

2ND SEMESTER 2007/2008

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR'S DEGREE IN AGRONOMY YEAR 4

COURSE CODE: CP 405

TITLE OF PAPER: BIOFUEL CROPS

TIME ALLOWED: TWO (2 HOURS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS OF YOUR

CHOICE

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QUESTION 1

Discuss the advantages and the disadvantages of using jatropha (*Jatropha curcas* L.) as a biofuel plant in Swaziland.

(25 Marks)

QUESTION 2

"The use of sugarcane as a biofuel crop in Swaziland will further increase the problem of household food security in Swaziland". Discuss the above statement.

(25 Marks)

QUESTION 3

Write briefly on the following. Each question carries five marks.

- (a) Green house effects
- (b) Kyoto Protocol
- (c) Stillage
- (d) Jatropha cake as a livestock feed in Swaziland
- (e) Bioenergy

(25 Marks)

QUESTION 4

Discuss the advantages and the disadvantages of using sunflower (*Helianthus annus* L) as a biofuel crop in Swaziland.

QUESTION 5

Discuss the attempts being made by the sugar industry in Swaziland in the production of ethanol from suagarcane for use as a blend with petrol for cars.

(25 Marks)