



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**FACULTY OF AGRICULTURAL SCIENCES**  
**DEPARTMENT OF CROP AND SOIL SCIENCES**  
**2025\_1 EXAMINATION...**

**COURSE TITLE: AGRICULTURAL STATISTICS AND DATA PROCESSING**

**COURSE CODE: AGR 302**

**TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER THREE (3) Questions in all. QUESTION 1 is compulsory (30 marks) and any other (2) questions (20 marks each)**

**QUESTIONS**

1. Briefly explain the following:
  - i. Sampling error.
  - ii. Non-sampling error (10 marks)
- b. Below is yield data of Cowpea from 10 equal plots.

Plot No.	1	2	3	4	5	6	7	8	9	10
Yield (in kg.)	60	40	50	45	60	55	65	50	65	55

- c. If the area of each plot is 242 square yards, find the average yield per acre? (10 marks)
  - c. What is the difference between Real time processing and Batch processing (10 marks)
2. Enumerate five (5) key principles in designing a Questionnaire? (5 marks)
  - b. Describe the following procedures in Field experimentation, collection and processing of data
    - i. Replication.
    - ii. Field experimentation practices
    - iii. Literature review (15 marks)
3. Write short notes on the following methods of data collection (20 marks)
  - i. Systematic sampling
  - ii. Stratified sampling
  - iii. Random sampling
  - iv. Convenience sampling
4. Enumerate and explain six (6) types of Correlation (18 marks)
  - b. Mention two ways that spurious correlation can arise? (2 marks)