



KENYA METHODIST UNIVERSITY

END OF 2ND TRIMESTER 2010 EXAMINATIONS

FACULTY : **SCIENCE AND TECHNOLOGY**
DEPARTMENT : **COMPUTER SCIENCE & BUSINESS INFORMATION**
UNIT CODE : **CISY 302**
UNIT TITLE : **RESEARCH METHODOLOGY**
TIME : **2 HOURS**

Instructions

- *Answer question 1 and any other two questions.*
- *Marks will be awarded to clearly and concisely explained points.*

Question 1

- Explain at least four characteristics of a good research problem. (8Mks)
- Analyze the threats to external validity in experimental design. (8Mks)
- Outline, using an example of your choice, the procedure of selecting a cluster sample. (4Mks)
- Explain at least five concepts used in data management that are collected in a research undertaking. (10Mks)

Question 2

- Explain the ethical issues that one needs to be aware of before embarking on a research study. (8Mks)
- Explain why reviewing of related literature is necessary in any research undertaking. (8Mks)
- State four weaknesses of scientific observation method in research. (4Mks)

Question 3

- Justify the need of for a research proposal in the research process. (6Mks)
- Outline the main components of a technical report. (10Mks)
- Define the following terms: (4Mks)
 - External validity
 - Intervening variable
 - Hypothesis
 - Phenomenological studies

Question 4

- Define the term sampling. (2Mks)
 - Explain at least four advantages of using samples instead the whole population when collecting information in a research. (6Mks)
- Explain the three methods used in obtaining a reliability coefficient of a research instrument. (6Mks)
- State qualities of a good/ scientific research. (6Mks)