



1<sup>ST</sup> SEMESTER 2009/2010

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME:** BACHELOR OF SCIENCE IN AGRONOMY YEAR 4

**COURSE CODE:** CP 401

**TITLE OF PAPER:** CEREAL CROPS PRODUCTION

**TIME ALLOWED:** TWO (2) HOURS

**INSTRUCTION:** ANSWER A TOTAL OF FOUR [4] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

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

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

**QUESTION 1**

- a. Discuss in detail the agronomic practices of the cereal crop that is being promoted by the Taiwan Technical Mission in Matsapha. (15 marks)
- b. Critique the concept of the promotion of the production of the crop referred to, in Question 1(a) above. (5 marks)
- c. What viable alternative would you propose regarding the production of this crop? (5 marks)

**[Total marks: 25 marks]**

**QUESTION 2**

- a. Give both the common English names and the botanical names of the cereal crop that you would recommend for production in the Lowveld of Swaziland. (2 marks)
- b. Explain why this crop is able to grow better in the Lowveld of Swaziland, where other cereal crops might not perform well. (10 marks)
- c. Explain three main uses of this crop. (3 marks)
- d. Discuss the agronomic practices applied in the production of this crop. (10 marks)

**[Total marks: 25 marks]**

**QUESTION 3**

- a. Draw a large diagram of a grain of the staple cereal crop in Swaziland, and label the parts. (10 marks)
- b. What is xenia? Explain how xenia occurs in a named cereal crop. (10 marks)
- c. Name five grain types of the crop drawn in Question 3(a) above, and briefly describe each grain type. (5 marks)

**[Total marks: 25 marks]**

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

**QUESTION 4**

- a. "Three cereal crops have sustained the human race over the centuries." Briefly discuss this statement. (5 marks).
- b. Choose one main cereal crop and discuss the pest and disease problems encountered in the production of the crop. (10 marks).
- c. For each of any four diseases and four pests discussed in Question 4 (b) above, explain the control measures. (10 marks).

**[Total marks: 25 marks]**

**QUESTION 5**

- a. With the aid of labelled diagrams and brief explanations, differentiate between the inflorescence of any five types of cereal crops. (10 marks)
- b. What technical advice would you give a small-scale farmer who is uncertain whether to grow a cereal as a monocrop or as a mixed crop? Justify your answer. (10 marks)
- c. Explain two ways that the small-scale farmer can be assisted to improve family food security in Swaziland. (5 marks)

**[Total marks: 25 marks]**