

**UNIVERSITY OF ESWATINI  
FACULTY OF EDUCATION  
DEPARTMENT OF CURRICULUM AND TEACHING  
RE-SIT EXAMINATION QUESTION PAPER, AUGUST 2021**

**TITLE OF PAPER : CURRICULUM STUDIES IN BIOLOGY I**  
**COURSE CODE : CTE527**  
**STUDENTS : PGCE: FULL TIME & IDE**  
**TIME ALLOWED : THREE (3) HOURS**

**INSTRUCTIONS:**

- 1. This examination paper has five (5) questions. Answer any 4.**
- 2. Each question has a total of 25 points.**
- 3. Do not use bullets, unless implied by the question**

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

1. a) Discuss what is meant by the following: **[2x3]**  
Science is an area of study

Science is a continuous process

- b) How can we justify the place of the Nature of Science in the school science curriculum? [10]
- c) Discuss the role of a viable paradigm in the scientific community. [5]
- d) Explain why Paul Feyerabend is considered as an anarchist. [4]
2. a) Why are individual learner laboratory experiences said to be superior to teacher demonstrations? [10]
- b) What are the attributes of a good demonstration? [5]
- c) Compare and contrast inductive and deductive demonstrations. [10]
3. a) Explain how questioning is used in discussion, demonstration and laboratory method. [3x4]
- b) Transform the following questions to higher order questions using Bloom's taxonomy and science processes. [8]
- i) Digestion of proteins begins in the stomach.
- ii) Absorption of digested food occurs in the villi.
- iii) Give the word equation for photosynthesis.
- iv) The function of roots is to anchor plants in the soil.
- c) Explain how you would create a positive and conducive climate to facilitate a discussion in a biology lesson. [5]
4. a) In Eswatini, teachers strive to have learners conduct practical activities, but not much scientific inquiry is involved. Critique this statement and include the notions of guided versus open inquiry and full versus partial inquiry. [15]
- b) Explain how increasing wait-time to five seconds or more impacts on learners and teachers. [10]
5. a) Ms Bailey, a Form I science teacher, does not see the need to prepare any lesson plans because she is confident of her subject matter knowledge and can teach it from the text book. Why is it important to prepare a lesson plan for each lesson? [7]
- b) Mr Gama's afternoon biology class, especially in the summer, is characterised by sleepy learners and very little learner participation, much to his concern. What kind of advice would you give Mr Gule to improve the situation in his class? [8]
- c) Explain why formative assessment is referred to as assessment for learning. [10]