

GWANDA STATE UNIVERSITY



FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE

DEPARTMENT OF HORTICULTURE AND CROP PRODUCTION

BACHELOR OF SCIENCE HONOURS DEGREE IN AGRICULTURAL ECONOMICS

Research Methods for Agricultural Economics

NAE 2204

Second Semester First Segment Final Main Examination Paper

April 2025

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: None

Examiner's Name: R. Foti

INSTRUCTIONS

1. Answer **all** questions in Section A
2. Answer **two** questions in Section B
3. Marks for each question or part question are indicated in parentheses.

MARK ALLOCATION

QUESTION	MARKS
SECTION A	60
SECTION B	40
TOTAL ATTAINABLE MARKS	100

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SECTION A: Answer ALL questions in this section

QUESTION 1

- a) Define the following terms as they are used in research:
- i) Research [2]
 - ii) Research methods [2]
 - iii) Research methodology [2]
 - iv) Research design [2]
 - v) Sampling [2]
 - vi) Research problem [2]
 - vii) Research hypothesis [2]
 - viii) Basic research [2]
- b) Explain briefly what you understand by the phrase “hypothesis testing” [4]

QUESTION 2

- a) Describe, using examples, the 2 types of basic research. [6]
- b) Describe fully the following types of applied research. Give examples to your answer:
- i) Development applied research [4]
 - ii) Evaluation applied research [4]
 - iii) Descriptive or Exploratory research [4]
 - iv) Analytical research [4]

QUESTION 3

- a) Explain the differences and relationships among qualitative research, quantitative research and mixed methods. [6]
- b) Explain giving practical examples the difference between probability and non-probability sampling procedures outlining why this distinction matters in research. [6]
- c) Describe the following types of research in agricultural economics:
- i) Experimental [2]
 - ii) Non-experimental [2]
 - iii) Quasi-experimental [2]

SECTION B: Answer 2 questions from this section

QUESTION 4

Describe fully the following methods of impact evaluation research:

- i) Regression discontinuity analysis [6]
- ii) Matching [7]
- iii) Difference in differences or parallel trend analysis [7]

QUESTION 5

Fully describe how you would implement any 5 probabilistic sampling procedures of your choice. [20]

QUESTION 6

Distinguish, giving examples, the following types of variables in research:

- a) Independent and dependent variables [4]
- b) Quantitative and qualitative variables [4]
- c) Nominal and ordinal variables [4]
- d) Continuous and discrete variables [4]
- e) Stimulus and control variables [4]

END OF EXAMINATION PAPER