



2<sup>ND</sup> SEMESTER 2008/2009

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMMES:**

**BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS AND AGRIBUSINESS  
MANAGEMENT YEAR 1**

**BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION YEAR 1**

**BACHELOR OF SCIENCE IN AGRONOMY YEAR 1**

**BACHELOR OF SCIENCE IN ANIMAL SCIENCE YEAR 1**

**BACHELOR OF SCIENCE IN FOOD SCIENCE, NUTRITION AND TECHNOLOGY  
YEAR 1**

**BACHELOR OF SCIENCE IN HOME ECONOMICS EDUCATION YEAR 1**

**BACHELOR OF SCIENCE IN HOME ECONOMICS YEAR 1**

**BACHELOR OF SCIENCE IN HORTICULTURE YEAR 1**

**BACHELOR OF SCIENCE IN LAND AND WATER MANAGEMENT YEAR 1**

**BACHELOR OF SCIENCE IN TEXTILE AND APPAREL DESIGN AND  
MANAGEMENT YEAR 1**

**COURSE CODE: CP 102**

**TITLE OF PAPER: CROP BOTANY**

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

**INSTRUCTION: ANSWER A TOTAL OF FOUR [4] QUESTIONS. QUESTION 5 IS  
COMPULSORY. ALL QUESTIONS CARRY EQUAL MARKS.**

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

**INSTRUCTIONS: ANSWER A TOTAL OF FOUR [4] QUESTIONS. QUESTION 5 IS COMPULSORY. ALL QUESTIONS CARRY EQUAL MARKS.**

**QUESTION 1**

- a. Draw a large diagram of a typical plant cell and label the parts. (10 marks)
- b. Discuss the functions of five of the parts labelled. (10 parts)
- c. How are spongy mesophyll cells of a Hibiscus different from the palisade mesophyll cells? (3 marks)
- c. How are the cells of the epidermis different from the cells of the xylem? (2 marks)

**[25 marks]**

**QUESTION 2**

- a. Copy out the table below into your answer sheets and fill in the blank spaces: (12 marks)

Taxon	Name	Name
Class		
Order		
Family		
Genus		
Species		
Scientific name		
Common name	Groundnut	Maize

- b. What is a taxon? (3 marks)
- c. Discuss four advantages of the binomial system. (10 marks)

**[25 marks]**

**INSTRUCTIONS: ANSWER A TOTAL OF FOUR [4] QUESTIONS. QUESTION 5 IS COMPULSORY. ALL QUESTIONS CARRY EQUAL MARKS.**

**QUESTION 3**

a. Differentiate between the following pairs of terms?

- |       |                                 |           |
|-------|---------------------------------|-----------|
| i.    | Organelle; organ;               | (2 marks) |
| ii.   | Superior ovary; inferior ovary; | (2 marks) |
| iii.  | Monocotyledon; dicotyledon;     | (2 marks) |
| iv.   | Angiosperm; gymnosperm;         | (2 marks) |
| v.    | Corolla; calyx.                 | (2 marks) |
| vi.   | Primary root; secondary root;   | (2 marks) |
| vii.  | Peduncle; pedicel;              | (2 marks) |
| viii. | Simple leaf; compound leaf;     | (2 marks) |
| ix.   | Serrated margin; entire margin; | (2 marks) |
| x.    | Stomata; hydathode;             | (2 marks) |
| xi.   | Style; pollen tube              | (2 marks) |

b. Give one example of a stem tuber. (1.5 marks)

c. Give one example of a root tuber. (1.5 marks)

**[25 marks]**

**QUESTION 4**

a. Structurally, what is the difference between a seed and a fruit? (5 marks)

b. Explain the process of how a flower develops into a fruit. (15 marks)

c. Explain the anatomical differences between a xerophyte and a hydrophyte.

(5 marks)

**[25 marks]**

**INSTRUCTIONS: ANSWER A TOTAL OF FOUR [4] QUESTIONS. QUESTION 5 IS COMPULSORY. ALL QUESTIONS CARRY EQUAL MARKS.**

**QUESTION 5**

Programme: \_\_\_\_\_

ID. No. \_\_\_\_\_

Fill in the blank spaces below. Detach the sheet and insert inside in the middle of the answer script when submitting your examination script.

No.	Common English name	Scientific name (with the authority)
1	Cabbage	
2	Carrot	
3	Cassava	
4	Coffee	
5	Cotton	
6	Ginger	
7	Groundnut	
8	Irish potato	
9	Jugo bean	
10	Mango	
11	Onion	
12	Pawpaw	
13	Pigeonpea	
14	Rice	
15	Sorghum	
16	Soya bean	
17	Spinach	
18	Sugar beet	
19	Sugarcane	
20	Sunflower	
21	Sweetpotato	
22	Taro	
23	Tobacco	
24	Tomato	
25	Wheat	

**[25 marks]**