

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER December 2011: BED II PRIMARY

COURSE NUMBER: PEC 277

COURSE NAME: CURRICULUM STUDIES: SCIENCE

TIME ALLOWED: 3 HOURS

- INSTRUCTIONS:
1. THIS PAPER HAS SIX QUESTIONS. QUESTION 1 IS COMPULSORY.
 2. ANSWER QUESTION 1 AND ANY **THREE** OTHER QUESTIONS.
 3. YOU WILL ANSWER A TOTAL OF **FOUR** QUESTIONS. EACH QUESTION IS WORTH 25 MARKS.
 4. DOCUMENTS REFERRED TO IN SOME OF THE QUESTIONS ARE ATTACHED. IF YOU DO NOT FIND THEM, ASK FOR THEM.
 5. ANY PIECE OF WRITTEN WORK WHICH IS NOT FOR MARKING PURPOSES MUST BE CROSSED OUT CLEARLY.

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

Answer **question 1** and any **three** other questions from this paper.

Question 1 This question is compulsory.

- a. Write **one** example for each of the following:
 - i. A product of science
 - ii. A scientific process
 - iii. A scientific attitude. (6)
- b. How does an objective differ from a key point? (6)
- c. Define the terms i) assimilation and ii) accommodation. (4)
- d. What is the difference between an objective question and an open ended question? (4)
- e. Why is science knowledge said to be falsifiable? Illustrate your answer appropriately. (5)

Total

25 Marks

Question 2

- a. Given the current financial crisis faced by the country, parents need to carry more and more financial burden for the education of their children. They need to be convinced that all children benefit from learning science.

Write an argument that is aimed at convincing parents that science is worth investing in. Your argument should show how children and other people benefit from science.

(17)

- b. Write an outline of Hurst's postulates. (8)

Total

25 Marks

Question 3

- a. Teaching is like a journey in which you decide the destination, the vehicle, resources and indicators of arrival. Specify what each aspect of the journey represents in teaching. (10)
- b. Describe **three** factors or principles that affect the choice of a teaching method showing how it affects the choice made. (15)

Total

25 Marks

Question 4

- a) In a Grade IV lesson you teach about the environment.
 - i. Write **four** objectives for your lesson. Objectives should come from each of the four domains of learning and should be of high order. (8)
 - ii. Suggest an activity you would give your learners to do during this lesson. Your activity should be described in full indicating **two** key points you would expect them to learn from the activity. You may use the NCC materials provided. (10)
- b) Discuss the use of attainment targets and suggest **one** attainment target you would be aiming to develop in this topic on environment. (7)

Total

25 Marks

Question 5

Describe Piaget’s theory of constructivism. Compare that with Vygotsky’s theory of social constructivism. (25)

Total

25 Marks

Question 6

- a) Write a contextualised lesson for a topic in “Electricity”. You may use the NCC materials provided. (10)
- b) Write **three** questions and their marking guide for the lesson in a) above. Questions should of higher order demand. (15)

Total

25 Marks