Candidate’s name………………………………………..index number…………………….

**P525/3**

**Principles and practices of**

**Agriculture**

**Paper 3**

**INTERNAL MOCKS EXAMINATIONS 2019**

**Uganda Advanced Certificate of Education**

**PRINCIPLES AND PRACTICESOF AGRICULTURE**

**Paper 3 (written practical)**

**2hours.**

**Instructions to candidates,**

This paper consists of five questions.

Answer **all** questions

|  |  |  |  |
| --- | --- | --- | --- |
| **FOR EXAMINERS USE ONLY** | | | |
| Questions | Marks | Initials |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| Total |  |  |

1. You are provided with plant tissue A. Using a cork borer, make cylinders from A cutting each 3cm long of same diameter.

Place each cylinder of plant tissue in atest tube containing equal amount of solutions A1 to A 8separately.

Leave the experiment for 30minutes.

1. Remove the plant tissue from solutions and record your observations in the table below; (03marks)

|  |  |  |
| --- | --- | --- |
| Specimen from solution | Initial length cm | Final length cm |
| A1 |  |  |
| A2 |  |  |
| A3 |  |  |
| A4 |  |  |
| A5 |  |  |
| A6 |  |  |
| A7 |  |  |
| A8 |  |  |

1. Plot a graph showing variation in length of plant tissues with solution

concentration. (3½marks)

1. (i) What physiological process is under investigation in the above experiment

in (b), (½mark)

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(ii)Briefly explain the shape of the curve from the plotted graph. (02marks)

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1. Outline 2 reasons why the physiological process is essential in plant life?

(01 mark)

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1. You are provided with specimen Q which in part of the farm animal.
2. Observe the specimen and identify the undesirable features on it. (2½marks)

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1. Suggest the cause of each undesirable feature on the specimen. (2½marks)

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1. State how each of the identified features on Q affect the quality of the specimen. (05 marks)

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1. Examine the specimens B, C, D, E and F carefully and answer the questions that follow.
2. Describe how the specimens examined are suited for their functions. (04marks)

B……………………………………………………………………………………………………………………………………………………………………………………………………………

C……………………………………………………………………………………………………………………………………………………………………………………………………………

D……………………………………………………………………………………………………………………………………………………………………………………………………………

E…………………………………………………………………………………………………………………………………………………………………………………………………………..

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

1. Describe how the specimens B,C,D, and E can be used to produce suitable pieces of F for construction of a feeder. (02marks)

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1. Suggest possible problems encountered in the use of specimens B, C, D and F.

(02marks)

B……………………………………………………………………………………………………………………………………………………………………………………………………………

C……………………………………………………………………………………………………………………………………………………………………………………………………………

D……………………………………………………………………………………………………………………………………………………………………………………………………………F……………………………………………………………………………………………………………………………………………………………………………………………………………

1. How can specimens B, C, D, and E be maintained in good working conditions?

(02marks)

B……………………………………………………………………………………………………………………………………………………………………………………………………………

C……………………………………………………………………………………………………………………………………………………………………………………………………………D……………………………………………………………………………………………………………………………………………………………………………………………………………

E……………………………………………………………………………………………………………………………………………………………………………………………………………

1. You are provided with specimens J, K, L, M, N and O which are pasture plants.
2. Examine and give any 2 common features of specimens K and M. (02marks)

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Specimens Nand O. (02marks)

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1. (i) Suggest the lifespan of specimen J and give a reason why it should be

included among pastures. (02marks)

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(ii)Give the method of propagating specimens J, K, L and M.

J……………………………………………………………………………………………

K……………………………………………………………………………………………

L……………………………………………………………………………………………M……………………………………………………………………………………………

(c)What qualities make specimens J and N suitable for use as livestock feeds? (02marks)

J……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

N……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

5. You are provided with specimens M1,M2,M3, M4 and M5 which are components of a

tractor engine.

(a)Observe specimens and state with a reason the type of engine to which they

belong. (02marks)

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(b)Describe order how specimens M1, M2, M3 and M4work together to ensure

performance of a tractor. (04marks)

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(c)Observe specimen M4 and state 2 features that enable it to function efficiently. (02marks)

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(d)Suggest 4 ways of ensuring durability and efficiency of M1. (02 marks)

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**END**

**Uganda Advanced Certificate of Education**

**Principles and practices of Agriculture paper 3(P515/3)**

**Internal mock examinations 2017**

**Instruction sheet**

A Potato tubers

A1 0**%**Nacl

A**2**5**%**Nacl

A**3**10**%**Nacl

A**4** 15**%**Nacl

A5 20%Nacl

A6 25%Nacl

A7 30%Nacl

A8 35%Nacl

B G- clamp/sash clamp

C Hand saw

D Smoothening plane

E Tape measure

F piece of timber

M1 Tractor battery with wire at terminals

M2 Ignition coil

M3 Distributor

M4Spark plug

M5Insulated clean wire

J Calliandria

K Green leaf desmodium

L Guinea grass

M Lablab

N Congo signal

O Thatching grass

Q skin/hide, folded with holes, hair slip damage,

Cowdung, soil, meat pieces and fats.

Alsoprovide test tubes each, cork borers.

**END**