



**1st SEMESTER 2013/2014**

**PAGE 1 OF 2**

**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

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

**COURSE CODE: CP 402**

**TITLE OF PAPER: BIOFUEL CROP PRODUCTION**

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

**INSTRUCTION: ANSWER QUESTIONS ONE AND TWO, WHICH ARE  
COMPULSORY AND ANY OTHER TWO (2)  
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)**

Write an essay on climate change and climate variability in Swaziland and what strategies can be adopted to mitigate the adverse effects of climate change and climate variability in each of the four agro-ecological zones of Swaziland. [Use the map of the four agro-ecological zones of Swaziland in support of your answer].

(28 Marks)

**QUESTION 2**  
**(THIS IS ALSO A COMPULSORY QUESTION)**

Write on the following (a to g). Each question carries four marks.

- (a) Carbon sequestration
- (b) El nino
- (c) Characteristics of plants grown in environment with high levels of carbon dioxide
- (d) Crop diversification
- (e) Sweet sorghum as a feedstock
- (f) U.S Distillers
- (g) Prospect of using maize as a feedstock in Swaziland

(28 Marks)

**QUESTION 3**

Write an essay on the progress in the use of cassava as a biofuel production in Swaziland.

(22 Marks)

**QUESTION 4**

'Global warming is a phenomenon for western nations for which Third World countries should not concern themselves'. Discuss the above statement.

(22 Marks)

**QUESTION 5**

Write an essay on ethanol production from sugarcane in Swaziland.

(22 Marks)