



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 355
UNITS: 3
TIME ALLOWED: 3 HOURS
INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE QUESTIONS

QUESTION ONE

- (a). List and explain five (5) traditional econometrics methodology. (10marks)
 - (b). Briefly differentiate between Econometrics modelling and machine learning. (15marks)
- (25marks)

QUESTION TWO

- (a). List and explain five (5) differences between Correlation and regression analysis. (10marks)
 - (b). Discuss three (3) assumption of classical linear regression model. (5marks)
- (15marks)

QUESTION THREE

- (a). What do you understand by the term "the coefficient of determination"? (10marks)
 - (b). Discuss the reason why we normally employ the normality assumption in a regression model? (5marks)
- (15marks)

QUESTION FOUR

Given a multiple regression model below:

$$GDP = a_0 + 0.62893INT + 0.23387UN + 0.51828INF \dots \dots \dots (i)$$

Where GDP = Gross domestic product, INT = Interest rate, UN = Unemployment and INF = Inflationary rate. The probability for INT = 0.112, UN = 0.441. and INF = 0.555. You are Required to:

- (i). Interpret the multiple regression model completely (5marks)
 - (ii). Test for t test for Interest rate, Unemployment and Inflationary rate using 5% level of significance. (10marks)
- (15marks)

QUESTION FIVE

Write short not on the following:

- (a). Model Specification. (5marks)
- (b) Dependent Variable. (5marks)
- (c). Independent Variable. (5marks)