



2nd SEM. 2010/2011

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**UNIVERSITY OF SWAZILAND
SUPPLEMENTARY 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 QUESTIONS

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QUESTION 1

a. How does a researcher formulate Theoretical Framework and Conceptual Framework? Explain. [10 marks]

b. Identify this research design and give three examples of internal validity threats and two external validity threats in this research design: O1 O2 O3 O4 X O5 O6 O7 O8 [15 marks]

Total: 25 marks

QUESTION 2

a. Differentiate a method of random sampling with a method of non-random sampling. [8 marks]

b. Give five (5) examples of strata that can be used in stratified random sampling. [5 marks]

c. Construct a table and show in column 1 the advantage, and in column 2 the disadvantage, of using each of these group data collection techniques:

- i. Focus group discussion
- ii. Nominal group technique
- iii. Delphi technique

[4 marks for each = 12 marks]

[Total: 25 marks]

QUESTION 3

a. Differentiate these principles associated with measurement and give example for each:

- i. reactive versus non-reactive measure
- ii. single versus multiple outcomes/triangulation measure
- iii. matching versus blocking

[3 marks for each = 9 marks]

b. Give two examples for each of these concepts:

- i. Measure in Ordinal scale
- ii. Measure in Nominal scale
- iii. Measure in Interval scale
- iv. Measure in Ratio scale
- v. Variable
- vi. Variate
- vii. Rival Variable

[2 marks for each = 14 marks]

c. What two forms of instrument suitability testing a researcher conducts?

[2 marks]

Total: 25 marks

QUESTION 4

a. If you were confident that your new way of teaching remedial reading (1) would improve the reading achievement scores over the old way (2), then your hypotheses would be:

$H_1: \mu_1 > \mu_2$; and

$H_0: \mu_1 = \mu_2$

Explain the two hypotheses above.

[4 marks]

b. Describe in detail how each of the following testing procedures is conducted prior to doing a survey research:

- a. Construct validity testing
- b. Content validity testing
- c. Face validity

[4 marks each = 12 marks]

c. List four (4) data/literature bases that you have used in the library to search for information for your courses:

[4 marks]

d. How would a student about to do a Research Project course find a researchable problem? Explain in five (5) points.

[5 marks]

[Total: 25 marks]