



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

SPECIAL/SUPPLEMENTARY EXAMINATION

**FOR THE DEGREE
OF
MASTER OF SCIENCE IN NURSING**

COURSE CODE: NCN 8127

COURSE TITLE: RESEARCH METHODOLOGY (SUPP)

DATE: 3RD OCTOBER 2022

TIME: 03:00 - 06:00 PM

INSTRUCTIONS TO CANDIDATES

- (i) WRITE YOUR UNIVERSITY REGISTRATION NUMBER ON EVERY PIECE OF PAPER YOU USE.
- (ii) DO NOT WRITE YOUR NAME ON ANY PIECE OF PAPER YOU USE.
- (iii) THIS PAPER CONSISTS OF ONE SECTION WITH 4 QUESTIONS
- (iv) ANSWER ALL THE FOUR QUESTIONS.
- (v) READ CAREFULLY THE ADDITIONAL INSTRUCTIONS PRECEDING EACH SECTION.

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over.

Answer ALL THE FOUR questions.

1. a) Discuss problems encountered by researchers in Kenya. [5 marks]
b) Explain the meaning of Research Hypothesis in context of research design. [5 marks]
c) Differentiate between Experimental and Control Groups. [5 marks]
d) Describe the different steps involved in a research process. [5 marks]
e) Differentiate between bivariate analysis and multivariate analysis. [5 marks]
2. a) What should be the size of the sample if a simple random sample from a population of 4000 items is to be drawn to estimate the percent defective within an error margin of 0.02 with 95% probability? Prevalence of defective items is 30%. [10 marks]
b) Calculate the size of sample for infinite population in the given question. [5 marks]
c) Management of Hospital B is interested in determining the percentage of the hospital's patients who are admitted for more than 3 days. The hospital head wants to be 95 percent confident that the percentage has been estimated to be within $\pm 3\%$ of the true value. What is the most conservative sample size needed for this problem? Value of $p=0.5$. $z = 1.96$ (as per table of area under normal curve for the given confidence level of 95%). [10 marks]
3. a) Define the term 'research'? [5 marks]
b) Classify different types of research with the help of suitable examples. [15 marks]
4. a) Define 'Sample Design'? [5 marks]
b) Discuss different types of sampling techniques with the help of suitable examples. [10 marks]