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**P515/3**

**PRINCIPLES AND**

**PRACTICES OF AGRICULTURE**

**(Practical)**

**Paper 3**

**Jul/Aug 2016**

**2 Hours**

**MUKONO EXAMINATIONS COUNCIL**

**Uganda Advanced Certificate of Education**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

**PRACTICAL**

**Paper 3**

**2 Hours**

**INSTRUCTIONS**

* *Answer* ***all*** *these questions in this paper.*
* ***All*** *answers should be written in the spaces provided. No extra paper attached will be marked.*
* ***All*** *answers must be written in blue or black ink.*

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| --- | --- | --- |
| **For Examiner’s use only** | | |
| Question | Marks | Examiner’s no and Signature |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| **Total** |  |  |

1. Specimens **L1** – **L4** are organs from two different types of livestock.

a) Identify the organ system to which they belong.  ***( ½ mark)***

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b) State the role of; ***(2marks)***

**L2**

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**L3**

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c) Using a knife, cut **L1** and **L4** longitudinally. From your observation, explain how each

one is adapted to its role. ***(4marks)***

**L1**

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**L4**

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d) In the space below, draw one half of the cut **L1** ***(3 ½ marks)***

1. **M1**, **M2** and **M3** are common on a livestock dairy farm.

a) State the role of **M1** in respect to **M2**  ***(1mark)***

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b) Test **M2** and **M3** using blue and red litmus papers. Record your observation in each case;

with **M2** ***(1mark)***

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with **M3** ***(1mark)***

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c) Explain your observation with **M3** ***(2marks)***

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d) Describe how **M1** can be used to carry out the role mentioned in (a) above. ***(3marks)***

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e) State two ways through which good quality of **M2** can be maintained on the farm.

***(2marks)***

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1. Specimens **N1** – **N5** are common in crop production.

a) Dissolve 2 spatulafuls of **N1** in 10cm3 of water in a test tube, and 2 spatulafuls of **N2**

in 10cm3 of water in another test tube.

Record your observation in each case

with **N1**  ***(1mark)***

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with **N2** ***(1mark)***

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b) From your observation above, explain why it is not recommended to apply **N1** at

planting time.

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c) State two advantages of **N3** over **N4** in crop production. ***(2marks)***

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d) State the role of **N5** in the maintenance of soil fertility. ***(2marks)***

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e) **N4** supplies nitrogen, phosphorous and potassium in the ratio of 10:20:15

respectively. If 200kilos of **N4** are applied in the field, determine the quantity of;

(i) phosphorous ***(1mark)***

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(ii) filler material ***(1mark)***

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1. a) Specimen **K1**, **K2**, **K3** and **K4** are plant pastures. Group the specimens according to their families. ***(2marks)***

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b) State the families to which each group belongs. ***(2marks)***

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c) Observe the specimen **K1** and **K2** carefully and give reasons why they should be

grown together. ***(4marks)***

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d) Give two advantages of feeding animals on the above specimen. ***(2marks)***

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5. You are provided with specimens **X1** to **X5** which are used in carrying out a farm activity.

a) Which activity can be carried out using the specimens? ***(1mark)***

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b) Explain how the specimens can be used to perform the named activity. ***(5marks)***

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c) State three reasons for carrying out the above activity. ***(3marks)***

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d) To which class of lever do specimens **X2** and **X4** belong? ***(1mark)***

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***End -***