Name of School:……

Candidate's Name:……

Centre No./Index No: …… Signature:……

**P515/3**
**AGRICULTURE PRACTICAL**
**Paper 3**
**July/August**
**2 Hours**

# ELITE EXAMINATION BUREAU MOCK 2019

## Uganda Advanced Certificate of Education

**PRINCIPLES AND PRACTICESOF AGRICULTURE**
**Paper 3**
**2 Hours**

**INSTRUCTIONS TO CANDIDATES**

- This paper consists of **five** questions.
- Answer **all** questions
- ***All*** *answers should be written in spaces provided.*

| For Examiners' Use Only | | |
|---|---|---|
| **Numbers** | **Marks** | **Examiner's Comment** |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| **Total** | | |

Turn Over


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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 $5cm^3$ of solutions $A_1$ to A $_8$separately. Solutions A1 to A8 are of different concentrations from 0%, 5%, 10%, 15%, 20%, 25%, 30% and 35% respectively.
   Leave the experiment for 30minutes.

(a) After 30 minutes remove the plant tissue from solutions and record your observations in the table below; (03marks)

| Specimen from solution | final length cm | Change in 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 against concentration of the solutions.

(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. (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. Specimens B, C, D and E are parts of a primary tillage implement.

(a) (i). Identify the implement to which the specimens belong. (01mark)

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(ii). To which level of Agriculture mechanization does the specimen identified in a (i) belong? (01mark)

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(b). Identify each specimen (02marks)

B.....

C.....

D.....

E.....


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(c). Briefly state the function of each specimen (02marks)

B.....

C.....

D.....

E.....

(d). Briefly explain how any one major feature observed assist each of thespecimen to carry out the stated function in 2 (c) above
(04marks)

B.....

C.....

D.....

E.....

3. (a)Classify the specimens J, K, L, M and N into two groups according to their similarity in terms of nutrient composition. (02marks)

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(b) (i) Suggest the best combination of the specimens J, K, L, M and N in pasture production (01mark)

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(ii) Give reasons for your choice of combination in b(i) above (03marks)

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(c)(i) Which two specimens are most suitable for zero grazing?(01mark)

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(ii) Give one observable feature that makes them more suitable. (01mark)

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(d)State any two advantages of feeding the specimens Jto N to cattle.

(02 marks)

(i)……

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(ii)……

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4. You are provided with specimens **P** and **Q** which are plant parts attacked by pest and diseases.

(a). Observe the specimens and state the damages observed on each specimen (02 marks)

P……

……

Q……

……

(b) Suggest the cause of each damage observed on each specimen. (02marks)

P……

……

Q……

……

(c). Suggest the effect of each observed damage on the crop. (02marks)

P……

……

Q……

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d). Suggest two cultural methods of controlling each observed damage on thespecimen. (02 marks)

P……

……

Q……

……

5. Specimens **S**, **T, U**, and **V** are important specimens in Honey harvesting.

(a) Examine the specimens and state the name of each as used in honey harvesting. (02

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marks)S.....
.....

T.....

U.....

V.....

(b). Describe how the specimens **S**, **T, U**, and **V**are used together to obtain honey from a Bee hive (04marks)

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(c). Briefly explain how specimen **V** enables a farmer to extract honey from the hive. (02marks)

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(d). Suggest any four factors that may affect the quality of honey harvested from a hive**.** (02marks)

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**END**


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