

**UNIVERSITY OF SWAZILAND****SUPPLEMENTARY EXAMINATION PAPER 2005**

**TITLE OF PAPER : RESEARCH METHODS**  
**COURSE CODE : ST332**  
**TIME ALLOWED : 2 (TWO) HOURS**  
**REQUIRMENTS : NONE**  
**INSTRUCTIONS : ANSWER QUESTION ONE AND ANY THREE  
QUESTIONS. ALL QUESTIONS CARRY  
EQUAL MARKS.**

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN  
GRANTED BY THE INVIGILATOR**

**ANSWER QUESTION ONE AND ANY THREE QUESTIONS:****QUESTION ONE.**

Suppose you want to estimate the average IQ of students in UNISWA. You want to organize a written IQ examination for a group of randomly selected students. You know that the university keeps only alphabetical lists of the students for the university. Assume that there are 5807 students in the current academic year. You propose to choose a sample of 250 students randomly without replacement. Your friend proposes to select randomly 3 faculties and select 100 students randomly from each selected faculty. Assume that your proposed sampling method is Method A and that of your friend is Method B. Based on the above facts, answer the following questions:

- 1.1 State the following for the above study:
  - (a) Population and its size.
  - (b) Parameter and Statistic.
  - (c) Sample sizes.
  - (d) Sampling methods.
- 1.2 State the sampling frame of the above survey. Is it possible to draw a sample in each of those two methods using the above sampling frame? Explain why or why not?
- 1.3 Are both methods probability sampling? Which method will provide you better estimate? Explain.
- 1.4 If the university keeps one alphabetic list of students in each faculty, which of the two sampling methods will you choose? Why?

**QUESTION TWO.**

- 2.1 State and discuss the criteria used in evaluating the significance of the selected research problem.
- 2.2 List all important components, in proper sequences, of writing a research proposal.

**QUESTION THREE.**

- 3.1 You know that the reviewing of previous research in the formulation of a new research problem is very useful. Discuss.
- 3.2 Summarize the advantages and disadvantages of the three modes of data collection in a table.

**QUESTION FOUR.**

The role of the measurement scales is very important when applying the various analysing techniques. Suppose you designed a questionnaire to collect data for your research project, which includes all types of questions resulting: qualitative and quantitative; discrete and continuous and nominal, ordinal, interval & ratio data. Discuss the use of various appropriate graphs and tables to present the data for your Project.

**QUESTION FIVE.**

Discuss the following terms:

- 5.1 Statement of the Problem.
- 5.2 Objective of the Study.
- 5.3 Probability Sampling.
- 5.4 Measurement Scales.
- 5.5 Findings of a Study