

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

RESIT/SPECIAL EXAMINATION

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
MATHEMATICS**

MATH 390: RESEARCH METHODOLOGY

STREAMS: BSC MATHS

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 11/08/2021

11.30 A.M – 1.30 P.M.

INSTRUCTIONS:

- Answer ALL Questions.
- Adhere to the instructions on the answer booklet.

QUESTION ONE

- Explain the difference between primary data and Secondary data (3 marks)
- State at least three assumptions of Sampling (3 marks)
- List at least four Forms of Hypothesis (4 marks)
- List at least five types of variables in research (5 marks)
- State and briefly explain at least five tools of data collection (5 marks)
- Highlight the main characteristics of a good objective (5 marks)
- Highlight at least six Basic rules in the APA referencing style. (5 marks)

QUESTION TWO

- a. Highlight the General format of research report: (6 marks)
- b. Explain the difference between a bibliography and a reference and state at least four referencing styles (5 marks)
- c. State the main parts of an abstract in a report (5 marks)
- d. Briefly explain the following terms
 - i. Exploratory or formative research studies. (1 mark)
 - ii. Descriptive research studies (1 mark)
 - iii. Diagnostic research studies (1 mark)
 - iv. Hypothesis-testing research studies). (1 mark)

QUESTION THREE

- a. Highlight and briefly explain 10 sources a mathematics research problem (7 marks)
 - b. Highlight the general steps in Experimental Research Methods (8 marks)
 - c. State and explain at least five Purposes of a Research Design (5 marks)
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