## University of Swaziland



Faculty of Education
Department of Educational Foundation

## Final Examination Paper 2012/2013

## November 2013

Title of paper: Measurement and Testing
Course Code: EDF321/PGC F/T
Time allowed: Three (3) hours
Notes and Instructions: The total for the paper is $100 \%$.
This paper is not to be opened until permission has been granted by the invigilator.

## Answer all questions

## Question one

(a) What is the difference between formative and summative assessment? (1 marks)
(b) Explain how these two processes are helpful in improving practice in schools/organisations-support your answer with examples? (2 marks)
(c) Black and William (1998b) noted that formative assessment practices will not materialise unless the following conditions are met: assessment practices are designed so that they align directly with the content standard to be learned; tasks or items match what has been or will be taught. Critically discuss this statement. (7 marks)

## Question Two

(a)What is item analysis? (3 marks)
(b) Explain the importance of item analysis in improving practice in schools or in educational organisations such as the Examination Council? (4 marks)
(c) What is the difference between difficult level or index and discrimination index? (3 marks)

## Question Three

(a) Calculate the difficult index or level of these two following items/questions and interpret the results. (10 marks)

| Distractors | A | B | C | D |
| :--- | :--- | :--- | :--- | :--- |
| Questions 1 | O | 4 | $23^{*}$ | 3 |
| Question 2 | $11^{*}$ | 14 | 3 | 2 |

Key:* correct answer!
(b) Calculate the discrimination index of these two items and interpret the results (10 marks)

Key: 1 correct answer
0 wrong answer

| Students |  | Scores |  |
| :--- | :--- | :--- | :--- |
| Thoko | 90 | 1 | 0 |
| Simon | 90 | 1 | 0 |
| John | 80 | 0 | 0 |
| Charles | 80 | 1 | 0 |
| Sonia | 70 | 1 | 0 |
| Robert | 60 | 1 | 0 |
| Cliford | 60 | 1 | 0 |
| Khelina | 50 | 1 | 1 |
| Justice | 50 | 1 | 1 |
| Tom | 40 | 0 | 1 |

## Question Four

(a) Calculate the mean, variance and standard deviation from this distribution of the test scores of ten individuals ( $10,1,3,9,2,5,7,6,9,8$ ), then interpret the results. Use the formula below.

Variance $=$ Total sum of the deviation score squared divided by N
Standard deviation $=$ Total sum of x squared divided by N , then square root. ( 10 Marks )

