

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2007

- COURSE CODE : B402
- TITLE OF PAPER : PLANT PHYSIOLOGY
- TIME ALLOWED : THREE (3) HOURS
- INSTRUCTIONS :
1. ANSWER ANY FOUR (4) QUESTIONS
 2. EACH QUESTION CARRIES 25 MARKS.
 3. ILLUSTRATE YOUR ANSWERS WITH LARGE AND CLEARLY LABELLED DIAGRAMS WHERE APPROPRIATE
- SPECIAL REQUIREMENTS :

CANDIDATES MAY BRING THEIR CALCULATORS. GRAPH PAPER MAY BE PROVIDED ON REQUEST.

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR(S).

QUESTION 1.

Give an account of the functions of light in plant growth and development.

[25 Marks]

QUESTION 2.

Explain how higher plants mobilize water resources from the rhizosphere.

[25 Marks]

QUESTION 3.

Give a comparative description of C₃ and C₄ plants.

[25 Marks]

QUESTION 4.

Describe the effects of water stress and explain how water stress may affect higher plants.

[25 Marks]

QUESTION 5.

With reference to five (5) mineral nutrients, discuss deficiency symptoms and describe their patterns of development.

[5 X 5 Marks]

[Total 25 Marks]

QUESTION 6.

Consider the soil environment and discuss the parameters of value to plants. Explain why the said parameters are important.

[25 Marks]

[TOTAL MARKS: 100]