Candidate's name……..index number…….

P525/3
Principles and practices of
Agriculture
Paper 3
August 2017

INTERNAL MOCKS EXAMINATIONS 2017
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 A_1 to A_8separately.
   Leave the experiment for 30minutes.

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

Specimen from solution	Initial length cm	Final length cm
A_1		
A_2		
A_3		

A_4		
A_5		
A_6		
A_7		
A_8		

(b) Plot a graph showing variation in length of plant tissues with solution concentration. (3½marks)

(c) (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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(d) Outline 2 reasons why the physiological process is essential in plant life? (01 mark)

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2. You are provided with specimen Q which in part of the farm animal.

(a) Observe the specimen and identify the undesirable features on it. (2½marks)

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

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

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3. Examine the specimens B, C, D, E and F carefully and answer the questions that follow.

(a) Describe how the specimens examined are suited for their functions. (04marks)

B……

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C……

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D……

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E……

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F……

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(b) 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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(c) Suggest possible problems encountered in the use of specimens B, C, D and F.
(02marks)

B……

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C……

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D……

……F……

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(d) How can specimens B, C, D, and E be maintained in good working conditions?
(02marks)

B……

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C……

……D……

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E……

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4. You are provided with specimens J, K, L, M, N and O which are pasture plants.

(a) 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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(b) (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……

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

(02marks)

J……

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N……

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5. You are provided with specimens M_1,M_2,M_3, M_4 and M_5 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 M_1, M_2, M_3 and M_4work together to ensure performance of a tractor. (04marks)

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(c)Observe specimen M_4 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 M_1. (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

A_1 0**%**Nacl

$A_2$5**%**Nacl

$A_3$10**%**Nacl

A_4 15%Nacl
A_5 20%Nacl
A_6 25%Nacl
A_7 30%Nacl
A_8 35%Nacl
B G- clamp/sash clamp
C Hand saw
D Smoothening plane
E Tape measure
F piece of timber

M_1 Tractor battery with wire at terminals
M_2 Ignition coil
M_3 Distributor
M_4Spark plug
M_5Insulated 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