



1st SEMESTER 2007/2008

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN AGRIC. ECON. & AGRIC. BUSINESS
MANAGEMENT YEAR 2**

BACHELOR OF SCIENCE IN AGRONOMY YEAR 2

**BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION
YEAR 2**

BACHELOR OF SCIENCE IN ANIMAL SCIENCE YEAR 2

COURSE CODE : CP 202

TITLE OF PAPER : PRINCIPLES OF CROP PRODUCTION

TIME ALLOWED : TWO (2) HOURS

INSTRUCTIONS : ANSWER FOUR (4) QUESTIONS OF YOUR CHOICE

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

QUESTION 1

Write, in DETAIL, on the following. Use examples to illustrate your answers, where possible. Each question carries five marks.

- (a) Black layer in maize (*Zea mays* L.)
- (b) Methods of determining leaf area in crop plants
- (c) Importance of involving farmers in agricultural research
- (d) Sink-source relationships
- [e] Crop classification

(25 Marks)

QUESTION 2

“Seed is the most important input in crop production”. Discuss the above statement

(25 Marks)

QUESTION 3

Each question carries five marks

- (a) List four types of seed viability tests and discuss one of them in detail.
- (b) Discuss four factors that plants compete for.
- (c) List four cropping systems and discuss one of them in detail.
- (d) Write briefly on the factors that affect growth and development in crop Plants.
- (e) A farmer wishes to apply 112 kg/ha of nitrogen to a maize crop. If a bag of limestone ammonium nitrate fertiliser costs E105.00, how much will be farmer spend on the fertiliser?

(25 Marks)

QUESTION 4

- (a) What is an indigenous crop?. List three examples to illustrate your answer. (5 Marks)
- (b) What is the importance of knowing the place of origin of crop species ? (5 Marks)
- (c) Explain why only a very small proportion of crop species are used by humans (10 Marks)
- (d) How can the problem in (c) above be addressed? (5 Marks)

QUESTION 5

Write, in DETAIL, on the following. Each question carries five marks

- (a) Seed yield and yield components.
- (b) Methods of determining seed health in crop plants.
- (c) The disadvantages of using kraal manure for crop production.
- (d) Why some farmers do not use kraal manure for crop production.
- (e) Heat units or degree days

(25 Marks)