UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND TEACHING
FINAL EXAMINATION QUESTION PAPER, MAY 2009

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

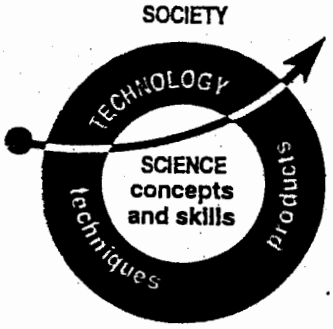
INSTRUCTIONS: 1.This examination paper has six (6) questions. Answer four (4) questions only
2. Each question has a total of 25 points.

SPECIAL REQUIREMENT: AN O'LEVEL BIOLOGY TEXTBOOK FOR QUESTION 6

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

1. Terry Allsop has identified problems faced by low income countries in implementing practical activities in their science instruction. Discuss the problems encountered by science teachers in Swaziland in this regard and their implications in implementing the IGCSE/SGCSE. [25]

2. The model below represents a suggested sequence for STS science teaching. Explain how this model differs from a traditional science instructional sequence. [25]



3. Discuss the steps you would take to develop a contextualised Junior Certificate science curriculum for schools in Swaziland. [25]

4. Discuss the reasons that have been suggested for the apparent low enrolment of girls in Science, Mathematics, and Technology Education in Africa and critically examine the efforts being made to address this issue. [25]

5. Since the introduction of the IGCSE in Swaziland, a number of biology textbooks have been published that claim to be designed for the IGCSE. Discuss the criteria you would use to determine if such a textbook was indeed suitable for your IGCSE class. [25]

6. Select an O'level Biology topic from the biology textbook provided. Construct a concept map that reflects the types of understandings you would wish your students to acquire in that particular domain of knowledge by performing the following tasks.

   a) Identify and list the key concepts (major and minor concepts). [5]
   b) Rank the concepts from the most general and most inclusive to the least general and least inclusive. [5]
   c) Cluster concepts that function at the same level of generality or abstraction or those concepts that interrelate closely. [3]
   d) Arrange concepts into a hierarchical representation. [7]
   e) Link related concepts and label the links with appropriate descriptors. [5]