Course Title: Applied Econometrics
Course Code: ECO454
Credit Unit: 2 Units:
Time Allowed: Two (2) Hours

Instruction: Answer Question **One** and Any other **Two** Questions

1a. Applied econometrics research involves an iterated stages that must be completed for a successful econometrics research. itemize and discuss these stages **(8 marks)**
b. Economics and econometrics models may sound alike but do not look alike. Evaluate the differences between economic and econometrics model **(7 marks)**
c. Discuss the basic assumptions of stochastic random terms **(15 marks)**

2a. List and explain the fundamental properties upon which the goodness of an econometric model is judged. **(10 marks)**
b. Is there any difference between stochastic model, and deterministic model? If yes explain **(2 marks)**
c. outline and discuss any five (4) differences in 2a above. **(8 marks)**

3. If income and consumption expenditure of the National Open University for the first ten years of its existence is given by the following table;

Income	10	20	40	50	60	70	80	100	120	125
Consumption Exp.	2	5	7	9	10	12	14	15	17	20
Years	1	2	3	4	5	6	7	8	9	10

Estimate the:
i. Autonomous consumption of the NOUN
ii. Marginal Propensity to Consume (MPC) of the University. (20 marks)

4. Given the following E-view output of a hypothetical economy. Clearly interpret the result and give economic implication where applicable.
Dependent Variable: LOGGDP
Method: Least Squares
Date: 10/10/24 Time: 11:32
Sample: 1980 2023
Included observations: 44

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	7.45219	1.961640	8.896736	0.0000
INFR	-0.18223	0.223154	-2.770380	0.0094
LOGIDO	0.103587	0.078309	1.322803	0.0956

R-squared	0.731695	Mean dependent var	12.85815
Adjusted R-squared	0.607775	S.D. dependent var	0.673594
S.E. of regression	0.636261	Akaike info criterion	2.080978
Sum squared resid	12.54967	Schwarz criterion	2.342208
Log likelihood	-32.49809	Hannan-Quinn criter.	2.173074
F-statistic	2.869713	Durbin-Watson stat	2.091549
Prob(F-statistic)	0.028407		

Note LOGGDP = National Output; INFR = Inflation Rate; LOGIDO = Industrial Output
(20 marks)