



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja
FACULTY OF SCIENCES
DEPARTMENT OF ENVIRONMENTAL SCIENCE
2023_1 POP EXAMINATION.

COURSE CODE: ESM304

TIME: ALLOWED: 2HRS

CREDIT UNIT: 2

COURSE TITLE: RESEARCH METHODS AND FIELD TRIP

Instruction: Attempt question number ONE (1) and any other THREE (3) questions.

1. Mention and discuss in details any FIVE essential elements of research (25marks).
2. Formulating research problem is the first and foremost step in the research process. Discuss. (15marks)
 - 3a. What is a research proposal? (5marks)
 - 3b. Justify the need for research proposal (10marks).
4. Differentiate between pure and applied research. (15marks)
5. Write notes on the following: (a) Explanatory Research (b) Correlation Research. (15marks)
6. (a) Identify and formulate a research problem in Environmental Science (8marks)
 - (b) Explain the sampling techniques that will be most appropriate for your study. (7marks)