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

EXAMINATION: POP 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 three questions (10 marks each)

QUESTIONS

1 a) Differentiate between researchable and non-researchable problems. **(12 marks)**

   b) List five major points to consider when selecting a research problem. **(10 marks)**

   c) Name the three methods use for data collection in agricultural research. **(8 marks)**

   (30 marks)

2 a) Give four reasons why hypothesis is important in research. **(4 marks)**

   b) State two examples of each of parametric and non-parametric test. **(6 marks)**

3 a) List the most frequently used parametric test for agricultural research. **(6 marks)**

   b) Write short notes on the answers in 3a. **(4 marks)**

4 a) List four factors that affect the level of significance. **(6 marks)**

   b) States four major reasons why hypothesis is important in a research. **(4 marks)**

5 a) Describe the two major classification of hypothesis **(5 marks)**

   b) Construct a flow diagram for hypothesis testing. **(5 marks)**

6 a) Give three advantages and of hypothesis testing. **(5 marks)**

   b) Define research design and list types of research design. **(5 marks)**

7 a) What are the major sources of error in Agricultural Research. **(6 marks)**

   b) What is the concept development as a technique in developing a measurement tool. **(4 marks)**