

COURSE CODE: RESEARCH METHOD

COURSE TITLE: FMS825

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.

1. Before any research study is undertaken, there should be an agreement between the sponsor of the study and the researcher as to the problem to be investigated, the methodology, the duration of the study, and its cost. This is usually accomplished through a research proposal, which the researcher submits for approval of the sponsor, who issues a letter of authorization to proceed with the study.

a. Demonstrate your understanding of research proposal by developing a simulated research proposal. You are required to explain in details what is involved in the below listed stages/steps by providing examples. Where necessary providing sample in text citation and references are added advantage

1. A working topic – *Provide a topic to your simulated proposal.*

2. Background of the study. – *Explain what is required here and give simulated example related to the simulated topic you provided.*

3. The problem statement: – *Explain what is required here and give simulated example related to the simulated topic you provided.*

a. The Hypothesis

b. Research questions.

c. Research Objectives

4. The scope of the study.

5. Literature Review

6. The research design, offering details on:

a. Type of study – exploratory, descriptive or empirical

b. Data collection methods

c. The sampling design – Sample Size and Sampling Technique

d. Data analysis. What tools will be used

7. Selected bibliography and references.

(25 marks)

- 5a. Briefly describe significant IoT security solutions for remote and mobile connections **(4Marks)**
- b. Outline ten (10) solutions for securing IoT applications **(10Marks)**
- c. What do you understand by the term Open IoT **(6Marks)**