

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2005: BED II PRIMARY

COURSE NUMBER: PEC 277

COURSE NAME: CURRICULUM STUDIES SCIENCE

TIME ALLOWED: 3 HOURS

- INSTRUCTIONS:
1. THIS PAPER IS DIVIDED INTO TWO SECTIONS.
 2. SECTION A (QUESTION 1) IS COMPULSORY. YOU MAY THEN CHOOSE ANY THREE (3) QUESTIONS FROM SECTION B (QUESTIONS 2, 3, 4, 5, AND 6).
 3. EACH QUESTION IS WORTH A MAXIMUM OF 25 MARKS.
 4. DOCUMENTS REFERRED TO IN SOME OF THE QUESTIONS ARE ATTACHED. IF YOU CAN'T FIND THEM ASK FOR THEM.
 5. ANY PIECE OF MATERIAL WHICH IS NOT FOR MARKING PURPOSES MUST BE CROSSED OUT CLEARLY.

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION IS GIVEN BY THE INVIGILATOR

SECTION A: COMPULSORY

Answer question 1 in this section. It is compulsory. Write your answers in the answer booklet, DO NOT write answers on the question paper. Write your answers in one word, short sentences or phrases. Where appropriate, write the letter that represents the question and then the number representing your answer (e.g., a. A)

Question 1: (Compulsory)

- a) Name **three** ways of representing intended outcomes of teaching. (3)
- b) Practical work is best assessed through which of the following;
- A testing
 - B oral questioning
 - C Observation
 - D Written assignments (1)
- c) What is social constructivism? (3)
- d) Write an objective that could be classified as application according to Bloom's taxonomy. (3)
- e) Which one of the following is an assessment procedure?
- A observing
 - B inferring
 - C hypothesizing
 - D communicating (1)
- f) State whether the following are true (T) or false (F). For your answer write the letter corresponding to the question and then T or F as appropriate.
- A Objectives are only one way to state intended outcomes.
 - B General objectives facilitate the choice of teaching method.
 - C Teaching and learning have a cause and effect relationship.
 - D Attainment targets are possible to state in the Swaziland education system.
 - E Young children are not capable of learning meaningfully. (5)

g) Indicate whether if the following are extrinsic or intrinsic reasons for learning science.

- A You can become a chemical engineer.
- B Knowledge of the body helps encourage healthier living.
- C We cannot just build a bridge without knowing the properties of the soil around the area.
- D scientists have a high prestige in society. (4)

h) Which one of the following is **not** true about why we assess students?

- A Obtain information on the nature of textbooks
- B Find out if we are good teachers
- C Rank students in a class
- D Stop children from being playful in class (1)

(i) *Open-ended inquiry or investigation methods are very well but unless they are carefully monitored and supported they can often lead to confusion and frustration ...*

Write **one** thing that is good and **one** thing that could be frustrating about open inquiry learning in class. (4)

SECTION B

Answer any **three** questions from this section.

Question 2

Supposing you are a Grade VII teacher in a rural school and your class is mainly carrying out revision and supplementary lessons. You decide to use a discovery approach for teaching a lesson on Water Plants.

- a) Write **two** behavioural objectives for this lesson. (6)
- b) Write an introduction to a contextualized lesson on this topic. (9)
- c) Develop an activity that is aimed at leading to discovery and specify what you intend the students to discover. (7)
- d) Write **one** assessment item for this lesson. (3)

Question 3

- a) Describe the role of the following in planning a lesson. Give specific examples of how each one affects the lesson.
 - (i) Learning theories.
 - (ii) Prime Time.
 - (iii) Knowledge of Learning styles.
 - (iv) The concept of triangulation. (20)
- b) What is involved in using a problem-solving approach to teaching? (5)

Question 4

Some students in your class show signs that they have not learnt anything from your lesson on 'chemical changes or making new substances' even though you have done everything possibly to explain it clearly.

- a) Describe possible causes for this situation. (10)
- b) Using your knowledge of Piaget's theory of cognitive learning, discuss the cognitive process that is likely to take place when new information is introduced. (10)
- c) Suggest a strategy you might use to help students learn a science meaningfully. (5)

Question 5

You have set up an assignment for your students to find out about science and why they have to learn it at school.

- a) Describe **five** sources of information they might use in this assignment. (10)
- b) Prepare a guide for assessing the students' responses. (5)
- c) Give a brief outline of how you would assess an assignment if it involves practical work. (10)

Question 6

During teaching practice you will be expected to develop detailed lesson plans.

- a. What do you understand as the reasons why it is necessary to write detailed lesson plans? (5)
- b. Give an outline of the details that are included in a well prepared lesson plan. Explain the importance of each detail. (10)
- c. Study the following lesson plan and give a short critique on it. (10)

Lesson Plan

Lesson: *Conductors and non conductors*
Grade: *Six*

Objectives: *Students will learn about conductors in a circuit.*

Teaching materials: *a circuit board*

Introduction: *teacher revise the previous lesson*

Presentation: *teacher will tell students about conductors.*

Teacher will ask questions on conductor and students will answer.

Teacher will connect a circuit and show that electricity flows when certain substances are used.

Conclusion: *teacher will summarize the lesson.*
