



**NAMIBIA UNIVERSITY  
OF SCIENCE AND TECHNOLOGY**

**Faculty of Health, Applied Sciences and Natural Resources**

**School of Agriculture and Natural Resources**

**Department of Natural Resources Sciences**

<b>QUALIFICATION :</b> Bachelor of Natural Resource Management Honours	
<b>QUALIFICATION CODE:</b> 08BNRH	<b>LEVEL:</b> 8
<b>COURSE:</b> CONSERVATION BIOLOGY	<b>COURSE CODE:</b> CSB810S
<b>DATE:</b> JULY 2025	
<b>DURATION:</b> 3 (THREE) HOURS	<b>MARKS:</b> 100

<b>SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	Dr T. Nzuma
<b>MODERATOR:</b>	Prof. H. Ndagurwa

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Answer ALL the questions.</li><li>2. Write clearly and neatly.</li><li>3. Number the answers clearly.</li></ol>

**PERMISSIBLE MATERIALS**

1. Examination question paper
2. Answering book
3. Calculator

**THIS QUESTION PAPER CONSISTS OF 1 PAGE** (Excluding this front page)

**Question 1**

**[15]**

- a) Define the four types of ecosystem services — provisioning, regulating, cultural, and supporting — and give a Namibian example for each. *(8 marks)*
- b) How can valuing ecosystem services enhance protected area management in Namibia? *(7 marks)*

**Question 2**

**[20]**

- a) Describe three ecological impacts of invasive species in Namibia, with specific examples. *(9 marks)*
- b) Outline mechanical, chemical, and biological control methods used in Namibia. Provide benefits and limitations of each. *(11 marks)*.

**Question 3**

**[30]**

Evaluate how Namibia's species and ecosystems can be conserved under increasing climate variability and change.

**Question 4**

**[35]**

You are designing a reserve for an amphibian species with low dispersal ability, impacted by habitat loss and climate change.

- a) Identify and explain four ecological criteria critical for selecting and designing the reserve. *(10 marks)*
- b) Discuss the implications of:
  - The SLOSS (Single Large or Several Small) debate,
  - Edge-to-interior ratios,
  - Connectivity corridors,in reserve planning for this species. *(15 marks)*
- c) Propose one post-establishment monitoring method for the amphibian population and justify your choice. *(10 marks)*

**THE END**

Total Marks: 100