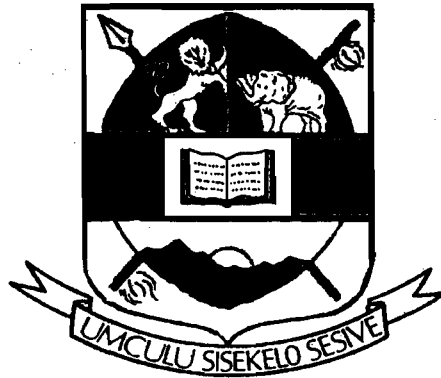


# UNIVERSITY OF SWAZILAND



## FINAL EXAMINATION PAPER 2017

TITLE OF PAPER: RESEARCH METHODS  
COURSE CODE: ST 332  
TIME ALLOCATED: 2 (TWO) HOURS  
INSTRUCTION: ANSWER ANY 4 (FOUR) QUESTIONS OF YOUR CHOICE. ALL QUESTIONS CARRY THE MARKS AS INDICATED WITHIN THE PARENTHESIS

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

**QUESTION ONE****[20 MARKS]**

- a) Psychologists are interested in helping people overcome their fears, anxieties and phobias. One way about finding out about these is to ask people to fill out a questionnaire. In this way they can write about their fears, anxieties and phobias and how they can overcome them without having to talk about them.**
- i.* Outline three advantages and three disadvantage of using a questionnaire in this study. (6)
  - ii.* Give a strength and a weakness of using an interview instead of a questionnaire in this study. (2)
  - iii.* Describe what is meant by a semi structured interview. (2)
  - iv.* What is the strength of using a semi structured interview over a structured interview? (1)
  - v.* Why has an unstructured interview not been chosen to carry out this study? (2)
- b) Researchers conducted a study investigating the correlation between amount of sleep and concentration. First, participants were asked how long they had slept the previous night in hours and minutes. This was then recorded as 'total minutes slept'. Concentration was then assured using a letter cancellation task in which subjects had two minutes to read an extract from a book, counting the number of times that the letter 'f' appeared.**
- i.* Explain what is meant by a negative correlation. (1)
  - ii.* Explain what is meant by a positive correlation. (1)
  - iii.* Explain what is meant by no correlation. (1)
  - iv.* Identify one strength and one weakness of the correlational method. (2)
  - v.* Describe two problems with the way the data was obtained in this correlation. (2)

**QUESTION TWO****[20 MARKS]**

Differentiate between the following terms as used in research

- a) Experimental research and Ex post facto research (4)**
- b) Data processing and Data analysis (4)**
- c) Reliability and validity (4)**
- d) Pure research and applied research (4)**
- e) Population and Sample (4)**

**QUESTION THREE****[20 MARKS]**

- a) Discuss what a research problem is and state the 7 Steps of a Research Problem formulation. (10)
- b) The first question most students ask is "how do I find a research problem"? There are three important sources of problems: experience, deductions from theory and related literature. Discuss how these three sources help you (as a new researcher) to find a research problem. (10)

**QUESTION FOUR****[20 MARKS]**

- a) Several methods can be used to gathering information about a situation, person, Problem or phenomenon. The choice of a method depends upon the purpose of the study, the resources available and the skills of the researcher. In selecting a method of data collection, the socioeconomic-demographic characteristics of the study population play an important role. If possible, it is helpful to know the study population's interest in, and attitude towards, participation in the study. Discuss the following effective and commonly used methods of data collection:
- i. Observation (3)
  - ii. The interview (3)
  - iii. The Schedule (3)
  - iv. The Questionnaire (3)
- b) State 8 essentials of a good Questionnaire. (8)

**QUESTION FIVE****[20 MARKS]**

- a) Discuss the main types of probability sampling methods and explain their strengths and weaknesses. (10)
- b) Explain what is meant by a *quota sample*, a (linear) *systematic random sample* and a *two-stage cluster sample*. Are these equal probability selection methods? Why or why not? (5)
- c) In a district containing 4000 houses, the percentage of homes owned by the occupier, thought to be between 45% and 65%, is to be estimated with a standard error of not more than 2%. From the same survey, the percentage of households running two (or more) cars, thought to lie between 5% and 10%, is to be estimated with a standard error of not more than 1%. How large a sample is necessary to satisfy both aims? (5)

**END OF EXAMINATION**