**CANDIDATES NAME:…………………………………………………………………**

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| **INDEX NUMBER** | | | | | | | |
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**SIGNATURE: ……………………………………**

**527/2**

**PRINCIPLES AND**

**PRACTICES OF**

**AGRICULTURE**

**PAPER 2**

**(Practical)**

**JUNE/JULY**

**2 HOURS**

**MOCK EXAMINATIONS SET 1 2019**

**Uganda Certificate of Education**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

PAPER 2

**(Practical)**

2 HOURS

**INSTRUCTIONS TO CANDIDATE:**

* *Attempt all questions in the paper in the spaces provided.*

|  |  |
| --- | --- |
| **FOR EXAMINERS USE ONLY** | |
| **QUESTIONS** | **MARKS** |
| **1**  **2**  **3**  **4**  **5** |  |
| TOTAL |  |

1. Specimen A and B are soil samples.

a) Measure 20cm**3** of sample A and pour it in the measuring cylinder. To it add 30cm**3** of water and stir the content. Leave the contents to settle. Repeat the procedure for sample B.

i) Record your observation for both the specimens. (4 marks)

A.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

B.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

ii) Record the volume of the mixtures in each of the cylinders. (1 mark)

A.

**………………………………………………………………………………………….....**

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**………………………………………………………………………………………….....**

B.

**………………………………………………………………………………………….....**

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b) Calculate the percentage of air in each of the soil samples. (4 marks)

A.

**………………………………………………………………………………………….....**

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**………………………………………………………………………………………….....**

B.

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**………………………………………………………………………………………….....**

2. Specimen C**1**, C**2**, C**3** and C**4** are fertilizers.

a) Identify problems associated with using the fertilizer material labelled C**3** and C**4** in their current condition. (2 marks)

C**3**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

C**4**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

b) Explain how specimen C**2** can be stored to maintain its quality on the farm. (2 marks)

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**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

c) Suggest measures of improving specimen C**3** and C**4** to make them suitable for crop use. (4 marks)

C**3**.

**………………………………………………………………………………………….....**

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**………………………………………………………………………………………….....**

C**4**.

**………………………………………………………………………………………….....**

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**………………………………………………………………………………………….....**

d) State the benefits of using materials C**1** and C**2** to improve soil fertility.

(3 marks)

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3. Specimen D, E and F are engine parts.

a) Classify the specimen according to the tractor engine system to which they belong. (1 ½ mark)

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**………………………………………………………………………………………….....**

b) State one function for each of specimen. (3 marks)

D.

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**………………………………………………………………………………………….....**

E.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

F.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

c) Observe the conditions of specimen D and F. State two effects of any two conditions observed on the specimen. (4 marks)

|  |  |  |
| --- | --- | --- |
| **Specimen** | **Condition** | **Effect of condition** |
| D |  |  |
| F |  |  |

d) Suggest the care and maintenance given to each of the specimen D and F to keep them in good condition. (2 marks)

D.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

F.

**………………………………………………………………………………………….....**

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4. Observe specimen J carefully.

a) Identify the body system from which specimen J was obtained. (1 mark)

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**………………………………………………………………………………………….....**

b) Draw specimen J in the space below and label the parts marked J**1**, J**2**, J**3**, J**4**, J**5** and J**6**. (3 marks)

c) Give one function of each of the parts J**1** to J**6**. (6 marks)

J**1**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

J**2**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

J**3**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

J**4**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

J**5**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

J**6**.

**………………………………………………………………………………………….....**

**………………………………………………………………………………………….....**

5. Specimen P, Q, R and S are construction materials.

a) Describe how specimen;

i) P, Q and R are used during construction of a floor for a calf pen. (4 marks)

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ii) S is used in constructing a wall for a poultry house. (2 marks)

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**………………………………………………………………………………………….....**

b) Why is specimen S important in the construction of farm building?

(2 marks)

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c) Outline the precautions taken to ensure proper setting of the materials set after combining P, Q and R. (2 marks)

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**END**