UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
MAIN EXAMINATION
MAY 2011
B. Ed. III AND PGCE

Title of paper: Curriculum Studies: Chemistry

Course number: EDC 379

Time allowed: 3 hours

Instructions:

1. This paper contains SIX questions
2. Question 1 is COMPULSORY. You may then choose ANY THREE questions from questions 2, 3, 4, 5 and 6.
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

QUESTION 1

This question is compulsory

a) Concepts play a significant role in learning. Using examples from chemistry discuss the significance of concepts in teaching and learning [10]

b) Describe **three** ways in which a chemistry teacher may use computers and accessories for her/his work. [6]

c) Contextualisation is one way that is used in Swaziland to promote the relevance of the Junior Certificate Science. Discuss how contextualisation may improve relevance of school science. [9]

QUESTION 2

Selecting a textbook for chemistry students need to be done carefully since it is a trusted resource for both teachers and pupils.

Discuss the criteria you might use to choose a prescribed chemistry textbook for your students. [25]

QUESTION 3

Discuss how each of the following factors may be affect the implementation of a curriculum such as SGCSE Physical Science.

a) Culture [5]

b) Teachers [8]

c) Science education policy [5]

d) The society [7]

QUESTION 4

Curriculum evaluation is an important step in curriculum development.

Discuss curriculum evaluation indicating the various evaluation steps involved in the process. [25]

QUESTION 5

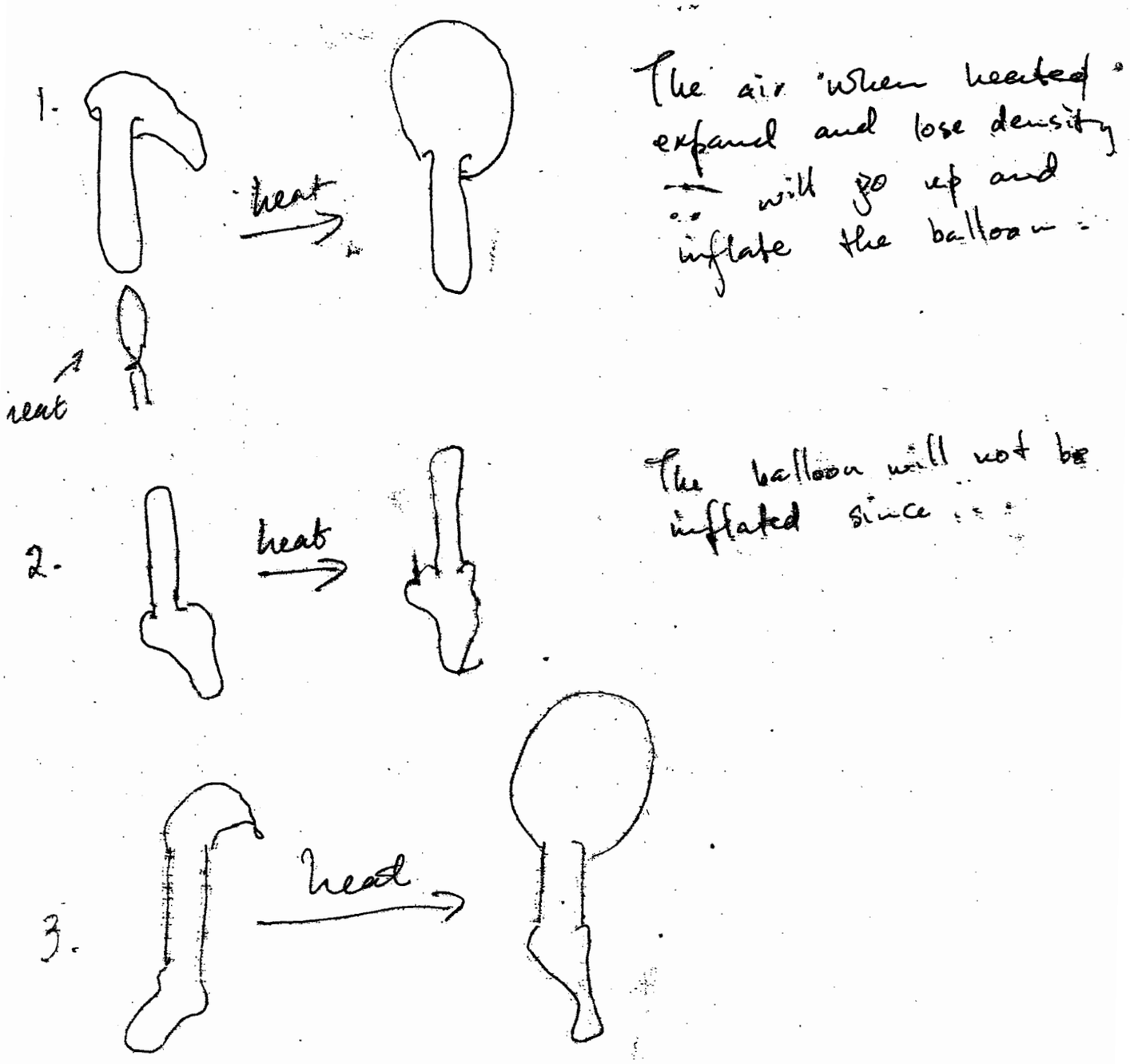
Language plays an important role in teaching and learning of chemistry.

a) Describe fully three functions of language in teaching and learning of chemistry. [10]

b) Discuss language related problem in learning chemistry that are inherent to the language used in chemistry classrooms. [15]

QUESTION 6

The figure below shows a pupil's responses (right hand side drawings) to three items on heating tubes fitted with balloons as shown by the initial state (diagrams on the left hand side).



a) Analyse the response and identify correct conceptions and incorrect conceptions regarding the chemistry concepts presented in the task. Justify your answer. [13]

b) Describe activities you might use to help learners undergo conceptual change [12]