



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
Plot 91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi - Abuja  
**FACULTY OF MANAGEMENT SCIENCES**  
**2021\_2 EXAMINATION.**

**COURSE CODE: FMS 825**

**COURSE TITLE: Research Methodology**

**CREDIT UNIT: 3**

**INSTRUCTION: 1. Indicate your Matriculation Number clearly**

**2. Attempt question one (1) and any other three (3) questions; four questions in all**

**3. Question one (1) is compulsory and carries 25 marks, while the other questions carry 15 marks each.**

**4. Present all your points in a coherent and orderly Manner**

**TIME ALLOWED: 2½ Hours**

**Question 1**

The following are responses of individuals in a sample regarding the link between COVID-19 lockdown and job opportunities in Nigeria:

	Constrained job opportunities	Increased job opportunities
Strict COVID-19 lockdown	50	68
Eased lockdown	90	56

- Formulate a good research topic and testable statement of hypothesis (null and alternative) **5marks**
- Given the nature of the contingent table containing the responses, what type of technique will be most appropriate for testing the hypothesis? **2marks**
- Using your answer in (i), test at five percent (5%) level whether a significant difference exist between the level of job opportunities between period of strict lockdown and easing period. **18mark**

**Question 2**

- (a) A very critical stage in the research process is topic selection, and certain factors exist to make the process of topic selection less strenuous to students. Precisely identify and explain those factors. **8 marks**

- (b) What is a research hypothesis and where can it be derived? **7 marks**

**Question 3:**

Provide a succinct distinction of each of the following paired words. Provide relevant examples in each case:

- (a) Parametric and Non-Parametric Hypotheses
- (b) Probability and Non-Probability Sampling
- (c) Test of Independence and test of Homogeneity
- (d) Null Hypothesis and Alternate Hypothesis

15 marks

#### Question 4

Identify and explain the major elements and types of research design.

15 marks

#### Question 5

- (a) Differentiate between probability and non-probability sampling techniques, giving at least three examples of each.
- (b) Consider a population of size  $N = 680$ , with a sampling error of 5 percent. Using the Taro Yameni's sample size determination technique, you are required to estimate the sample from this finite population.

8 marks

7 marks