



*"Investing in Africa's Future"*

**COLLEGE OF SOCIAL SCIENCES, THEOLOGY,  
HUMANITIES AND EDUCATION**

**HSA 302 RESEARCH DESIGN AND DATA ANALYSIS**

**END OF SECOND SEMESTER EXAMINATIONS**

**MAY 2018**

**LECTURER: DR PL MANGEZVO**

**DURATION: 3 HRS**

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***INSTRUCTIONS***

1. Do NOT write your name on the answer sheet.
2. Answer any three questions.
3. Begin your answer for each question on a new page.
4. Each question is worth a total of 20 marks.
5. Credit is given for neat, well-written and lucid work.



1. Briefly describe two major types of questions that one can include in a questionnaire emphasizing the pros and cons of each type.

2. The following are the marks obtained by 15 pupils in a test that was marked out of 20:

12, 8, 7, 10, 13, 10, 11, 15, 17, 18, 16, 14, 12, 10, 4.

Summarise this data using a frequency table combined with percentages. Calculate the cumulative frequency and sketch an ogive graph.

3. With the use of examples, explain how knowing the type of data collected influences the statistical and graphical analyses that can be performed on the data.

4. The lower quartile, median and upper quartiles of the marks of pupils in two classes were as follows:

Statistic	Class A	Class B
Lower quartile (Q1)	35%	42
Median (Q2)	55%	48%
Upper quartile (Q3)	72%	68%

Determine which class performed better than the other.

5. Explain the nature of the relationship between age and shoe size. Plot a table of values and use it to draw a line graph that would clearly show this relationship.

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