

**UNIVERSITY OF SWAZILAND**

**SUPPLEMENTARY EXAMINATION PAPER 2012**

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

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

**QUESTION ONE.**

[ 8 + 8 + 4 + 5 marks ]

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 list of the students by the faculty. Assume that there are 4897 students in the current academic year. You propose to choose a sample of 250 students randomly giving everyone equal chance. Your friend proposes to select randomly 3 faculties and select 80 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 of each method. | (d) Sampling methods for A and B. |
- 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? Explain why or why not.
- 1.4 Suppose the university only keeps one alphabetic list of all students of UNISWA. Which of the two sampling methods will you choose? State the reason.

**QUESTION TWO.**

[ 10 + 15 marks ]

- 2.1 State and define three probability sampling.
- 2.2 Explain the steps how one can draw a sample in each of those (three) sampling methods. Use the real population of the UNISWA students.

**QUESTION THREE.**

[10 + 15 marks ]

- 3.1 Discuss the importance of reviewing previous research in the formulation of new research problem.
- 3.2 Select a topic of any research problem. Discuss the four criteria used in evaluating the significance of the selected research problem.

**QUESTION FOUR.**

[10 + 15 marks ]

- 4.1 Suppose you wish to investigate an issue regarding students' academic problem using a survey. Choose an issue and discuss the mode of data collection appropriate for the selected issue with respect to its advantages and disadvantages compared to other modes.
- 4.2 Suppose you have finished the data collection for your survey and you found in your data set all four (nominal, ordinal, interval and ratio) types of variables. Consider the survey of Question five and use the example of real variables related to that survey, discuss how you can organize your data and how you can analyze your data.

**QUESTION FIVE.**

[25 marks ]

Discuss the differences between the following pairs of terms:

- Statement of the Problem and Objective of the Study
- Survey and Census
- Research Report and Research Proposal
- Experimental Research and Descriptive Research
- Population and Sample