



2ND SEMESTER 2008/2009

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR'S DEGREE IN AGRONOMY YEAR 4

COURSE CODE: CP 409

TITLE OF PAPER: SUGARCANE PRODUCTION

TIME ALLOWED: TWO (2) HOURS

**INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS OF YOUR
CHOICE**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED
BY THE CHIEF INVIGILATOR**

QUESTION 1

THIS IS A COMPULSORY QUESTION

You have been hired, as an international consultant, to recommend alternative crops to sugarcane for the sugar industry in Swaziland. The production of the recommended crop (s) should enable farmers service their loans and make profit. Write a report to the Managing Director of an Agricultural Bank, who can loan the capital for the business, with convincing reasons, that farmers can service their loans and make profit with the crop (s) you have recommended.

(25 Marks)

QUESTION 2

Discuss the strategies that the sugar industry in Swaziland should adopt in order to maintain its contribution to the national economic development.

(25 Marks)

QUESTION 3

Comment on the progress that the sugar industry is making on the use of biofuel for cars in Swaziland. How does her effort compare with that of Brazil ?

(25 Marks)

QUESTION 4

The use of Swazi Nation Land for sugarcane production is the cause of hunger and malnutrition in Swaziland. Discuss the above statement.

(25 Marks)

QUESTION 5

The introduction of tropical sugar beets and sweet sorghum as biofuel plants are a threat to sugarcane industry in Swaziland. Discuss the above statement

(25 Marks)

INSTRUCTIONS: ANSWER ANY FOUR [4] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

QUESTION 3

- a. Explain why some farmers prefer planting sugar beans to groundnut. (5 marks)
- b. Explain the low yield of sugar beans from small-scale farmers' plots. (5 marks)
- c. What do you understand by "pegging" in grain legume production? (5 marks)
- d. Explain an appropriate position of grain legumes in a cropping system. (5 marks)
- e. What is the scientific name for a 'peg'? Briefly, explain the botanical relationship between a peg and the relevant parts of a groundnut flower (5 marks)

[25 marks]

QUESTION 4

Discuss the ecological and agronomic requirements for Jugo beans in Swaziland.

[25 marks]

QUESTION 5

- a. Discuss five recent advances in grain legume production. (20 marks)
- b. What has been the role of the African continent in these advances in grain legume production? Justify your answer. (5 marks)

[25 marks]