



**UNIVERSITY OF ESWATINI  
MAIN EXAMINATION PAPER**

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

**COURSE CODE:** CP 402

**TITLE OF PAPER:** BIOFUEL CROP PRODUCTION

**TIME ALLOWED:** 2 HOURS

**INSRCTIONS:** ANSWER QUESTION 1 [COMPULSORY] AND ANY  
OTHER THREE [3] 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 short notes on the following words or phrases, each question carries four marks

- a) SDG # 7: Affordable and clean energy
- b) El Niño and La Niña in Eswatini
- c) Carbon credits
- d) Switchgrass as a feedstock
- e) Greenhouse gases
- f) Third generation biofuels
- g) E10 RSSC project

[28 marks]

**QUESTION 2**

Write an essay on carbon sequestration

[24 marks]

**QUESTION 3**

Discuss why research and commercial production of jatropha (*Jatropha caucous*) was stopped in Eswatini?

[24 marks]

**QUESTION 4**

Discuss the differences between biodiesel and bioethanol, include relevant examples.

[24 marks]

**QUESTION 5**

Discuss the potential for the use of sweet sorghum for ethanol production in Eswatini.

[24 marks]