



2ND SEMESTER 2011/2012

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**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

PROGRAMME: B.SC. IN AGRICULTURAL & BIOSYSTEMS ENGINEERING YEAR 1
B.SC. IN AGRICULTURAL ECONOMICS AND AGRIBUSINESS MANAGEMENT YEAR 1
B.SC. IN AGRICULTURAL EDUCATION YEAR 1
B.Sc. IN AGRONOMY YEAR 1
B.SC. IN ANIMAL SCIENCE YEAR 1
B.SC. IN CONSUMER SCIENCE YEAR 1
B.SC IN CONSUMER SCIENCE EDUCATION YEAR 1
B.SC. IN FOOD SCIENCE, NUTRITION & TECHNOLOGY YEAR 1
B.SC. IN HORTICULTURE YEAR 1
B.SC. IN TEXTILE AND APPAREL DESIGN & MANAGEMENT YEAR 1

COURSE CODE: CP 102

TITLE OF PAPER: BOTANY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

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

QUESTION 1

Give the two (2) types of **organs** found in the body of angiosperms. Your answer must also include the various examples under each type and functions.

[25 MARKS]**QUESTION 2**

Meristems are very important in plant growth and development. Define the term “meristem” and discuss the role of the **apical meristems** in the formation of essential plant tissues and their cells.

[25 MARKS]**QUESTION 3**

Write short notes on the following terms related to secondary growth in woody dicotyledonous angiosperms:

- a) Secondary xylem (5 Marks)
- b) Secondary phloem (5 Marks)
- c) Vascular cambium (5 Marks)
- d) Periderm (5 Marks)
- e) Annual growth rings (5 Marks)

[25 MARKS]**QUESTION 4**

- a) Define binomial nomenclature and outline its advantages in botanical studies. (9 Marks)
- b) Give a complete scientific classification of the following cultivated plants within the Plant Kingdom.
 - i. Rice (8 Marks)
 - ii. Groundnut (8 Marks)

[25 MARKS]**QUESTION 5**

Give botanical and common names of any two (2) useful plants in the following plant Families.

- a) Alliaceae (5 Marks)
- b) Rosaceae subfamily Maloideae (5 Marks)
- c) Solanaceae (5 Marks)
- d) Euphorbiaceae (5 Marks)
- e) Malvaceae (5 Marks)

[25 MARKS]