*P515/2*

*PRINCIPLES AND*

*PRACTICES OF*

*AGRICULTURE*

*Paper 2*

*DECENBER, 2020*

***3*hours**

JINJA JOINT EXAMINATIONS BOARD

Uganda Advanced Certificate of Education

*MOCK EXAMINATIONS – DECEMBER, 2020*

*PRINCIPLES AND PRACTICES OF AGRICULTURE*

*THEORY*

*Paper 2*

***3* hours**

*INSTRUCTIONS TO CANDIDATES:*

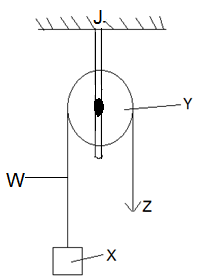
*Answer question* **1** *in section* **A** *and* **four** *other questions selecting at least* **one***from each*

*of the sections* **B,C*,*D** *and E*

**SECTION A (20MARKS)**

**Question 1 is compulsory.**

1. Figure 1 below shows a farm machine. Study it and answer the questions that follow.



1. Name the parts labeled **W, X, Y** and **Z.** (2marks)
2. Describe how the machine in figure 1 above can be used to supply building mortal at point **J**. (4marks)
3. A load of 200N is raised through a distance of 4metes by the force of 50N. If the effort moves through a distance of 20metres.

Calculate;

1. mechanical advantage (2marks)
2. velocity ratio (2marks)
3. work input (2marks)
4. work output (2marks)
5. Explain the factors that influence the efficiency of a machine (6marks)

**SECTION B (20MARKS)**

**CROP PRODUCTION**

Answer **one** question from this section

1. (a) What is meant by **seed dormancy**? (2marks)

(b) State the causes of seed dormancy (4marks)

(c) Give the various methods of breaking seed dormancy. (8marks)

(d) Describe an experiment you would carry out to test for viability of a given seed lot using

tetrozolium salt method (10marks)

1. (a) Give the effects of disease on crop production. (6marks)

(b) Suggest ways in which crop diseases are spread. (5marks)

(c) How can a farmer control the spread of crop diseases in the garden? (9marks)

**SECTION C (20MARKS)**

**ANIMAL PRODUCTION**

Answer **one** question from this section

1. (a) What are the qualities of good meat for human consumption? (10marks)

(b) Explain the factors to consider when culling farm animals. (10marks)

1. (a) Give reasons for conserving fodder on the farm? (5marks)

(b) Describe the procedure of making good quality silage on the farm. (10marks)

(c) Outline the advantages of silage over Hay. (5marks)

**SECTION D (20MARKS)**

**AGRICULTURAL ENGINEERING**

Answer **one** question from this section

1. (a) Give the advantages of using cattle dips in tick control (4marks)

(b) State the factors that reduce the effectiveness of dipping animals. (4marks)

(c) What precautions that should be taken before taking animals to the dip? (12marks)

1. (a) State the advantages of using animal draught power. (4marks)

(b) Suggest ways of achieving excellent ploughing using animal draught power. (7marks)

(c) Explain the factors that favour use of animal draught power on the farm. (9marks)

**SECTION E (20MARKS**

**AGRICULTURAL ECONOMICS**

Answer **one** question from this section

1. (a) Give the importance of opportunity cost to a farmer. (4mark)

(b) Explain the factors that determine the supply of labour on the farm. (9marks)

(c) Outline the different ways a farmer can improve efficiency and productivity of workers

on the farm. (7marks)

1. (a) State the advantages of individual land tenure. (5marks)

(b) Outline the land reform policies in Uganda necessary for increasing agricultural

production. (9marks)

(c) Outline the problems associated with land fragmentation (6marks)

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