



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2023_1 POP EXAMINATION.**

COURSE TITLE: INTRODUCTION TO ECONOMETRICS II

COURSE CODE: ECO 356

UNITS: 3

TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

QUESTION ONE

(a). What are the property of a good estimator **(5 Marks)**

(b). Given the following multiple regression model below:

$$\text{GDP} = -1.8774 - 0.5542\text{INF} - 0.6114\text{EXR} + 0.4438\text{INT}$$

and t calculated for $\text{INF} = 1.882$, $\text{EXR} = 1.944$ and $\text{INT} = 1.633$

where GDP = Gross Domestic Product (Proxy for Economic growth), INF = Inflationary rate, EXR = Exchange rate, INT = Interest rate.

You are required to:

(i) Interpret the result above completely. **(10marks)**

(ii) Test for the level of significance of t statistics at 5% level of significance (1.96) for:

(a) Inflationary rate **(5marks)**

(b) Exchange rate **(5marks)**

(c) Interest rate **(5marks)**

(30Marks)

QUESTION TWO

(a). Briefly explain how you can detect multicollinearity in a regression model **(10 marks)**

(b). Explain the reason why is heteroscedasticity regarded as a problem. **(10 marks)**

(20marks)

QUESTION THREE

(a). Explain in detail the term Durbin-Watson Test. **(10 marks)**

(b). Discuss the term 'Dummy variable'. **(10 marks)**

(20Marks)

QUESTION FOUR

(a). List and explain five (5) differences between Multiple and Simple regression. **(10marks)**

(b). In a regression model, that are disturbance term. Briefly discuss the Causes of the Existence of the Disturbance Term in a regression model? **(10marks)**

(20Marks)