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**UNIVERSITY OF SWAZILAND  
FINAL EXAMINATION PAPER**

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

**COURSE CODE: CP 403**

**TITLE OF PAPER: FIBRE, TOBACCO AND TUBER CROPS**

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

**INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS**

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THE CHIEF INVIGILATOR**

**QUESTION 1**

Describe the cultivation of any root or tuber crop under each of the following headings:

- a) Climatic and soil requirements (5 marks)
  - b) Seed-bed preparation. (5 marks)
  - c) Fertiliser requirements. (5 marks)
  - d) Insect pest and disease control (5 marks)
  - e) Yield per hectare. (5 marks)
- [25 Marks]

**QUESTION 2**

- a) Discuss how the presence of hydrocyanic glucosides (HCN) in all parts of a cassava plant presents some problems in the marketing and consumption of cassava. (15 marks)
  - b) Discuss the nutritional value of cassava roots and how a diet based cassava may be improved (10 marks)
- [25 Marks]

**QUESTION 3**

Discuss the commercial, economic, and social benefits of *Bt* crops. In your discussion identify the present and future impacts

[25 Marks]

**QUESTION 4**

- a) Describe how cotton is harvested by small-scale farmers (5 marks)
  - b) Describe in detail the nursery procedures in raising tobacco seedlings from seedbed preparation up to transplanting (10 marks)
  - c) Explain what harvest index is and indicate how it is calculated (5 marks)
  - d) Give examples as to why the harvest index is low in some crops (5 marks)
- [25 Marks]

**QUESTION 5**

Cotton production in Swaziland provides employment in rural communities yet its production in the 2014/2015 season decreased considerably while the production increased by 113% in neighbouring South Africa. Discuss this situation and propose strategies for increasing Swazi production.

**[25 Marks]**