

UNIVERSITY OF SWAZILAND

FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT

JULY, 2014

SUPPLEMENTARY 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 test was administered to a Form 3 Integrated Science class, the learners' responses to item number one which was a multiple choice item is tabulated as follows:

Options	A	B	C*	D	E
Upper group	1	1	9	0	2
Lower group	3	5	4	0	1

Answer the following question using the information on the table to answer the following questions:

- Showing your calculations, how many students wrote the test? (5 marks)
- Compute item difficulty of the item and comment: (5 marks)
- Compute item discrimination of the item and comment. (5 marks)
- Discuss the effectiveness of the four (4) destructors: A, B, D and E, make a decision about each destructor. (20 marks)
- On the bases of (b), (c) and (d) state your overall assessment of the item (5 marks)

Total marks [40 marks]

QUESTION 2

Write brief notes about any **three (3)** of the following statistical concepts, use classroom examples to support your argument where applicable.

- The normal curve
- Standard deviation
- Mean
- Inclusive Range

10 x 3 = 30 marks

Total marks [30 marks]

QUESTION 3

Reflect on the concept of usability of a measurement instrument, using relevant classroom examples to support your arguments, discuss any **five (5)** key features that would render classroom measuring instrument usable.

6 x 5 = 30 marks

Total marks [30 marks]

QUESTION 4

Use classroom examples where applicable to discuss any **five (5)** factors that affect the reliability of a measurement instrument (test).

6 x 5 = 30 marks

Total marks [30 marks]