

NATIONAL OPEN UNIVERSITY OF NIGERIA

University Village, Nnamdi Azikiwe Expressway, Plot 91, Cadastral Zone, Jabi, Abuja Faculty of Agricultural Sciences, Department of Agricultural Economics and Extension PoP Exam Question November/December 2019

Course Code: AEA505 Course Title: Econometrics Credit Unit: 3 Total Score: 70 Marks Time Allowed: 3 Hours INSTRUCTION:

Answer Compulsory question 1 (30 marks) and any four questions (10 marks each)

- 1. (a.) Define econometrics (4 marks)
 - (b.) List three (3) basic components of econometrics (3 marks)
 - (c.) List and explain two (2) basic types of econometrics (10 marks)
 - (d.) Briefly discuss three (3) limitations associated with linear correlation (6 marks)
 - (e.) Briefly discuss autocorrelation and three (3) of the causative factors (7 marks)
- 2. (a.) Mention two (2) importance of econometrics? (2 marks)(b.) Discuss any two (2) of the listed importance in 2a above (8 marks)
- 3. (a.) List four (4) types of variables (4 marks)
 - (b.) Discuss any three (3) of the variables as listed above (in 3a) (6 marks)
- 4. (a.) Briefly discuss regression analysis (2 marks)
 - (b.) List four (4) different forms of regression analysis (2 marks)
 - (c.) Discuss any three (3) of the listed forms of regression analysis in (b.) above (6 marks)
- 5. Write short notes on any five (5) of the following: (10 marks)
 - i. Primary Data (2 marks)
 - ii. Secondary Data (2 marks)
 - iii. Cross-Section/ cross-sectional Data (2 marks)
 - iv. Time series data (2 marks)
 - v. Pooled cross-section data (2 marks)
 - vi. Panel Data (longitudinal data) (2 marks)
- 6. (a) List any six (6) of the stochastic assumptions of Ordinary Least Square (OLS) estimates (6 marks)
 - (b) Briefly discuss any four (4) of the assumptions as listed in 6a above (4 marks)

7. Use the Table 1 below to estimate the slope and intercept for equation $Y = \hat{a} + bX$ (10 marks) Table 1: Distribution of X and Y

Y	69	76	52	56	57	77	38	55	67	72	64
Х	9	12	6	10	9	10	7	8	12	11	8