



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi, Abuja**  
**Faculty of Education**

COURSE CODE;     EDU723  
 COURSE TITLE;    BASIC RESEARCH METHODS IN EDUCATION  
 CREDIT UNIT;     2  
 TIME ALLOWED    2 HOURS  
 INSTRUCTION     ANSWER QUESTION ONE AND ANY OTHER TWO

**QUESTION 1**

- a) List the seven (7) components of a questionnaire as an instrument for data collection in educational research. (3marks).
- b) With two (2) examples each, explain the two types of questionnaire. (6marks)
- c) State a research topic in your area of study, ii. Derive Two (2) research objectives from the topic and iii. Develop Eight (8) – item questionnaire for data collection on this research study. (21 marks). **TOTAL = 30 marks**

**QUESTION 2.**

- a) In what ways does a bar chart resemble a histogram and in what ways does a histogram differ from a bar chart. (12 marks)
- b) In the table below, indicate which graphical representations make use of discrete data, those that make use of continuous data and those that make use of both. (5 marks)

| S/N | GRAPHICAL REPRESENTATION | TYPE OF DATA |
|-----|--------------------------|--------------|
| 1   | BAR CHART                |              |
| 2   | PIE CHART                |              |
| 3   | HISTOGRAM                |              |
| 4   | FREQUENCY POLYGON        |              |
| 5   | OGIVE                    |              |

- c) What do you understand by the term sequencing in statistics?  
 Given the following TMA scores of PGDE students in statistics, put them in sequence.  
 16, 10, 25, 14, 28, 30, 11, 18, 12, 29, 15, 17, 13, 20, 26, 20. (3marks **TOTAL= 20marks**.)

**QUESTION 3.**

- a). In a research project report there are three(3) sections. What are these sections? (2 marks).

- b). Explain the components of chapter one—INTRODUCTION—of the research project report. (14 marks)
- c). Explain the components of the supplementary pages of the research project report (4marks).

#### QUESTION 4.

How do you differentiate the following?

- i. Quantitative and Qualitative researches.
- ii. Probability and non- probability sampling.
- iii. Validity and Reliability of instrument.
- iv. Type 1 and Type 2 errors.
- v. Two- tailed and One- tailed hypotheses **(20 marks)**