



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

EXAMINATION: 2021_2 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. As a student of crop science and you are about to start your field experiment having been confronted with some farmers problems that requires investigation. Explain in your own words what you understand by Research Problems and highlight its minor features. (10 marks)
b. What constitutes a Researchable problem? (5 marks)
c. Outline the procedures for problem selection (10 marks)
2. Discuss the three (3) Principles of Experimental Design (15 marks)
3. a. What is factorial Experimental Design (5 marks)
b. Outline the characteristics and advantages of (a) above (10 marks)
4. a. Explain the Questionnaire method of data collection (8 marks)
b. What are the merits and demerits of Questionnaire? (7 marks)
5. a. Define Secondary data (5 marks)
b. Outline the sources of secondary data (6 marks)
c. What are the advantages of secondary data? (4 marks)