



SUPPLEMENTARY 2004/2005

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: **DIPLOMA IN AGRICULTURE YEAR 1,
DIPLOMA IN AGRICULTURAL EDUCATION
YEAR 1, DIPLOMA IN HOME ECONOMICS
YEAR 1 AND DIPLOMA IN HOME ECONOMICS
EDUCATION YEAR 1**

COURSE CODE: **CP 100**

TITLE OF PAPER: **BIOLOGY (BOTANY)**

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

INSTRUCTIONS: **ANSWER ALL QUESTIONS**

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

QUESTION 1

List and define the practical importance of both macro and micro-nutrients in plant nutrition and development (25)

QUESTION 2

Write short notes on the following

- a) water and mineral uptake (10)
- b) ascent of sap in plants (5)
- c) transpiration pull theory (5)
- d) root pressure (5)

QUESTION 3

- a) Name nine (9) external factors that are essential for seed germination and briefly describe the role they play in seed germination (15)
- b) Name five (5) tissues that are unique in plant roots and describe their functions in plant roots anatomical integrity. (10)

QUESTION 4

Draw a typical plant cell and label all the plant cell components. Describe the functions of each of the plant cell components. (25)