



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF SOCIAL SCIENCES  
DEPARTMENT OF ECONOMICS**

**COURSE TITLE: RESEARCH METHODS**

**COURSE CODE: ECO 311**

**UNITS: 3.**

**TIME ALLOWED: 3 HOURS**

**INSTRUCTION: ANSWER QUESTION (ONE) AND ANY OTHER (THREE)**

**Question 1**

The following Table shows the saving pattern in a rural Nigerian village

Income per month (N) X	30	40	50	60	70	70	80
Saving per month(N) Y	14	9	10	7	5	6	12

- i. Estimate the parameters of the model to find the least squares line (15 marks)
- ii. Calculate the correlation coefficient, and (10 marks)

**Question 2**

- a) Outline and discuss the nine (9) steps involved in structuring an empirical economic analysis or research problem (8 marks)
- b) List the types of research on the basis of goal, method and on the basis of kinds of evidence and analysis used. (7 marks)

**Question 3**

- a) Define parametric t-test(5 marks)
- b) State how
  - i. Null Hypothesis (H<sub>0</sub>) and Alternative Hypothesis (H<sub>1</sub>) are related to parametric t-test
  - ii. P-value or probability value is related to Parametric t-test(10 marks)

**Question 4**

- a) Explain the five (5) significant roles that ethics play in social research.(9 marks)
- b) State clearly the details or features of reference you should include in a full publication (6 marks)

**Question 5**

- a) Identify and discuss the six (6) hindrances that made some scientific method of research not able to establish generalizations which are comparable to the theories of the natural sciences on the basis of explanatory power or in their capacity to yield precise predictions (10 marks)

- b) Enumerate the five (5) types of literature reviews we have. **(5 marks)**

**Question 6**

- a) Assuming you are writing a project and your supervisor demanded that you include a Conceptual Framework into your research project, why do you think it is important in the project **(10 marks)**
- b) Given the following numbers 5, 7, 8, and 9, determine the harmonic mean of the figures **(5 marks)**