NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMUNICATION AND INFORMATION SCIENCE

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Master of Science Degree in Library and Information Science

RESEARCH METHODS AND DATA ANALYSIS TECHNIQUES

ILI 5102

First Semester Examination Paper

November 2016

This examination paper consists of 2 pages

Time Allowed:	3 hours
Total Marks:	100
Special Requirements:	Graph Paper
Examiner's Name:	Mr N. Pasipamire

INSTRUCTIONS

1. Answer any <u>four</u> (4) questions.
2. Give equal time to all questions you choose.
3. Each question carries 25 marks.
4. Importance is attached to clear presentation of ideas, good expression and legibility of handwriting.

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
6.	25

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1. Demonstrate circumstances where you would use case study as a design and case study as a method when carrying out research. [25 Marks]

2. As a college Librarian, you are concerned about the relationship between library use and the success rate of students. Develop a plan that could be utilized to study this relationship. Include a description of the following in your response:

2.1 Research questions/hypotheses, including definitions of your variables/terms
2.2 Strategy of inquiry
2.3 Population and /or sample
2.4 Data collection methods
2.5 Protection of student information (confidentiality)
2.6 Analysis – how might you analyze your results and answer your question

You may also include additional components in your research plan (other than the 6 listed above) as you feel necessary. [25 Marks]

3. Demonstrate, using examples, how theories are used in qualitative, quantitative and mixed methods studies. [25 Marks]

4. Using example from your profession, evaluate the following techniques of creating reliable measures:

4.1 Test – retest method [5 Marks]
4.2 Multiple forms [5 Marks]
4.3 Inter-rater reliability [5 Marks]
4.4 Split half method [5 Marks]
4.5 Use of established measures [5 Marks]

5. Discuss using examples why is important to calculate the standard deviation (SD) and inter quartile range (IQR) when examining the distribution of a quantitative variable. [25 Marks]

6. Discuss using concrete example the four levels of measurement commonly employed by researchers [25 Marks]

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