



1st SEMESTER 2014/2015

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRICULTURAL
ECONOMICS AND AGRIBUSINESS YEAR TWO

BACHELOR OF SCIENCE IN ANIMAL SCIENCE
YEAR 2

BACHELOR OF SCIENCE IN ANIMAL SCIENCE
YEAR 2 (DAIRY OPTION)

COURSE CODE: CP 205

TITLE OF PAPER: PRINCIPLES OF CROP PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER QUESTIONS 1 AND 2, WHICH ARE
COMPULSORY AND ANY OTHER TWO QUESTIONS OF
YOUR CHOICE

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

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QUESTION 1
(THIS IS A COMPULSORY QUESTION)

- (a) Write an essay on “Climate change” (14 Marks)
- (b) A farmer wishes to plant 50 ha of maize applying 25 kg/ha of phosphorus. If the source of phosphorus is single superphosphate, how much will the farmer spend on single superphosphate 50 kg of superphosphate cost E175.00? (8 Marks)
- (c) If the cost of maize seed is E15.00/kg, how much will the farmer spend on seeds for the 50 ha? (6 Marks)
- [28 Marks]**

QUESTION 2
(THIS IS ALSO A COMPULSORY QUESTION)

Write briefly on **a to g** listed below. Give examples to illustrate your answers, where necessary. Each question carries four marks.

- (a) Ideal characteristics of an agroforestry tree.
- (b) Seed vigour tests.
- (c) Crop classification.
- (d) Crop competition.
- (e) Methods of determining leaf area in crop plants.
- (f) Methods of applying fertilisers to crops
- (g) Factors contributing to efficient use of leaves in crop production.

[28 Marks]

QUESTION 3

Write an essay on “Cropping systems”

[22 Marks]

QUESTION 4

Distinguish between the following pairs of terms.

- (a) El nino and La nina. (4 Marks)
- (b) Broadcasting and top dressing fertilizers. (4 Marks)
- (c) Strip cropping and alley cropping system. (4 Marks)
- (d) Efficient nodulation and effective nodulation. (3 Marks)
- (e) Effective tillers and non-effective tillers in rice. (4 Marks)
- (f) Relay intercropping and catch crop. (3 Marks)

[22 Marks]

QUESTION 5

Write an essay on how bean (*Phaseolus vulgaris* L.) crop yields can be increased in Swaziland.

[22 Marks]