UNIVERSITY OF ESWATINI

INSTITUTE OF DISTANCE EDUCATION

B. ED. (ADULT EDUCATION) LEVEL 4

MAIN EXAMINATION, OCTOBER 2021

PAPER TITLE: **QUANTITATIVE DATA ANALYSIS**

COURSE CODE: **AED406**

INSTRUCTIONS: **ANSWER FOUR QUESTIONS ONLY**

THIS PAPER MUST NOT BE OPENED UNTILL THE CHIEF INVIGILATOR GRANTS PERMISSION

Question 1

Write brief notes on the following terms as used in data analysis:

a) Parametric test
b) Non-parametric test
c) Bi-variate analysis
d) Variable transformation
e) Multivariate analysis

[5 x 5 = 25 marks]

Question 2

a) Describe at least two functions of a contingency table **[5 marks]**
b) Describe the procedure for checking for errors in categorical variables **[10 marks]**
c) Outline and explain two reasons why it is important for you as a researcher to understand the nature of variables when developing your measures [data collection instruments] **[10 marks]**

Question 3

You have been engaged by UNESCO to conduct a study on the effects of COVID -19 on the education in universities in eSwatini.

a) Write at least two hypotheses that you would likely want to prove by the data you will collect **[2 marks]**
b) List at least 10 variables that are likely to be included in the survey, classifying them into the four main types of variables. **[10 marks]**
c) Develop a code book using the variables highlighted in b) above in preparation for SPSS data file **[13 marks]**

Question 4

a) Explain instances when you would likely want to use contingency tables to summarise your data. **[5 Marks]**
b) Highlight at least three implications of using contingency tables in data summary on the results. **[5 marks]**
c) Highlight at least two tests that you are likely to perform on the contingency table stating their significance in results use. **[10 marks]**
d) Explain why it is not advisable to calculate the standard deviation and mean for categorical variables? **[5 marks]**

Question 5

With the aid of examples, outline and describe two Multiple Response Analysis methods you would use to analyse your data. **[25 marks]**