



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF CROP AND SOIL SCIENCE  
2024\_2 EXAMINATION**

***COURSE TITLE: Statistics And Research Methods (2 CU)***

***COURSE CODE: AGR501***

***TOTAL SCORE: 70 MARKS***

***INSTRUCTION: Answer 4 questions in all***

***Question 1 is compulsory (25 marks) and any other THREE questions (15 marks each)***

***TIME ALLOWED: 2 ½ Hours***

- 1a. Write briefly on Basic Concepts in Hypothesis Testing (15marks)
- 1b. Explanation of the Concept of Research Design (15marks)
  
- 2a. Explanation Factorial Experiments, its characteristics and advantages (10 marks)
- 2b. Explain the following terms as they relate to research designs: (10 marks)
  
- 3a. What is the significance of the central limit theorem? (10 marks)
- 3b. Delimiting the Research Problem (10 marks)
  
- 4a. The utility of the concept of standard error in statistical induction is on the account of specified reasons, discuss.: (10 marks)
- 4b. Write exhaustive on Completely Randomized Design (CRD):