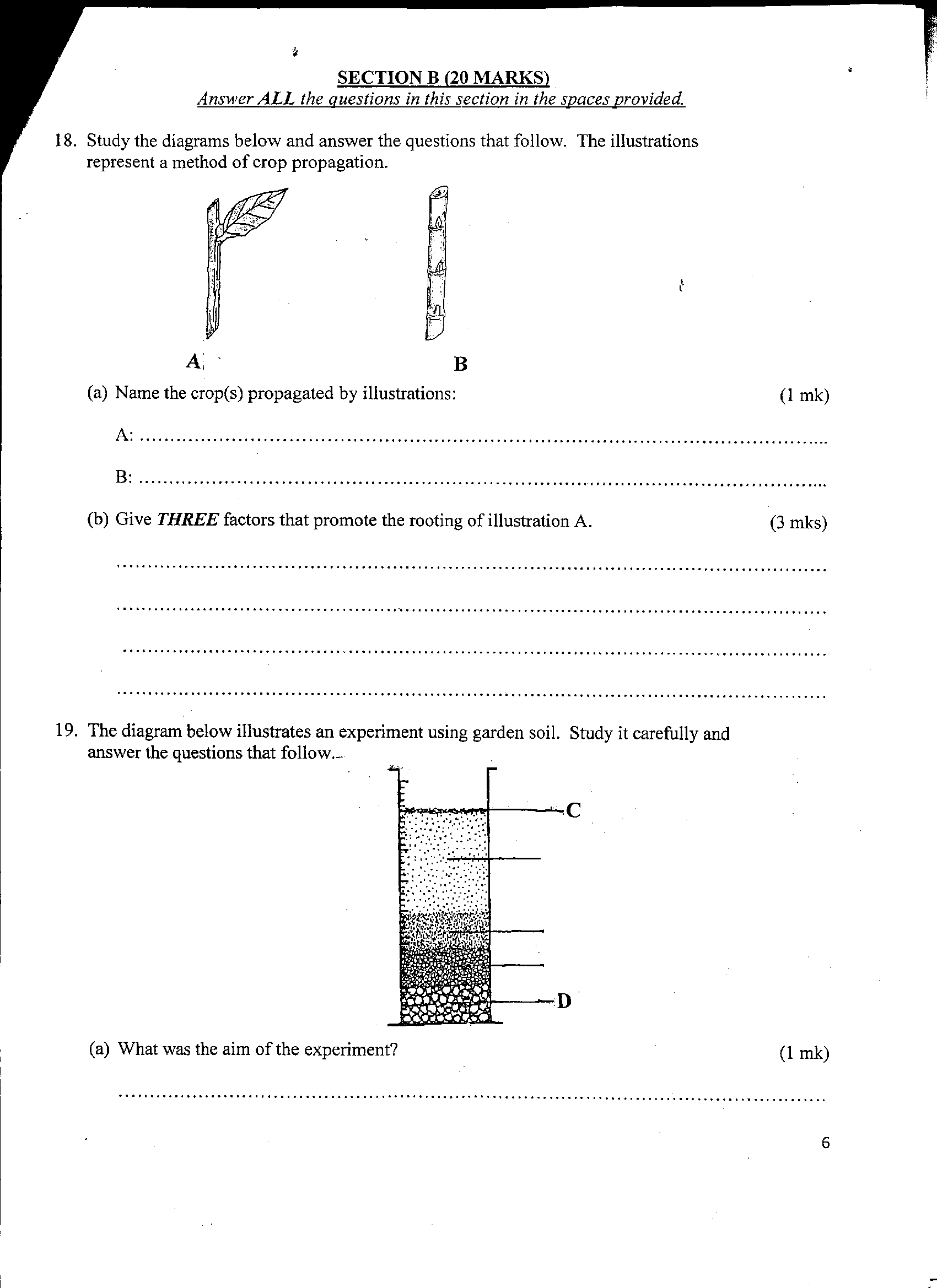
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**SECTION B. (20 MARKS)**

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

1. Study the diagram below and answer the questions that follow. The illustrations represent a method of crop propagation.



(a) Name the crops (s) propagated by illustrations: (1mrk)

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(b) Give **three** factors that promote the rooting of illustration **A.** (3mrks)

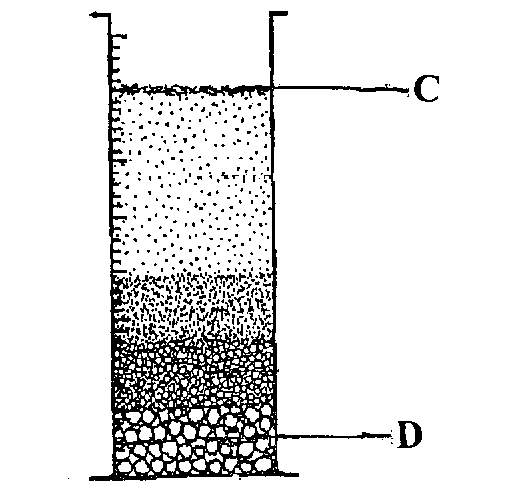
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1. The diagram below illustrates an experiment using garden soil. Study it carefully and answer the question that follow.



(a) What was the aim of the experiment? (1mrk)

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(b) Name the parts labeled **C** and **D.** (2mrks)

C…………………………………………………………………………………………………………………………….

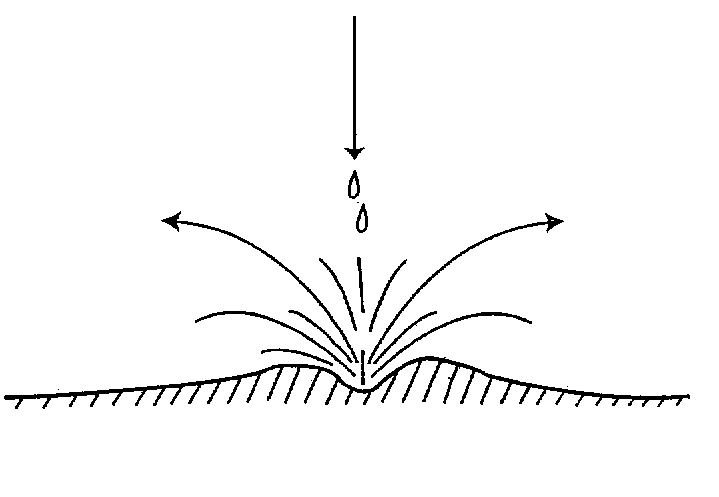
D…………………………………………………………………………………………………………………………….

(c) Name the property of soil being investigated. (1mrk)

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1. The illustration below shows a type of soil erosion. Study it carefully and answer the questions that follow.



(a) Identify the type of erosion illustrated. (1mrk)

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(b) Give **tw**o soil factors that influence the rate of soil erosion. (2mrks)

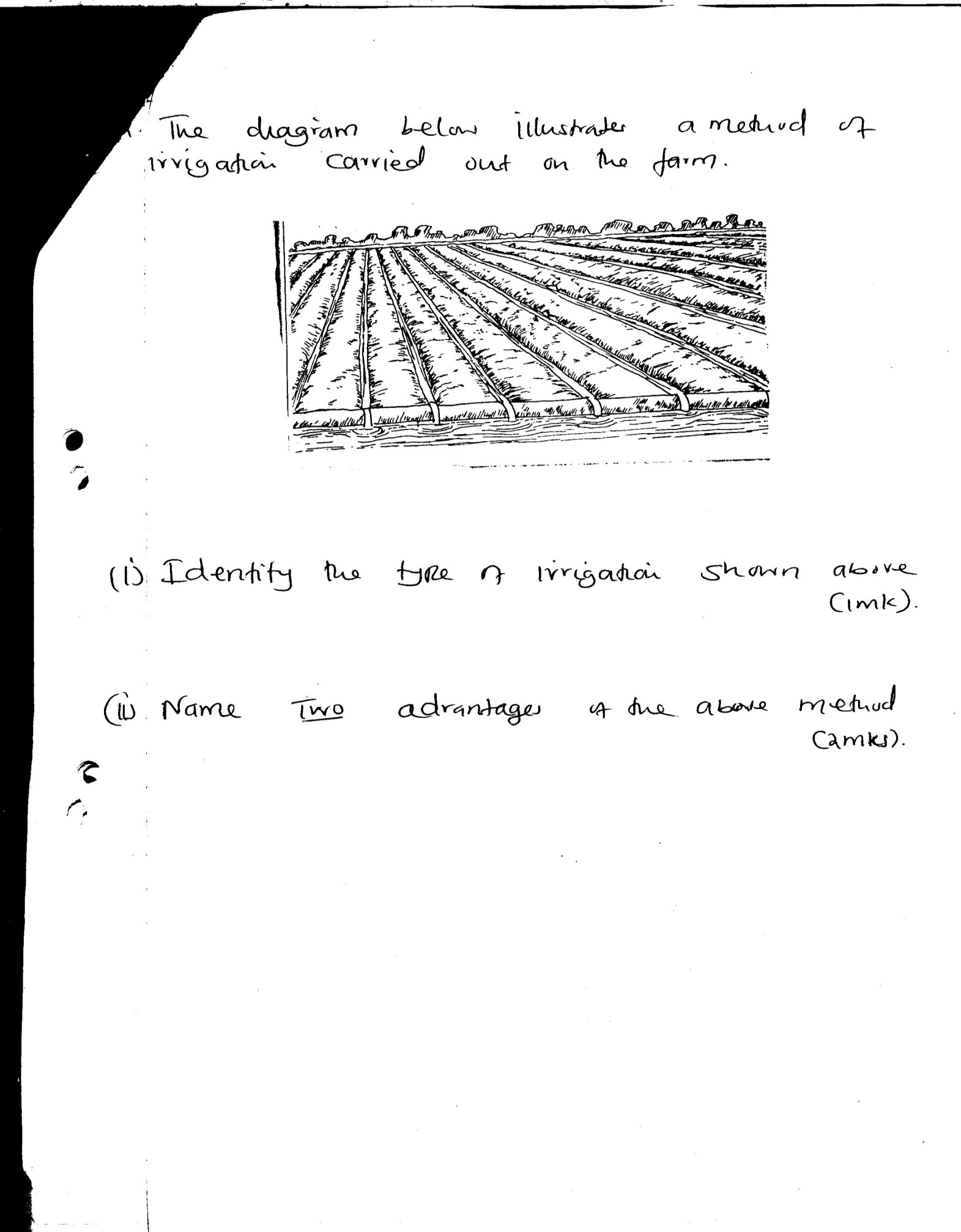
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(c) Name **one** agent of soil erosion. (1mrk)

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1. The diagram below illustrate a method of irrigation carried out on the farm



(i) Identify the type of irrigation shown above. (1mk)

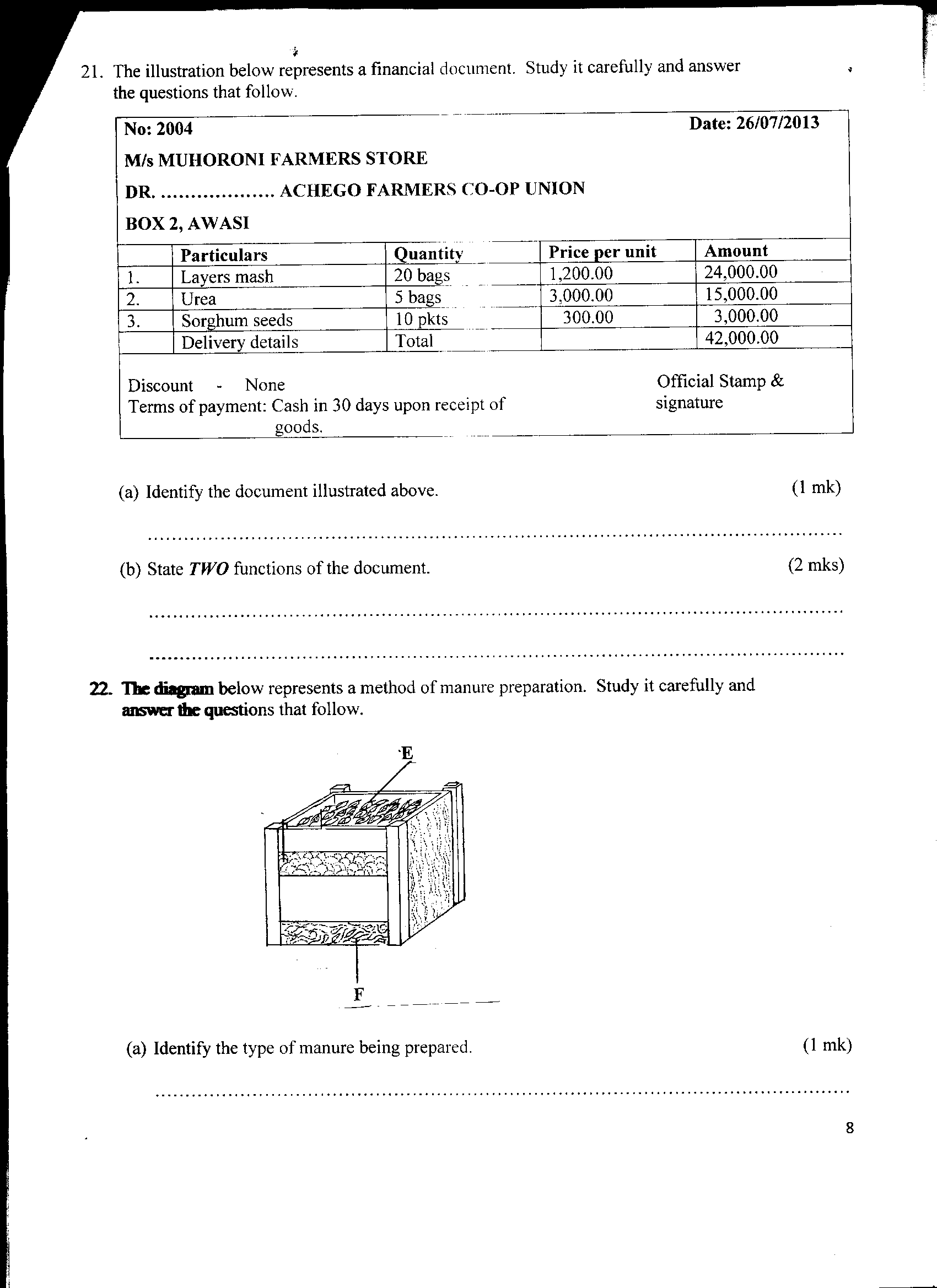
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(ii) Name **two** advantages of the above method. (2mks)

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1. The diagram below represent a method of manure preparation. Study it carefully and answer the questions that follow.



(a) Identify the type of manure being prepared. (1mrk)

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(b) Name the parts labeled **E** and **F.**  (1mrk) .

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F…………………………………………………………………………………………………………………………….

(c) Give **three** disadvantages of manures. (3mrks)

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**SECTION C (40MARKS)**

***Answer any TWO question from the section in the spaces provided***

1. (a) Give six precautions observed in pruning mature tea (6 mks)

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(b) Describe the procedure followed when collecting a soil sample form the field for testing in the

laboratory (6 mks)

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(c) Outline four advantages of intercropping crops (4 mks)

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(d) State four factors considered before selecting a farm enterprise. (4 mks)

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1. Describe the production of tomatoes under the following sub-headings:

i) Ecological requirements of tomato plants (5mks)

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ii) Land preparations (4mks)

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iii) Transplanting (7mks)

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iv) Disease control (4mks)

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27. a) State five factors that influence soil productivity. (5mks)

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b) State five qualities of mother plant used during grafting. (5mks)

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c) Give two types of mulching materials. (2mks)

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d) State four agricultural practices which pollute water. (4mks)

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e) Describe precautions followed when harvesting coffee. (4mks)

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