

**UNIVERSITY OF SWAZILAND**

**FACULTY OF EDUCATION**

**DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT**

**MAY, 2015**

**FINAL EXAMINATION PAPER**

**COURSE CODE : EDF 321**

**TITLE OF PAPER : MEASUREMENT AND TESTING**

**TIME ALLOWED : THREE (3) HOURS**

**INSTRUCTION : ANSWER QUESTION 1 AND ANY OTHER TWO QUESTIONS OF YOUR CHOICE.**

**SPECIAL CONDITION : SCIENTIFIC CALCULATOR ARE NEEDED**

**MARKS ALLOCATED : 100 MARKS**

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

### QUESTION 1

A Geography examination was administered in a Form 2 class. The examination items were divided into two halves in order to establish the reliability of the examination. The table below presents data from 6 selected learners.

Learners	A	B	C	D	E	F
1 <sup>st</sup> Half	6	10	14	11	13	8
2 <sup>nd</sup> Half	8	12	11	10	14	6

Use the information to answer the questions that follow:

- (a) Where possible use classroom examples to compare reliability and validity with respect to the following: (15 marks)

- ✓ Meaning of each concept
- ✓ The relative importance of each concept
- ✓ The extent to which one depends on the other

- (b) Showing all working, use the Pearson Product Moment Correlation Co-efficient method to compute the correlation coefficient between the two halves and interpret the value obtained.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2) - (\sum x)^2][n(\sum y^2) - (\sum y)^2]}} \quad (20 \text{ marks})$$

- (c) Sketch a scatter diagram showing the students' performance between the two (2) halves and comment about the shape of the line graph and the answer obtained from (b).

(5 marks)

**Total marks [40 marks]**

### QUESTION 2

Reflect on the concept of item analysis, using relevant classroom examples to support your arguments, discuss any **four (4)** reasons why educators have to perform item analysis after giving any assessment instrument.

Reflection (10 marks), (4 x 5 = 20 marks)

**Total marks [30 marks]**

### QUESTION 3

Write brief explanatory notes about the following concepts, use classroom examples to support your arguments where applicable.

- a) Normal distribution curve
- b) Educational measurement
- c) The value of essay tests

3 x 10 = 30 marks

**Total marks [30 marks]**

#### **QUESTION 4**

Amongst the objective type of tests are the multiple choices which are most popular amongst educationist and examinations boards, through the use of examples where applicable, discuss any **five (5) factors** that makes multiple choice to be more advantageous to use over the others.

5 x 6 = 30 marks

**Total marks [30 marks]**