



UNIVERSITY OF SWAZILAND

RESIT EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS
AND AGRIBUSINESS YEAR TWO**

BACHELOR OF SCIENCE IN ANIMAL SCIENCE YEAR TWO

**BACHELOR OF SCIENCE IN ANIMAL SCIENCE YEAR TWO
(DAIRY OPTION)**

COURSE CODE: CPR211

TITLE OF PAPER: PRINCIPLES OF CROP PRODUCTION

TIME ALLOWED: TWO (2) HOURS

**INSTRUCTIONS: ANSWER QUESTION ONE, WHICH IS A COMPULSORY
QUESTION AND ANY OTHER THREE (3) QUESTIONS**

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THE CHIEF INVIGILATOR**

100

QUESTION 1

Describe the environmental factors affecting crop production in Swaziland.

(25 Marks)

QUESTION 2

Describe the soil factors that must be considered to ensure there is an ideal or a favourable soil environment for growing crops.

(25 Marks)

QUESTION 3

a. Distinguish between the following pairs of words/terms. Use examples to illustrate your answers.

- (i) Biennial and perennial crops
- (ii) Normal and abnormal seedlings
- (iii) Top dressing fertilizer and side dressing fertilizer
- (iv) Cash and catch crops
- (v) Seed and grain

b. Using the oven method of moisture determination, calculate the moisture content of a maize crop if the weight of the empty container is 21.973 g and the weight of the maize sample is 26.439 g after drying.

(25 Marks)

QUESTION 4

Write briefly on the following. Give examples to illustrate your answers, where necessary.

- a. Saturation (3 Marks)
- b. Field capacity (3 Marks)
- c. Permanent wilting point (3 Marks)
- d. Available water content (3 Marks)
- e. Seed vigour (4 Marks)
- f. Advantages of seed certification (5 Marks)
- g. Inert matter (4 Marks)

101

QUESTION 5

- a. What are the advantages and disadvantages of localized fertilizer placement method of fertilizer application?
(14 Marks)
- b. What is foliar fertilizer application? Give advantages and disadvantages of this method.
(11 Marks)