

UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
MAIN EXAMINATION PAPER 2009
B. Ed. III AND PGCE

Title of paper : Curriculum Studies: Chemistry

Course number : EDC 379

Time allowed : 3 hours

Instructions :

1. This paper contains FIVE questions
2. Question 1 is COMPULSORY. You may then choose ANY TWO questions from questions 2, 3, 4, 5.
3. Marks for each question are indicated at the end of the question.
4. Any piece of material or work which is not intended for marking purposes should be clearly CROSSED OUT
5. Ensure that responses to questions are NUMBERED CORRECTLY

Special Requirements

SGCSE Physical Science syllabus (6888) (Chemistry section)

THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

SECTION A

This question is compulsory

QUESTION 1

For the topic "Chemical reactions" (see Physical Science syllabus 6888 attached)

- a) Give and justify a sequence for the sub-topics dealt with in this topic. [8]
- b) Prepare a detailed scheme of work to be covered in two weeks. Remember that three 40-minute periods per week are recommended for the Chemistry section. [32]

SECTION B

QUESTION 2

Resources are an important component for teaching Chemistry, yet they may not be readily available, leading teachers to use improvisations.

- a) What functions do resources serve in teaching Chemistry? [10]
- b) Discuss how improvisations may be a useful strategy for providing resources for teaching Chemistry? Make use of illustrative examples from Chemistry in your discussion. [20]

QUESTION 3

- a) Science is compulsory school subject in Swaziland. This ensures that all pupils take science as a school subject, and thus, provides adequate representation of girls in school science subjects.

What strategies might a science teacher employ to sustain adequate representation of women in scientific fields of study and employment? [14]

- b)
 - i) State three problems that science teachers might experience in their school science departments in Swaziland.
 - ii) How, in your view, might these problems be minimised? [9]

- c) Briefly discuss strategies a teacher might use to enhance the relevance of school science curricula. [7]

QUESTION 4

Discuss misconceptions in Chemistry teaching and learning situations. Make use of specific examples from Chemistry to illustrate your discussion. [30]

QUESTION 5

- a) As part of the process of developing a science curriculum, the developed curriculum and support materials have to go through various stages of evaluation. This is an important step in curriculum development.
- i) What is curriculum evaluation and why is it an important step in curriculum development? [6]
 - ii) Describe the curriculum evaluation process indicating the various evaluation steps involved in the process. [16]
- b) How might the society influence the implementation of a science curriculum? [8]