

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2010

TITLE OF PAPER : STATISTICAL DATA PROCESSING
COURSE CODE : ST206
TIME ALLOWED : 2 (TWO) HOURS
REQUIRMENTS : NONE
INSTRUCTIONS : ANSWER ANY 4 (FOUR) QUESTIONS.
ALL QUESTIONS CARRY EQUAL MARKS.

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

QUESTION ONE.

[10 + 5 + 10 marks]

- 1.1 Give two examples for each of the following type of variables:
- discrete and nominal
 - continuous and ordinal
 - discrete and interval
 - continuous and ratio
 - discrete and ordinal
- 1.2 Choose any two variables from your answers in 1.1 and explain how you can transform those to categorical variables.
- 1.3 Suppose you wish to prepare a code-book. Choose any five variables from the answers given in part 1.1 and these five variables should be part of the code-book. List only the names of the variables and all valid codes of those 5 variables including missing and non-response codes.

QUESTION TWO.

[5 + 10 + 10 marks]

- 2.1 What is Data Processing? Explain.
- 2.2 Questionnaires are the most widely used way to collect different types of information from a large number of respondents. Discuss those 'different types' with examples.
- 2.3 State and explain the five reasons that encourage researchers to adopt items from other studies.

QUESTION THREE.

[10 + 5 + 10 marks]

- 3.1 Discuss the differences between *multiple dichotomy method* and *multiple response method*.
- 3.2 Give an example of multi-response question (open-ended or closed-ended) and provide a codebook for that question.
- 3.3 State the rules for developing response categories for closed-ended questions.

QUESTION FOUR.

[9 + 16 marks]

- 4.1 State the name of three factors which affect the data analysis methods. Briefly explain how they affect the analysing methods of the data.
- 4.2 Suppose you are given a list of variables consisting Age, Gender, Education, Religion, Income, and Marital Status of a sample 300 Mbabane residents. Discuss how you can use descriptive methods to describe those variables and their relationships (if exist).

QUESTION FIVE.

[25 marks]

Discuss the following pairs of terms:

- Valid range checks and Filter checks.
- Records and Observations in data collection..
- Classical Data Analysis and Exploratory Data Analysis.
- Methods of Data Analysis and Modes of data collection.
- Nominal Variables and Categorical Variables.