



2ND SEMESTER 2010/2011

PAGE 1 OF 3

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN HORTICULTURE
YEAR III**

COURSE CODE: HORT 305

TITLE OF PAPER: HORTICULTURAL EXPERIMENTATION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS

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THE CHIEF INVIGILATOR**

ANSWER ANY FOUR (4) QUESTIONS

Question 1

(a) What is research? List the objectives of a research project. [13Marks]

(b) What would you consider as the characteristics of good research?

[12 Marks]

[25 marks]

Question 2

Write a concise outline of the research proposal for your final year research project.

[25 marks]

Question 3

Describe the general steps involved in a research experiment.

[25 marks]

Question 4

(a) What is experimental error? How would you reduce this in your research experiment? [15 Marks]

(b) Why would you consider replication of your treatments in your research experiment? [10 Marks]

[25 marks]

Question 5

A field experiment was conducted to determine the effects of 3 rates of organic manure on the growth and yield of 4 varieties of cabbage at Luyengo in a randomized complete block design replicated three times.

- (a) Which method of analysis will you recommend for this experiment and why? [7 Marks]
- (b) List the various treatments used in the experiment. [6 Marks].
- (c) Sketch the ANOVA table for this experiment, indicating the estimates of the degrees of freedom. [12 marks]

[25 marks]