



**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)**