



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF CROP AND SOIL SCIENCE**

**EXAMINATION: 2021\_1 POP EXAMINATION**

**COURSE CODE: AGR501**

**COURSE TITLE: STATISTICS AND RESEARCH METHODOLOGY (3CU)**

**TIME: 2HRS**

**Instruction: Answer 4 questions in all; No. 1 is compulsory and carries 25 marks and any other three questions carrying 15 marks each.**

**QUESTION**

1. a. Define Research Problems and highlight its minor components (10 marks)  
b. What is a Non-researchable problems? (5 marks)  
c. Mention the procedures for Researchable problem selection (10 marks)
2. a. Define hypothesis (5 marks)  
b. The major reasons why hypothesis is important in our research are (5 marks)  
c. Differentiate between Null and Alternate hypothesis (5 marks)
3. a. What are the most frequently used parametric tests for agricultural research (5 marks)  
b. Outline factors affecting the levels of significance (10 marks)
4. a. What are the factors that determine the research design decisions (7 marks)  
b. Explain the four (4) types of Research Design you know (8 marks)
5. Explain any five (5) major concepts used in Research Designs (15 marks)