**You are to attempt all questions.**

# A. Question on Time Series

The data provided in sheet one titled “Time Series” you are required to;

* Compute the descriptive statistics and the correlation matrix
* Run a regression for the functional form below:
  1. GDP=f(MD, INT)

Where; GDP = nominal GDP; MD=money demand; INT=Interest rate; INF=Inflation rate; M2=money supply; NER=Exchange rate; OP=oil price; RGDP = real GDP;

* Perform the post estimation tests of normality, linearity, stability of the model, autocorrelation, heteroscedasticity and multicollinearity
* Interpret your results

**Hint**: The data for questions 1-3 was saved as Time Series I and for questions 4-6 it was saved as Time Series II

# B. Question on Panel Data

The data provided in sheet three titled “Panel Data” related to 15 oil and gas companies in Nigeria. with the research topic titled; Firm Performance and Environmental Accounting Disclosure of Oil and Gas Companies in Nigeria. You are required to;

1. The descriptive statistics – Mean, variance and standard deviation
2. The correlation coefficient
3. Run a regression of the structural equation specified below and interpret your result

Where:

EVAD = Environmental Accounting Disclosure

SIZE = Firm size

ROA = Return on asset

ROE = Return on equity

FPT = Firm profitability

AAT = Asset tangibility

SOL = Amount on social responsibility.

**Topic: Determinants of Firm Size of Oil and Gas Companies in Nigeria**

SIZEit = b0 + b1EVADit + b2ROAit + b3FPTit + b4ROEit + b5AATit + µit (2)

# C. Question on Survey Data

You have just concluded collection of questionnaire from the research participants on the topic titled***: Carbon Emission and Life Expectancy nexus: mediating roles of agriculture and foreign direct investment***. The responses have been coded accordingly and all is set for the data analyses. For a hitch free data analysis, the following appendices have been attached for ease of analyses

**APPENDIX 1**: The sample questionnaire

**Survey Data**: The Microsoft Excel sheet for the coded data from all returned responses.

**You are required to:**

1. Carry out descriptive statistical analysis to explain the variables characteristics, skewness, Kurtosis and normality of the variables.
2. Evaluate the reliability of the scale with appropriate reporting and interpretation.
3. Conduct factor analysis with appropriate reporting and interpretation.
4. To test the following hypotheses

H1. Carbon emission has no significant effect on life expectancy in Nigeria.

H2. Carbon emission has no significant effect on FDI in Nigeria.

H3. Carbon emission has no significant effect on agricultural output in Nigeria.

H4. Carbon emission’s effect on life expectancy is not significantly mediated by FDI and

agricultural output in Nigeria.

H5. There is no difference between female and male perception of life expectancy

1. List the important control or moderating variables this study ought to account for but missing from the Excel spread sheet. Could the omission from the model affect the study?