NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMUNICATION AND INFORMATION SCIENCE

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

BACHELOR OF SCIENCE HONOURS DEGREE IN LIBRARY AND INFORMATION SCIENCE

RESEARCH METHODS AND STATISTICS 11

ILI 2209

Second Semester Examination Paper

April 2017

This examination paper consists of 4 pages

Time Allowed:	**3 hours**
Total Marks:	**100**
Special Requirements:	**None**
Examiner's Name:	**N. Pasipamire**

INSTRUCTIONS

1. Answer any <u>four</u> (4) questions.
2. Give equal time to each question.
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

ILI 2209

1. In research, the characteristic or phenomenon that can be measured or classified is called a variable. Using examples, discuss the four levels that can be used to measure variables
[25 Marks]

2. A random sample of 30 NUST students was asked the following question as part of a larger survey that was carried out to assess the quality of the services offered by the Library. What is your perception of services offered by the Library? **Appendix 1: Data from Respondent** shows the responses: excellent, very good, good, acceptable and poor

   Required:
   a) Organise and summarise the data   [8 Marks]

   b) Discover the important features and patterns in the data   [9 Marks]

   c) Interpret the findings in the context of the aim of the study.   [8 Marks]

3. The following are test scores for 34 LIS students who set for an examination in 2006.

   50, 41, 61, 51, 55, 76, 82, 43, 44, 71, 60, 81, 50, 70, 66, 92, 65, 44, 64, 45, 58, 64, 55, 55, 66, 56, 45, 78, 48, 61, 47, 73, 45, 46.

   Required:

   a) Construct an appropriate graph from the data   [10 Marks]
   b) Interpret the graph's pattern in terms of :-
   i.   Shape
   ii.   Centre
   iii.   Spread   [15 Marks]

4. Using examples, demonstrate the circumstances where you would use a) mean b) mode
c) median as measures of centres?   [25 Marks]

5.1 Discuss the two approaches used in analysing qualitative data.   [8 Marks]
5.2 After briefly explaining what coding is, discuss the process of data coding.   [10 Marks]
5.3 Conduct manual coding on the passage attached as **Appendix 2: Coding.**   **[**7 Marks]

6. Examine the following types of qualitative data analysis,

6.1 Content analysis   [5 Marks]
6.2 Narrative analysis   [5 Marks]
6.3 Discourse analysis   [5 Marks]
6.4 Framework analysis   [5 Marks]
6.5 Grounded theory   [5 Marks]

ILI 2209

Appendix 1: Data from Respondents

Student	Service Ratings
1.	Excellent
2.	Good
3.	Excellent
4.	Poor
5.	Poor
6.	Very good
7.	Good
8.	Poor
9.	Good
10.	Good
11.	Good
12.	Good
13.	Acceptable
14.	Good
15.	Poor
16.	Excellent
17.	Poor
18.	Very good
19.	Acceptable
20.	Poor
21.	Very good
22.	Good
23.	Poor
24.	Good
25.	Good
26.	Good
27.	Good
28.	Acceptable
29.	Excellent
30.	Excellent

ILI 2209

Appendix 2: Coding

**My son, Barry, went through a really
tough time about, probably started the end
of fifth grade and went into sixth grade.
When he was growing up young in
school he was a people-pleaser and
his teachers loved him to death.
Two boys in particular that he chose to
try to emulate, wouldn't, were not
very good for him. They were very critical of
him, they put him down all the time, and
he kind of just took that and really kind
of internalized it, I think, for a long time.
5 In that time period, in the fifth grade, early sixth grade,
they really just kind of shunned him all together, and
so his network as he knew it was gone.**

Source: The Coding Manual for Qualitative Researchers
Johnny Saldaña

Caveat: After coding attach this copy on your answer book.

ILI 2209