UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
FINAL EXAMINATION PAPER 2011

TITLE OF PAPER: CURRICULUM STUDIES IN MATHEMATICS

COURSE CODE: EDC 281

PROGRAMME: B.ED 2 & 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

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

Question 1
Question and answer is one of the methods that can be used in the teaching and learning of mathematics.
- (a) State the strengths and weaknesses of the question and answer method   [6]
- (b) What are the do's and don'ts of the question and answer method?   [19]

Question 2
- (a) Create a group discussion task for the topic "Linear Programming"   [10]
- (b) Identify the following for the task
  - i)   Material(s) needed to do the task.   [2]
  - ii)   Prerequisite knowledge.   [5]
- (c) State the expected learning outcomes at the end of the task.   [8]

Question 3
For mathematics to be meaningful to learners it should be taught in contexts that are realistic to them.
- (a) Give a brief introduction to indicate you working definition of realistic.   [5]
- (b) Using the syllabus as a guide to what pupils need to learn, explain how each of the subtopics under topic 2 "Place value, Estimation and Limits of Accuracy" could be treated using realistic contexts. In each case give an example.   [20]

Question 4
Learners need to be motivated to learn mathematics. Using the title "Motivation in Mathematics" write an essay on how you would use motivation strategies to develop intrinsic motivation in the learners.   [25]

Question 5
Debate the learner-centeredness of the SGCSE mathematics curriculum   [25]