



2ND SEM. 2014/2015

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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 UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

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QUESTION 1

- a) Define research (5 marks)
- b) List the objectives of a research project (8 marks)
- c) Describe the general feasibility considerations taken before undertaking a research project (12 marks)

[25 marks]

QUESTION 2

- a) Describe ways by which you would reduce the effects of experimental error in your research (15 marks)
- b) What are the merits of replicating a research experiment? (10 marks)

[25 marks]

QUESTION 3

Describe the conditions under which you would utilise the following experimental designs:

- a) Latin square design (12 marks)
- b) Split plot design (13 marks)

[25 marks]

QUESTION 4

With the aid of appropriate examples, discuss the following:

- a) Blocking (9 marks)
- b) Replication (9 marks)
- c) Plot size (3 marks)
- d) Experimental error (4 marks)

[25 marks]

QUESTION 5

Using appropriate examples, discuss the components of a research proposal using the following guidelines:

- a) Introduction (5 marks)
- b) Problem statement (5 marks)
- c) Materials and methods (9 marks)
- d) Literature review (6 marks)

[25 marks]