



NATIONAL OPEN UNIVERSITY OF NIGERIA
Dept. of Agricultural Economics and Extension, Faculty of Agricultural Sciences,
2025_2 EXAMINATIONS

Course Title: Econometrics

Credit Unit: 3 Units

Total Score: 70 Marks

Time Allowed: 2.5 hours

INSTRUCTION: Answer compulsory question 1 (25 marks) and any other 3 questions (15 marks each).

1a. Explain the term applied econometrics based on your understanding. **4 marks**

1b. Highlight five (5) special features of ordinary least square (OLS) in regression analysis.

5 marks

1c. Give the data set for Y and X are given below: **10 marks**

Y	76	52	56	57	77	38	55	67
X	12	6	10	9	10	7	8	12

Find the value of ΣY ; ΣX ; ΣXY and ΣX^2 and tabulate your result

1d. What is primary data? List at least four (4) instruments for its collection. **6 marks**

2a. Explain the term linearity in variable. **4 marks**

2b. What is categorical variables? Enumerate five (5) examples categorical variables. **7 marks**

2c. Explain with example what a non-linear regression implies. **4 marks**

3a. The random term, μ is independent (RTI) of the independent or explanatory variable(s), justify. **3 marks**

3b. Use a simple table as example to describe panel data in econometrics. **6 marks**

3c. Differentiate between error of specification and error of aggregation in deviation of regression.

6 marks

4a. Write a short note on null hypothesis using a real example. **4 marks**

4b. Use a hypothetical graph as example, describe negative non-linear correlation. **5 marks**

4c. Discuss three (3) consequences of autocorrelation in regression model. **6 marks**

5a. Discuss what t-test in data interpretation is all about. **4 marks**

5b. Demonstrate the Spearman rank correlation test of detecting heteroscedasticity. **6 marks**

5c. Enumerate five (5) uses of analysis of variance (ANOVA) to an analyst. **5 marks**