

1ST SEMESTER 2008/2009

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UNIVERSITY OF SWAZILAND

FINAL 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. <u>QUESTION 5 IS</u> <u>COMPULSORY</u>. 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. <u>In one sentence</u>, explain the difference between an organelle and an organ. (3 marks)
- d. Give one example each of an organelle and an organ. (2 marks)

[25 marks]

QUESTION 2

Write short notes on the following, or explain their meanings:

a. Taxonomy (5 marks)

b. Binomial nomenclature (5 marks)

c. Parts of a typical flower (5 marks)

d. Double fertilization (5 marks)

e. Features of an herbaceous dicotyledonous stem (5 marks)

[25 marks]

QUESTION 3

- a. Botanically, what is a fruit? (3 marks)
- b. Classify fruits, and give one example (with scientific names) of each type of fruit named. (10 marks)
- c. Name three groups of plants that are most useful to humankind, and discuss how these plants are used. (12 marks)

[25 marks]

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

QUESTION 4

a. What is a xerophyte? (2 marks) b. Name one example of a xerophyte. (2 marks) c. Describe two anatomical features that enable xerophytes to survive where they are found. (6 marks) d. Describe one physiological feature that enables xerophytes to survive where they are found. (2 marks) e. What is a hydrophyte? (2 marks) f. Name one hydrophyte. (2 marks) g. Describe two anatomical features that enable hydrophytes to survive where they are found. (6 marks) h. What is a halophyte? (3 marks)

[25 marks]

22

23

24 25 Okra

Carrot

Sunflower 'Ligusha'

ID. No. _____

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 <u>insert inside in the middle of the answer script when submitting your examination script</u> .		
No.	Common English name	Scientific name (with the authority)
1	Cowpea	
2	Wheat	
3	Sugar beet	
4	Onion	•
5	Groundnut	
6	Lettuce	
7	Maize	
8	Cabbage	
9	Tomato	
10	Jugo bean	
11	Cassava	
12	Sweetpotato	
13	Pigeonpea	
14	Rice	
15	Irish potato	
16	Cotton	
17	Sunnhemp	·
18	Spinach	
19	Sensitive plant	
20	Soya bean	
21	Sugarcane	

[25 marks]