

UNIVERSITY OF SWAZILAND**FINAL EXAMINATION PAPER 2005**

TITLE OF PAPER: SPERMATOPHYTA

COURSE CODE: B301

TIME ALLOWED: THREE HOURS

INSTRUCTIONS:

1. ANSWER FOUR QUESTIONS AT LEAST 2 FROM EACH SECTION.
2. EACH QUESTION CARRIES TWENTY FIVE (25) MARKS.
3. ILLUSTRATE YOUR ANSWERS WITH LARGE AND CLEARLY LABELLED DIAGRAMS WHERE APPROPRIATE.

SPECIAL REQUIREMENTS: NONE

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS
BEEN GRANTED BY THE INVIGILATORS**

SECTION A**QUESTION 1**

Mainly using diagrams, discuss the biology of Polypodium, a pteridophyte.

[25 MARKS]

QUESTION 2

Discuss variability of the sporophyte in bryophytes by considering the sporophytes of Mnium, Anthoceros and Marchantia.

[25 MARKS]

QUESTION 3

Using annotated diagrams, discuss the biology of a gymnosperm of economic importance in Swaziland.

[25 MARKS]

SECTION B**QUESTION 4**

Using illustrations and relevant examples, discuss sclereids in angiosperms.

[25 MARKS]

QUESTION 5

Present a well illustrated account of how root apical meristems are organized.

[25 MARKS]

J.S.

QUESTION 6

Discuss the old family *Leguminosae sensu lato* or *Fabaceae* and explain the considerations that led to its fragmentation into the three current families. Examples and illustrations will help enhance your answer.

[25 MARKS]

JB