



# UNIVERSITY OF ESWATINI

# RESIT 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

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# 2<sup>nd</sup> SEMESTER 2018-2019

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## QUESTION 1

(a) Describe four functions of the soil ecosystem.

(10 marks)

(b) Identify a cropping system and describe how it positively contributes to the four functions of the soil ecosystem identified in (a) above. (10 Marks)

[20 Marks]

#### QUESTION 2

Intercropping evolved as an attempt to manipulate the physical and biological environment for the benefit of the crop(s). Using one physical factor of the environment, describe the merits and demerits of intercropping in capture and utilization of this physical factor.

[20 Marks]

### QUESTION 3

Plants are endowed with certain features or physiological processes that enable them to reduce the limiting effects of the physical and biotic conditions of existence. Discuss this statement using appropriate examples.

[20 Marks]

### **QUESTION 4**

Describe the influence of soil pH in crop adaptation and distribution.

[20 Marks]

#### QUESTION 5

Wheat, cassava and pigeon peas are minor crops in Eswatini. As a Director of Crop Production in the Ministry of Agriculture and using small scale farmers, how would you scale up any one of the three crops (choose only one)? List logical steps or short statements in your answer (no essay please).

[20 Marks]