

UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND TEACHING
FINAL EXAMINATION PAPER , MAY 2008

TITLE OF PAPER : **CURRICULUM STUDIES IN MATHEMATICS**

COURSE CODE : **EDC 281**

STUDENTS : **B.ED. II & PGCE**

TIME : **THREE (3) HOURS**

INSTRUCTIONS : **ANSWER ANY FOUR (4) QUESTIONS.**
EACH QUESTION IS WORTH 25 MARKS.

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Question 1

- (a) Name and describe the two types of motivation you learnt in this course [4].
- (b) Identify and explain each of the 7 strategies of motivation [21].

Question 2

Question and answer is one of the methods that can be used in the teaching /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 3

- (a) Create a group discussion task for the topic "Shear" [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 4

For mathematics to be meaningful to learners it should be taught in contexts that are realistic to them. Using the syllabus extract as a guide to what pupils need to learn, explain how the subtopics 'direct variation' and 'indirect variation' could be treated using realistic contexts [25].

Question 5

Using ideas from Hallam (2002) debate the applicability of ability grouping in delivering the SGCSE mathematics curriculum [25].

Syllabus Extract

6.1 Demonstrate understanding of the elementary ideas and notion of ratio, direct and inverse proportions (variation)

6.4 Complete tables of simple direct variation

6.5 Express direct and inverse variation in algebraic terms and use this form of expression to find unknown quantities.