



1st SEMESTER 2014/2015

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

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

BACHELOR OF SCIENCE IN ANIMAL SCIENCE YEAR TWO

BACHELOR OF SCIENCE IN ANIMAL SCIENCE YEAR TWO (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

QUESTION 1
(THIS IS A COMPULSORY QUESTION)

- (a) Name two factors that have contributed to reduction in crop production in Swaziland (4 marks)
(b) Discuss how these two factors can be addressed by small-scale farmers. (10 Marks)

(c) A farmer wishes to plant 50 ha of maize applying 75 kg/ha of nitrogen. If the source of nitrogen is urea, how much will the farmer spend on urea if 50 kg of urea cost E250 ? (8 Marks)

(d) 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 a green manure crop.
- (b) Seed viability tests.
- (c) Stages of on-farm trials.
- (d) Crop classification.
- (e) Methods of determining seed moisture content in crops.
- (f) Methods of determining leaf area index in crop plants.
- (g) Biofertilisers.

[28 Marks]

QUESTION 3

Write an essay on “Cropping Systems”

[22 Marks]

QUESTION 4

Distinguish between the following pairs of terms. Use examples and/or diagrams to illustrate your answers.

- (a) Top dressing fertiliser and side dressing fertiliser. (3 Marks)
- (b) Primary and secondary yield components in crops. (4 Marks)
- (c) Cropping systems and farming systems. (3 Marks)
- (d) Productivity and production. (4 Marks)
- (e) Effective tillers and non-effective tillers in rice. (4 Marks)
- (f) Relay intercropping and catch crop. (4 Marks)

[22 Marks]

QUESTION 5

Write an essay on the importance of seed dormancy.

[22 Marks]