



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

**COURSE TITLE: APPLIED ECONOMETRICS II
COURSE CODE: ECO 454
UNITS: 2
TIME ALLOWED: 3 HOURS**

**INSTRUCTION: ANSWER ANY THREE (3) QUESTIONS. ALL QUESTIONS
CARRY EQUAL MARKS. ONE MARK FOR CLARITY**

QUESTION 1

- i) Outline the importance of Identification? **11 Marks**
- ii) Outline how identification determines the choice of econometrics technique **12 Marks**

QUESTION 2

Given a sample size of $n= 20$, the consumption model was estimated to be:

$$\hat{C} = 100 + 0.89Y$$

(75.5) (0.21) $R^2 = 0.78$

- i) Test the reliability of the estimates of MPC($s(b_1)$) given a 5% level of significance **11 Marks**
- (ii) Provide economic interpretation of the consumption model in terms of R^2 and the signs of the regression coefficients. **12 Marks**

Note: the standard error is given in parentheses below the coefficients

QUESTION 3

Discuss the properties of ordinary least square estimators **23 Marks**

QUESTION 4

Using the necessary algebra, discuss the properties of two stage least squares **23 Marks**

QUESTION 5

Outline the prosperities of the instrumental variable **23 Marks**