

**UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND TEACHING
FINAL EXAMINATION QUESTION PAPER, MAY 2007**

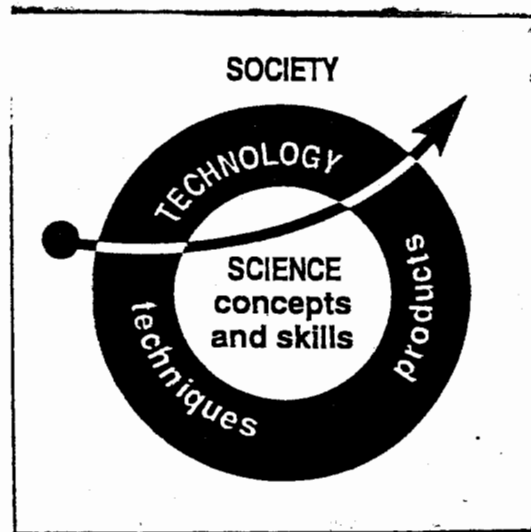
TITLE OF PAPER : CURRICULUM STUDIES IN BIOLOGY II
COURSE CODE : EDC 378
STUDENTS : BEd. III, PGCE
TIME ALLOWED : THREE (3) HOURS

INSTRUCTIONS:

- 1. This examination paper has six (6) questions. Answer four (4) questions only**
- 2. Each question has a total of 25 points. The number of points for each sub-question, where it exists, is indicated in parentheses**

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GRANTED BY THE INVIGILATOR**

1. The status of science and technology education in Africa has not improved when compared to other developing countries in the world. Yoloye (1999) suggests that Africa should engage in 'low science' rather than play catch up with the rest of the world. Discuss the recommendations that have been proposed in this regard. [25]
2. A sequence for STS science teaching is represented in the model below. Explain how the various components interact with each other. Suggest a variation to this model. [25]



3. Discuss the factors that affect the interaction between short-term memory and in-coming sensory information. [25]
4. According to Jerome Bruner, when learners are taught the structure of a subject, they are able to understand how different elements of the subject are related. Explain. [25]
5. Select an O'level Biology topic and then perform the following tasks:
 - a) Construct a concept map that reflects the types of understandings you would wish your students to acquire in that particular domain of knowledge.
 - b) Identify and list the key concepts (major and minor concepts). [5]
 - c) Rank the concepts from the most general and most inclusive to the least general and least inclusive. [5]
 - d) Cluster concepts that function at the same level of generality or abstraction or those concepts that interrelate closely. [3]
 - e) Arrange concepts into a hierarchical representation. [7]
 - f) Link related concepts and label links with appropriate descriptors. [5]
6. In most African countries there is a high attrition rate for girls as one moves from lower primary to upper primary and on to secondary school. Discuss the reasons for this situation and your recommendations for correcting it. [25]