

# MAIN EXAMINATION PAPER

PROGRAMME:

B.Sc. AGRICULTURAL & BIOSYSTEMS ENGINEERING YEAR 2

B.Sc. AGRIC. ECON. & AGBMGT YEAR 2

B.Sc. AGRICULTURAL EDUCATION YEAR 2

B.Sc. AGRICULTURAL EXTENSION YEAR 2

COURSE CODE:

CPR210

TITLE OF PAPER: FIELD CROPS

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ALL QUESTIONS

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

### QUESTION 1

Political/policy factors, socioeconomic factors and cultural factors are known to influence crop distribution. For each factor, name a crop grown in Eswatini that may be influenced by the factor. Describe fully the circumstances.

[20 Marks]

## **QUESTION 2**

Briefly describe five changes that need to be made in the design and management of agroecosystems so that soil biota is part of cultivation practices.

[20 Marks]

# **QUESTION 3**

Intraplant competition, intraspecific competition and interspecific competition are forms of competition crops may encounter. Discuss the severity of each with respect to light, i.e., competition for light.

[20 Marks]

#### **QUESTION 4**

a) What do you understand by succession?

[4 marks]

b) Compare and contrast succession in the natural environment with that in the agroecosystem. [16 marks]

[20 Marks]

## **QUESTION 5**

In the Southern Africa region, rainfall, evaporating power of the air and available surface water supply influence crop cultivation. Describe one challenge that each of the three factors pose and for each challenge, a practical remedy that farmers can implement.

[20 Marks]