



NATIONAL OPEN UNIVERSITY OF NIGERIA
SCHOOL OF EDUCATION

2025_2 EXAMINATIONS

COURSE CODE: EDU 323

COURSE TITLE: **BASIC RESEARCH METHODS IN EDUCATION**

COURSE UNIT: 3

TIME : 3 HOURS

Instruction:

1. Students are to answer question one and any other three questions.
2. The total mark for question 1 is 25 marks, and 15 marks for each of questions 2, 3, 4, 5 and 6
3. Full mark allotted should only be given to a very well-expressed answer with appropriate sentences.

1. a. Briefly explain the concept of Educational Research **5 marks**
- b. A survey to determine the preference pattern of some parents on the choice of games for their children is given in a table below. Use a null hypothesis to determine whether the indicated preference pattern is statistically significant.

Frequency	Foot Ball	Basket Ball	Volley Ball	Table Tennis	Total
Observed	24	50	52	34	160
Expected	40	40	40	40	160

Use the above table to answer the following questions:

- i. State the null hypothesis H_0 **5 marks**
 - ii. Apply the chi-square formula in each cell and sum up at the end **5 marks**
 - iii. Take decision on the significance of the χ^2 value using degree of freedom at 0.05 level of significance and supposed your table value is **7.82** **5 marks**
 - c. To guide against looking for research problems unreasonably by final year students. list any (5) major sources of educational problems for research exercise **5 marks**
2. a. Briefly explain what you understand by the word 'Research Hypothesis' in education **5 marks**
 - b. State categorically and briefly explain first five (5) of the introduction chapter of a research report as commonly sub-headed in chapter one **10 marks**
3. Distinguish between the following terms
 - i. Two-Tailed and One-Tailed Tests **3 marks**
 - ii. Type I and Type II Errors **3 marks**
 - iii. Inferential statistics and Descriptive statistics **3 marks**
 - iv. Accidental Sampling and, Captive Audience **3 marks**
 - v. Probability sampling and Nonprobability sampling techniques **3 marks**
- 15 marks**

- 4.a, Explain sociometric technique? **5 marks**
- b. List and explain any five (5) good characteristics of a Questionnaire **10 marks**
- 5.a. According to Anaekwe (2002), state three (3) ethical issues that could negate the purpose of research and kills initiatives and intellectual growth in research business that is termed malpractices that researcher must not indulge in. **9 marks**
- b. Explain three (3) conditions or times when studying entire population is necessary? **6 marks**
- 6a. Explain the term ‘Hawthorne Effects – Placebo’? **5 marks**
- b. Enumerate three (3) advantages and two disadvantages of interview **10 marks**