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UNIVERSITY OF ESWATINI

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGICAL SCIENCES

SUPPLEMENTARY EXAMINATION 2019/2020 ACADEMIC YEAR

**TITLE OF PAPER:** BIODIVERSITY CONSERVATION

**COURSE CODE:** BIO 443

**TIME ALLOWED:** THREE HOURS

**INSTRUCTIONS:**

1. ANSWER ANY FOUR QUESTIONS IN THIS PAPER
2. START EACH QUESTION ON A NEW PAGE
3. ILLUSTRATE YOUR ANSWER WITH LARGE AND CLEARLY LABELLED DIAGRAMS WHERE APPROPRIATE

**SPECIAL REQUIREMENTS:** NONE

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

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**QUESTION 1.**

Discuss the status of the biodiversity of Eswatini. Your discussion should include: definition, components, trends, threats, utilization and distribution of Eswatini's biodiversity.

**(25 Marks)**

**QUESTION 2.**

Community based natural resource management (CBNRM) programmes and projects are in many ways a new and different approach to the management of land and natural resources. However there are a number of common problems that have emerged from CBNRM programmes and projects. Using countries in the Southern African region as examples, list and discuss some of these problems?

**(25 Marks)**

**QUESTION 3.**

List and discuss the measures used to test the status of ecosystems. Use as many examples as possible, especially based on Eswatini's ecosystems.

**(25 Marks)**

**QUESTION 4.**

List and discuss the three perspectives (parameters) that can be used to measure biodiversity at the ecosystem/community level.

**(25 Marks)**

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**QUESTION 5.**

Define conservation and discuss on the two approaches used in the conservation of ecosystems. Use as many examples as possible, especially from Eswatini.

**(25 Marks)**

**QUESTION 6.**

List and discuss the different approaches and methods conservation ecologists use to monitor biological populations.

**(25 Marks)**

**END OF EXAMINATION PAPER**