

UNIVERSITY OF SWAZILAND

Faculty of Education



INSTITUTE OF POST GRADUATE STUDIES

**DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT
DECEMBER, 2009**

**FINAL EXAMINATION PAPER
MASTER OF EDUCATION (M.Ed)**

COURSE CODE : EDF / EDC 620
TITLE OF PAPER : QUANTITATIVE RESEARCH METHODS
TIME ALLOWED : THREE (3) HOURS
INSTRUCTIONS : ANSWER ALL QUESTIONS

TOTAL MARKS: 100

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

Question 1

A researcher used a two sample t-test to see whether there were differences in the performance of Form IV pupils in School A and in School B in Mathematics. After testing the pupils in the two schools, the following results were obtained.

Name of School		N	\bar{X}	SD
School A	Performance	100	15,29	3,29
School B	Performance	100	18,82	3,21

Alpha Level = 0,05

t-value = 0,53

table value = 0,61

- (a) Give an appropriate heading to the table. (5 marks)
- (b) Comment on the:
- (i) means of the two schools. (5 marks)
- (ii) standard deviations (SD) of the two schools. (5 marks)
- (c) Formulate a hypothesis for the research and indicate what type of a hypothesis it is (10 marks)
- (d) From the results, which hypothesis should be accepted and why? Explain fully, showing what the results mean. (15 marks)

Question 2

Scores	f
10 - 12	1
7 - 9	4
4 - 6	3
1 - 3	2

- (a) Find the mean, median and mode of the above distribution and indicate what each of the statistics you obtain means. (18 marks)
- (b) Is it possible to draw bar graphs from this information? Explain fully. (12 marks)

Question 3

Giving suitable examples where applicable, differentiate between:

- (a) the ordinal and the ratio scales of measurement (10 marks)
- (b) a parameter and a statistic (10 marks)
- (c) descriptive and inferential statistics (10 marks)