UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
MAIN EXAMINATION PAPER 2017

TITLE OF PAPER: CURRICULUM STUDIES IN MATHEMATICS

COURSE CODE: CTE532

PROGRAMME: PGCE

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: ANSWER ANY **FOUR** QUESTIONS. EACH QUESTION IS WORTH 25 MARKS.

This paper contains 3 pages including this one

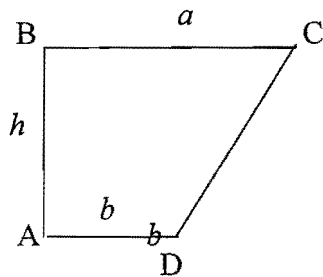## DO NOT OPEN THIS PAPER UNTIL INSTRUCTED TO DO SO BY THE INVIGILATOR

Question 1

(a) Discuss **five (5)** language issues in the teaching and learning of school mathematics. [10]

(b) How would you deal with these issues in your teaching of mathematics?   [15]

Question 2

Write an essay on the organisation of the mathematics department for maximum performance of both staff and learners.   [25]
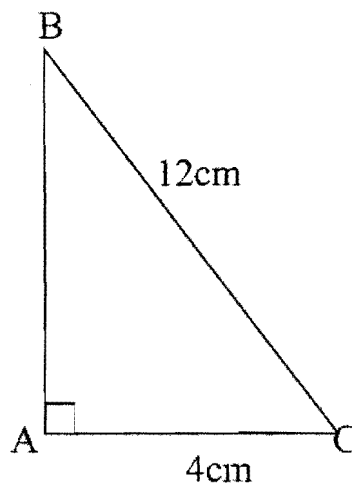
Question 3

(a) Construct a structured item that would lead learners to discover the formula for area of a trapezium. You may use figure 1 or draw your own diagram(s).   [10]

(b) Write completion items to test learners on all aspects of rounding off decimal numbers to 3 significant figures. Indicate what each item is testing.   [9]

(c) Analyse the multiple choice item 23 on:
             (i) The stem
             (ii) The diagram
             (iii)The responses   [6]

23   The size of line AB in the diagram below is:

| | NOT TO SCALE |

B

12cm

A (right angle)   C

4cm

A 128   **B** 16   **C** $\sqrt{128}$ **D** 8

Question 4
Write a paper on using a computer to prepare classwork, tests, assignments and examinations in mathematics. In your paper give examples you would use with your audience.   [25]

Question 5
Discuss the 10 ways of curriculum integration showing how you would use some of them in your teaching.   [25]