

**UNIVERSITY OF SWAZILAND  
FACULTY OF EDUCATION  
FINAL EXAMINATION QUESTION PAPER, MAY 2006**

**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. The number of points for each sub-question is indicated in parentheses**

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

1.
  - a) Discuss the status of the science curriculum
    - i) Before launching of Sputnik 1 into space [4]
    - ii) After launching of Sputnik 1 into space [6]
  - b) Science and technology are related. Explain [4]
  - c) Explain why Science, Technology, and Society (STS) issues should be taught in Swazi schools. [6]
  - d) Science and Technology have improved the quality of life for mankind as well as created problems. Explain. [5]
  
2.
  - a) Terry Allsop has identified problems faced by low income/developing countries in implementing Science and Technology Education in their schools. Discuss the problems, relating them to Swaziland. [10]
  - b) 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. [15]
  
3.
  - a) Compare the goals of the Forum for African Women Educationalists (FAWE) and Female Education in Science and Mathematics in Africa (FEMSA) in relation to girls' education in Africa. [5]
  - b) Explain why women lag behind men in access to, participation, and performance in Science, Mathematics and Technology (SMT) education. [12]
  - c) What initiatives have been made to address gender imbalances in SMT education in Africa and the rest of the world? [8]
  
4.
  - a) Explain the role of the following in meaningful learning:
    - i) prior concepts
    - ii) subsumer
    - iii) advance organizer [15]
  - b) Elaborate on the three simultaneous processes involved in Bruner's discovery learning. [10]
  
5. In most schools in Swaziland where electricity is available, teachers use the following resources because they can be purchased with ease or are readily available:  
 Charts                  Worksheets      Textbooks      Overhead projector/Transparency

- a) Explain why these resources are important in the classroom. [10]
- b) Explain how each resource can be used as an effective teaching/learning aid for teaching and learning a particular topic in biology. [15]