



**2<sup>ND</sup> SEMESTER 2007/2008**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

**PROGRAMME: DIPLOMA IN AGRICULTURE YEAR 3  
DIPLOMA IN AGRICULTURAL EDUCATION YEAR 3**

**COURSE CODE : CP 301**

**TITLE OF PAPER : INTRODUCTION TO FIELD CROPS**

**TIME ALLOWED : TWO (2) HOURS**

**INSTRUCTIONS : ANSWER FOUR (4) QUESTIONS OF YOUR CHOICE**

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CHIEF INVIGILATOR**

**QUESTION 1**

- (i) Describe the two types of groundnuts based on their growth habits. 10)
- (ii) Outline the problems faced by groundnuts farmers in Africa. 10)
- (iii) What are the two main cultural practices that assist in controlling pests and diseases. (5)

**(25 marks)**

**QUESTION 2**

Write briefly on the following:-

- (i) Why sorghum plants thrive better in drought conditions than maize? (5)
- (ii) Nodulation process in grain legume crops. (5)
- (iii) Determinate and indeterminate crops. (5)
- (iv) Photoperiodism and its importance in crop yields. (5)
- (v) The difference between lowland and upland rice cultivation. (5)

**(25 marks)**

**QUESTION 3**

a. Write a crop production guide for Maize (*Zea mays*) under the following sub titles:

- (i) Climatic requirements (10)
  - a. Temperature
  - b. Water
  - c. Photoperiod
- (ii) Fertilization (10)

b. Write briefly on the three types of roots in maize and their main functions (5)

**(25 marks)**

**QUESTION 4**

- a. Discuss the raising of seedlings in tobacco production in your country. (10)
  - b. What is meant by topping and suckering of tobacco plants and why are these practices important in tobacco production? (10)
  - c. List the different types of tobacco curing practiced in your country. (5)
- (25 marks)**

**QUESTION 5**

- a. Write about the specific climatic parameters required for sugarcane production. (10)
  - b. Write briefly about the planting material and planting process of sugarcane. (15)
- (25 marks)**