



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Faculty of Education**  
**Department of Library and Information Science**  
**2024\_1 EXAMINATION**

**Course Title:** Research Methods and Statistics in Library & Information Science  
**Course Code:** LIS305 (3CU)  
**Time Allowed:** 3 Hours  
**Instruction:** Please carefully read and take note of the instruction below:  
Answer three questions in all, question one and any other two questions.

**Question 1**

- a. A variable is any characteristic that assumes measurable values. Explain. **(3marks)**
- b. Differentiate between: -
  - i. Dependent and independent variables **(6marks)**
  - ii. Discrete and continuous variables **(6marks)**
- c. What is Case Study research? Explain four (4) characteristics of case study research. **(12marks)**
- d. List three (3) categories of a case study **(3marks)**. **Total 30marks.**

**Question 2**

- a. Explain the relationship between research question and research objective **(8marks)**
- b. Briefly explain any three (3) of the following:
  - i. Statement of problem **(3marks)**
  - ii. Justification of the research **(3marks)**
  - iii. Significance of the research **(3marks)**
  - iv. Scope of the research **(3marks)**
  - v. Background of the study **(3marks)**. **(12marks)**. **Total 20marks.**

**Question 3**

- a. Explain the significance of validity in research **(2marks)**

- b. Identify and explain three (3) categories of validity (9marks)
- c. Identify and explain three (3) threats to validity (9marks). Total 20marks.

**Question 4**

Clearly explain the following:

- (a) Probability and Non-Probability sampling (4marks)
- (b) Snowball sampling (4marks)
- (c) Convenience sampling (4marks)
- (d) Judgement sampling (4marks)
- (e) Quota sampling (4marks). Total 20marks.

**Question 5**

- a. What do you understand by 'Ethical Issue in Research'? (10marks)
- b. List four (4) examples of ethical issues in research procedure (4marks)
- c. Mention four (4) circumstances that is compulsory for you to reference in-text and in the list of reference (6marks). Total 20marks.

**Question 6**

- a. Define research problem. (10marks)
- b. With the aid of a diagram illustrate the sources of research problem. (10marks).  
Total 20marks.