



**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**

**INSRUNCTIONS: ANSWER ANY FOUR [4] QUESTIONS OF YOUR CHOICE**

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**QUESTION 1**

The production of bioethanol and biodiesel from crops is both a saviour and a culprit of global warming. Discuss [25 marks]

**QUESTION 2**

The use of food and fodder crops for biofuel production has been met with negative criticism. Discuss the alternative feedstock sources that can be used in Eswatini. [25 marks]

**QUESTION 3**

Discuss why research and commercial production of jatropha (*Jatropha caucous*) was stopped in Eswatini? [25 marks]

**QUESTION 4**

- a) Explain using relevant examples the differences between biodiesel and bioethanol. [15 marks]
  - b) Discuss the potential for the use of sugarcane for ethanol production in Eswatini. [10 marks]
- [25 marks]

**QUESTION 5**

- a) What are carbon credits [5 marks]
  - b) Discuss five (5) reasons that were cited at the Kyoto Protocol to justify the need for biofuel production and use. [20 marks]
- [25 marks]