



2ND SEMESTER 2016/2017

**UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION**

PROGRAMMES: BACHELOR OF SCIENCE IN AGRONOMY YEAR FOUR (4)

COURSE CODE: CPR 208 & CP 407

TITLE OF PAPER: SUGARCANE PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER QUESTIONS 1 & 2 AND ANY OTHER TWO QUESTIONS.

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72

QUESTION 1 - COMPULSORY

- a) Growers in the Swaziland sugar industry are faced by several major challenges, both in the internal and external production environment. Identify and explain the nature of these challenges.(15 marks)
- b) What are the key requirements that must be met by a grower wishing to establish a sugarcane growing operation in Swaziland? (10 marks)

[25 Marks]

QUESTION 2 - COMPULSORY

- a) Describe how the soils of the Swaziland sugar industry are grouped into land classes. Explain the implications of these land classes for the cane grower. Use examples to illustrate your answer.(5 marks)
- b) *Chilo saccharphagus* is a pest of sugarcane having migrated from the Far East to Mauritius and then into Mozambique. Explain why it is a serious threat to the Swaziland sugar industry, and discuss actions that may be taken to protect the industry. (15 marks)
- c) Explain are the main reasons for adopting a planned system of seedcane production? (5 marks).

[25 Marks]

QUESTION 3

Compare and contrast centre pivot to drip irrigation system, taking both economic and operational factors into account.

[25 Marks]

QUESTION 4

- a) What are the five factors conducive for disease development in sugarcane production? (15 marks)
- b) Discuss the five principles of disease control in sugarcane. (10 marks)

[25 Marks]

QUESTION 5

Discuss the criteria enabling harvesting of cane at right time, adopting proper procedures

[25 Marks]