

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER Dec 2016: BED II PRIMARY

COURSE NUMBER: PED277

COURSE NAME: CURRICULUM STUDIES: SCIENCE

TIME ALLOWED: 3 HOURS

- INSTRUCTIONS:
1. THIS PAPER HAS 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 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

SECTION A

Answer **ALL** seven (7) questions from this section. Use the answer book provided for all answers. Do not write your answers in the question paper. This section does not require long answers.

Question 1

- a) Name **three** scientific products. (3)
- b) Indicate whether the following statements are process, products or attitudes of science.
- A observing accurately
 - B deriving a relationship between two variables
 - C proposing a statement that explains behaviour
 - D finding the distance between the nuclei of two atoms with the help of a high power electron microscope
 - E repeating an experiment in order to take an average (5)
- c) List **four** things that help a teacher to select a suitable teaching method. (4)
- d) Which psychologists are mainly known for the following concepts?
- A social constructivism
 - B task analysis
 - C constructivist learning
 - D meaningful learning (4)
- e) Name **three** ways in which a teacher can express his or her intentions in teaching a lesson. (3)
- f) The question below was given to Grade VI learners after they had done expansion of materials. Classify the question according to Blooms taxonomy. (2)

Musa had a money box called 'Piggy Bank' which he used to save money. One very hot day he found that he could not put the coin through the hole because the coin was too big. What should he do?

- A wet the coin
- B magnetise the coin
- C put the coin in cold water to cool it
- D Put the coin on a stove to warm it

- g) State **four** reasons why lesson planning is necessary. (4)

SECTION B

Answer any **THREE** questions from this section

Question 2

A set of teacher's notes is provided in Appendix A: teachers' notes from a Grade V science lesson in an earlier version of the primary science materials.

- a. Write a planner for this lesson. (10)
- b. Use the knowledge you gathered in this course to structure a contextualised lesson for two periods. (15)

Question 3

- a. Piaget states that children learn through both physical and mental activity. Discuss the implication of this theory for lesson delivery at Grade 6 level. Use specific examples where appropriate. (13)
- b. Briefly describe the domains of learning. (12)

Question 4

Look at the information given in Appendix A.

- a) Write **three** objectives for this lesson. Objectives should be higher than recall. (9)
- b) Describe a method or methods you would use to teach this lesson stating your reason for selecting the method(s). (10)
- c) Write **two** questions you would ask during the lesson to encourage learners to speculate. (6)

Question 5

The following are different strategies for teaching science. Describe them and show the advantages and disadvantages of using them.

- Discovery
Problem solving
Discussion (25)