



2nd SEMESTER 2015/2016

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

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

ANSWER ANY FOUR (4) QUESTIONS**Question 1**

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

(b) What would you consider as the characteristics of a good research?
[12 Marks]

[25 marks]

Question 2

Write a concise outline of research proposal for your final year research project.
[25 marks]

Question 3

Describe the general steps involved in field research experimentation.
[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 replicating the treatment levels in your research experiment?
[10 Marks]

[25 marks]

Question 5

In a field experiment conducted to compare the growth of 3 lettuce varieties in a randomized complete block design replicated four times. The following yield results were obtained (kg/plot)

Cultivar	Rep 1	Rep 2	Rep 3	Rep 4
ELIHPNOLH	12	13	14	15
ELIKEZEF	13	15	16	10
ELIZEKNEY	12	11	14	13

(a) Sketch the complete ANOVA table for this experiment

[20 marks]

(b) Show the field layout of the experiment

[5 Marks]

[25 marks]