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SUPP. 2005/2006

UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: DIPLOMA IN AGRICULTURE YEAR III AND
DIPLOMA IN AGRICULTURAL EDUCATION
YEAR III

COURSE CODE: CP 301

TITLE OF PAPER: INTRODUCTION TO FIELD CROPS

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS.
ANSWER QUESTION FIVE(5) IN A SEPARATE
ANSWER SCRIPT

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**INSTRUCTIONS: ANSWER ANY FOUR(4)QUESTIONS.
ANSWER QUESTION FIVE(5) IN A SEPARATE
ANSWER SCRIPT.**

QUESTION 1

Discuss the factors that limit maize production in Swaziland and suggest practical solutions to each of the factors.

(25 marks)

QUESTION 2

Write briefly on the following:-

- (a) Mechanism of drought resistance in sorghum (5)**
- (b) Benefits of grain legumes in a cropping system (5)**
- (c) List five morphological/physiological changes that have occurred in plants with domestication (5)**
- (d) Crop classification (5)**
- (e) Suitability of rice production in Swaziland (5)**

(25 marks)

QUESTION 3

Discuss the production guide for bambara groundnut (*Vigna subterranea* (L.) Verdc.

(25 marks)

QUESTION 4

Discuss how the yield of sorghum can be increased in Swaziland, or in your country, if other than Swaziland.

(25 marks)

QUESTIONS 5

- (a) List five wheat yield components **(5 marks)**
- (b) "Swazi farmers should embrace irrigated wheat production in their cropping calendars". Discuss. (You may wish to use the following subheadings: temperatures; diseases pressures; market forces; double cropping potential; wheat quality; yield components; irrigation constraints; land constraints). **(20 marks)**

(25 marks)