



# UNIVERSITY OF SWAZILAND

### FINAL EXAMINATION PAPER

**PROGRAMME:** 

**B.Sc. AGRIC & BIOSYSTEMS ENGINEERING YEAR 4** 

B.Sc. AGRIC. ECON. & AgBMgt YEAR 4

**B.Sc. AGRICULTURAL EDUCATION YEAR 4** 

**COURSE CODE:** 

**CP 409** 

TITLE OF PAPER:

FIELD CROPS

TIME ALLOWED:

TWO (2) HOURS

**INSTRUCTIONS:** 

ANSWER ANY FOUR QUESTIONS

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# 1<sup>ST</sup> SEMESTER 2014/2015

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#### **QUESTION 1**

- (a) Sorghum yield in Swaziland is relatively lower than that of maize despite the fact that it is more drought tolerant than maize. Discuss at least three aspects of research that needs to be investigated to improve sorghum productivity. [10 marks]
- (b) Sorghum plants have an ability to yield even under severe drought conditions. Discuss.

[15 marks]

[25 Marks]

# **QUESTION 2**

Discuss the reasons why grain legumes exhibit low yields and propose ways that could be addressed to improve yields for both the commercial farmer and smallholder farmer in Swaziland

[25 Marks]

### **QUESTION 3**

Discuss the major reasons why soya bean is not grown in Swaziland on a large scale and suggest how production could be increased.

[25 Marks]

# **QUESTION 4**

a) The maize and beans intercropping system is common in the nations in the tropical and subtropical regions. Discuss factors that influence the performance of this mixture.

[15 marks]

b) Discuss five aspects to successful intercropping.

[10 marks]

[25 Marks]

### **QUESTION 5**

- a) Are the primary goals for crop production the same in developed and developing countries? If not, how are they different and why? [15 marks]
- b) List the effects crops have on succeeding crops. Explain the positive and negative effects of each. [10 marks]

[25 Marks]