UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
SUPPLEMENTARY EXAMINATION PAPER 2013

TITLE OF PAPER: CURRICULUM STUDIES IN MATHEMATICS

COURSE CODE: EDC 381

PROGRAMME: B.ED 3 & PGCE

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: ANSWER ANY **FOUR** QUESTIONS. EACH QUESTION IS WORTH 25 MARKS.
DO NOT WRITE ON THE SYLLABUS PROVIDED.

PROVISION: SGCSE Syllabus, PRISM Alive 4

THIS PAPER CONTAINS 2 PAGES. DO NOT OPEN UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

Question 1

(a) Explain each of the following purposes of testing in the context of Swaziland school Mathematics:

    (i)   Achievement   [3]
    (ii)   Diagnosis   [3]
    (iii)   Prognosis   [3]
    (iv)   Selection   [3]
    (v)   Motivation   [3]
    (vi)   Instrument of Teaching   [3]

(b) What is the purpose of standardising scores from different tests before their comparison can be made? [4]

(c) Below is the formula for calculating a standard score; explain what each letter in the formula $S = \dfrac{X - M}{\sigma_x}$ stands for. [3]

Question 2

Explain each of the following types of objective test items giving an exemplar item from Mathematics in each case:

    (i)   Completion Items   [5]
    (ii)   Quantitative Comparison Items   [5]
    (iii)   Situation Set Items   [5]
    (iv)   Data Sufficiency Items   [5]
    (v)   Relationship Analysis Item   [5]

Question 3

(a) Describe how you would use any **three** leadership styles you learnt in this course to head the Mathematics department at a typical government school in Swaziland [15]

(b) State **five** distinct factors that influence the choice of a leadership style [10]

Question 4

Write an essay entitled "Using code-switching in the teaching and learning of Mathematics alleviates some learning problems associated with language" [25]

Question 5

The following is a quotation from Buerk (1982) (Quoted in Betts & McNaughton, 2003, p 3):

> Math does make me think of a stainless steel wall-hard, cold smooth offering no handhold; all it does is glint back at me. Edge up to it, put your nose against it; it doesn't give anything back; you can't put a dent in it; it doesn't take your shape; it doesn't have any smell; all it does is make your nose cold.

Write an essay entitled "School learners view school mathematics as rigid and irrelevant" your essay should refute or support the statement of the title. [25]