



NATIONAL OPEN UNIVERSITY OF NIGERIA
Department of Agricultural Economics and Extension
FACULTY OF AGRICULTURAL SCIENCES
2025_1 EXAMINATION

Programme: Agricultural Extension and Management

Course Title: Statistics and Research Methods

Course code: AEM501

Credit Unit: 3

Time Allowed: 3 Hours

INSTRUCTION: Answer Compulsory question 1 (30 marks) and 4 questions (10marks).

Question 1.

- (a) What is research?
- (b) In social research state 5 kinds of data collected.
- (c) Highlight 5 guides to a researcher in problem identification.
- (d) Distinguish between Type II Error and Type 1 Error
- (e) Explain dependent and independent variables
- (f) State the differences between secondary and primary data in research

Question 2

- (a) Explain the following types of research
 - i. Historical research:
 - ii. Descriptive research:
 - iii. Experimental research:
- (b) Explain 2 factors that survey research are dependent upon
- (c) Outline 5 uses of Hypothesis

Question 3.

- (a) What are the unique features of a research problem?
- (b) Enumerate 6 essentially identified steps in a research process
- (c) Highlight 5 good hypothesis statement sources

Question 4.

- (a) Explain the following:
 - i. Null Hypothesis:
 - ii. Alternative Hypothesis
- (b) State 4 factors to be considered when stating a general objective of a study
- (c) Discuss comprehensive research report

Question 5.

- (a) i. What are the criteria for good statement of problem?
- ii. State the rules that must be followed when constructing a table for tabulation of data
- (b) Consider 5 guidelines that must be contained in a questionnaire design
- (c) Give 5 importance of pre – test in survey