

1st SEMESTER 2016/2017

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### UNIVERSITY OF SWAZILAND

### SUPPLEMENTARY EXAMNATION 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

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# QUESTION 1 (THIS IS A COMPULSORY QUESTION)

Discuss global warming. Include in your answer, how Swaziland has contributed to global warming and what can be done to mitigate the adverse effects arising from Swaziland's contribution to global warming.

(28 Marks)

## **QUESTION 2**

## (THIS IS ALSO A COMPULSORY QUESTION)

Explain the following terms/statements. Each question carries four marks.

- (a) Feedstocks.
- (b) Carbon tax
- (c) Rapid multiplication of cassava stems.
- (d) Carbon sequestration.
- (e) Characteristics of plants grown in environment with high levels of carbon dioxide.
- (f) Agroforestry potentials of moringa (Moringa oleifera Lam.).
- (g) Status of ethanol production in Swaziland and in Brazil

(28 Marks)

### **OUESTION 3**

Certain organisations in Swaziland are not in favour of jatropha (*Jatropha curcas* L.) production in Swaziland because jatropha could become an alien invasive weed such as *Chromolaena odorara* L. Discuss this statement basing your argument on the views expressed by these organisations?

(22 Marks)

## **QUESTION 4**

[a] Explain why there has been renewed interest in biofuel crop production and use in recent years. [12 marks]

Can the renewed interest be sustained? If yes, why? If not, why not?

[10 marks]

(22 Marks)

### **OUESTION 5**

"Should we grow crops for humans or for cars?" Discuss the statement.

(22 Marks)