



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN INFORMATION
TECHNOLOGY
(MAIN CAMPUS)**

**CIT 211: RESEARCH METHODS AND TECHNICAL
WRITING**

Date: 1st April, 2014

Time: 2.45 – 5.00pm

INSTRUCTIONS:

- This paper contains section A and B.
- Attempt ALL questions in Section A and ANY OTHER TWO questions in Section B.



SECTION A

QUESTION ONE (30 MARKS).

- a. With respect to a particular business organization explain five specific reasons why that organization may conduct research. (5 Marks).
- b. Using at least two examples for each describe the two types of research below in the areas of Information Technology; (5 Marks).
 - i. Applied Research.
 - ii. Basic research.
- c. Research may be classified as Inductive and Deductive. Distinguish these two classifications using at least two examples for each. (5 Marks).
- d. State the meaning of the following categories of research; (5 Marks).
 - i. Descriptive research
 - ii. Theory testing/building research
 - iii. Comparative research
 - iv. Longitudinal research
 - v. Participatory research
- e. Describe the following aspects of research and state at least two examples of each.
 - i. Research Paradigms. (2 Marks).
 - ii. Research philosophies. (2 Marks).
 - iii. Research Approaches. (2 Marks).
 - iv. Research Strategies. (2 Marks).
 - v. Time horizons. (2 Marks).

SECTION B

QUESTION TWO (20 MARKS).

- a. Discuss any five major characteristics of Scientific Research. (10 Marks).
- b. Discuss the significance of the literature review in any research work. (10 Marks).

QUESTION THREE (20 MARKS).

- a. Using examples compare and contrast qualitative research and quantitative research. (10 Marks).
- b. Discuss the major factors that would influence the decision as to whether or not particular research is to be conducted. (10 Marks).

QUESTION FOUR (20 MARKS).

- a. Briefly discuss the advantages and possible constraints of the major techniques of data collection in Information Technology projects. (10 Marks).
- b. Define the term validity with respect to of research instruments and explain the forms of validity that exist. (5 Marks).
- c. Define the term reliability with respect to of research instruments and explain the ways of checking the reliability of instruments: (5 Marks).

QUESTION FIVE (20 MARKS).

- a. Describe the significance of "problem statement" in Information Technology scientific reports and explain what constitutes a good problem statement. (5 Marks).
- b. Use examples to distinguish measures of Central Tendency and measures of Variability in describe statistics. (5 Marks).
- c. Define the term triangulation and discuss the different types of triangulation in research. (10 Marks).