



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF CROP AND SOIL SCIENCES  
2020\_2 EXAMINATION ...**

*EXAMINATION: JANUARY 2020\_2 EXAMINATION*

**COURSE TITLE: STATISTICS AND RESEARCH METHODOLOGY**

**COURSE CODE: AGR 501**

**TOTAL SCORE: 70 MARKS**

**TIME ALLOWED: 2hours 30 minutes**

**INSTRUCTION: Answer FOUR Questions in all.**

*Question 1 is compulsory (30marks) and any four questions (10 marks each)*

**QUESTIONS**

1.
  - a. Discuss extensively the difference between researchable and non-researchable problems. **(12 marks)**
  - b. What are the major important tips to consider when making a choice of a research problem? **(15 marks)**
  - c. Name the three methods use for data collection in agricultural research. **(3marks)**
  
2.
  - a. Give four reasons why null hypothesis is important in research. **(4 marks)**
  - b. State two examples of each of parametric and non-parametric test. **(6 marks)**
  
3.

List and Discuss elaborately the most frequently used parametric test for agricultural research. **(10marks)**
  
4.
  - a. State the factors that affect the level of significance. **(6 marks)**
  - b. Enumerate the importance of hypothesis in agricultural research. **(4 marks)**
  
5.
  - a. Describe the two major classification of hypothesis **(4marks)**
  - b. Construct a flow diagram for hypothesis testing. **(6marks)**
  
6.
  - a. Give three advantages and of hypothesis testing. **(4marks)**
  - b. Define research design and list types of research design. **(6marks)**
  
7.
  - a. Highlight the major sources of error in Agricultural Research? **(6 marks)**
  - b. Describe the concept development as a technique in developing a measurement tool? **(4 marks)**