

**UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND TEACHING
MAIN EXAMINATION QUESTION PAPER, MAY 2014**

TITLE OF PAPER : CURRICULUM STUDIES IN BIOLOGY II
COURSE CODE : EDC 378
STUDENTS : BEd. III, PGCE
TIME ALLOWED : THREE (3) HOURS

INSTRUCTIONS: 1. This examination paper has five (5) questions. Answer four (4) questions only.
2. Each question has a total of 25 points.

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

1. a) Swaziland, like the majority of African countries, is a consumer rather than a producer of science and technology. Explain why Science, Technology and Society issues should be taught to Swazi children. [10]
- b) Aikenhead (1994) suggests that a major aim of the Science, Technology and Society (STS) approach to curriculum and instruction is to help learners make sense out of their everyday experiences. Explain how STS achieves this aim. [15]
2. a) Describe the considerations you would make when planning a gender responsive science lesson for a mixed gender class. Indicators for gender responsiveness must be evident in the planning. [10]
- b) Over the years, women have been reported to be underrepresented in the science professions. Provide the causes for this under-representation. [15]
3. a) A contextualised science curriculum in which the content reflects the students' everyday experiences is now being emphasised for schools in Swaziland. Outline the steps you would take to develop a relevant and affordable science curriculum for a rural secondary school in Swaziland. Include considerations you would make to plan, design, implement and evaluate your curriculum. [16]
- b) Explain how each of the following language factors affect the encoding of information in working memory and, therefore, learners' responses to questions: key words; terms of quantity; negative forms. [9]
4. In 2006, a survey of selected secondary schools in Swaziland found that even though most schools had their laboratories in good condition, there were hardly any practical activities taking place in the schools.
 - a) Suggest possible reasons for this situation. [15]
 - b) Outline a proposal to describe how you would remedy the above mentioned situation. [10]

5. In most schools in Swaziland where electricity is available teachers use the following resources because they can be purchased with ease or they are readily available:

Chart	Worksheet
Textbook	Overhead projector

- a) Explain why each of these resources is important in learning science. [5]
- b) Select a topic in Biology and explain how each resource can be used as an effective teaching learning tool. [12]
- c) Provide the cognitive abilities and process skills that could be developed through the use of these resources in the topic chosen in b) above [8]