

2<sup>ND</sup> SEM. 2010/2011

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# UNIVERSITY OF SWAZILAND MAIN EXAMINATION PAPER

PROGRAMME: BSC. IN AGRICULTURAL EDUCATION YEAR III

**COURSE CODE:** 

**AEE 301** 

TITLE OF PAPER: EDUCATIONAL RESEARCH METHODS

TIME ALLOWED:

TWO (2) HOURS

**INSTRUCTION:** 

**ANSWER ALL FOUR (4) QUESTIONS** 

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# **QUESTION 1**

- a. State the purpose for each of the following types of research and give a brief example for each.
  - i. Case or Field research
  - ii. Descriptive research
  - iii. Correlational research
  - iv. Causal-comparative research
  - v. Quasi-experimental research

[3 marks for each = 15 marks]

- b. Differentiate Research with these other inquiry methods. Begin by describing Research first.
  - i. Development
  - ii. Evaluation
  - iii. Needs Assessment

[1 mark + 3 marks for each = 10 marks]

Total: 25 marks

#### **QUESTION 2**

Illustrate and explain each of these research designs:

- a. Randomised control-group pretest-posttest design
- b. Randomised Solomon four-group design
- c. Randomised control-group posttest only design
- d. Counterbalanced design
- e. Control-group time series design

[5 marks for each = 25 marks]

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### **QUESTION 3**

- a. Give an example of how to control (in each of these) variance in experimental research:
  - i. Maximise the experimental variance
  - ii. Control the extraneous variance
  - iii. Minimise the error variance

[5 marks for each = 15 marks]

b. Differentiate interaction effect and main effect using an example of a 2x2 table with data.

[10 marks]

Total: 25 marks

#### **QUESTION 4**

#### Read the Problem Statement below:

#### Problem statement:

Which teaching method will yield higher mean score in a subsequent test, discussion or lecture?

#### Then, re-state the Problem Statement above into each hypothesis below:

- a. Directional or one-tailed hypothesis
- b. Non-directional or two-tailed hypothesis
- c. Null hypothesis
- d. Inductive hypothesis
- e. Deductive hypothesis

[5 marks for each = 25 marks]