



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, NATURAL RESOURCES AND APPLIED SCIENCES

SCHOOL OF AGRICULTURE AND NATURAL RESOURCE SCIENCES

DEPARTMENT OF NATURAL RESOURCES SCIENCES

QUALIFICATION : BACHELOR OF NATURAL RESOURCES MANAGEMENT HONOURS	
QUALIFICATION CODE: 08BNRH	LEVEL: 8
COURSE CODE: ELR821S	COURSE NAME: ECOLOGICAL RESTORATION
DATE: JANUARY 2025	
DURATION: 3 HOURS	MARKS: 75

SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Professor Theo Wassenaar
MODERATOR:	Mrs Elbé Brunette

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer all the questions.2. Write neatly and clearly.3. Mark all answers clearly with their respective question numbers.4. All written work MUST be done in blue or black ink.5. No books, notes and other additional aids are allowed.

PERMISSIBLE MATERIALS

1. Examination paper
2. Examination script

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

SECTION A: SHORT QUESTIONS**[25 MARKS]****QUESTION 1:****[8 MARKS]**

Discuss the meaning of ecological structure, function and composition, and explain how these properties of an ecosystem can be used in planning for restoration.

QUESTION 2:**[2 MARKS]**

Name two Namibian Acts that contain clauses that either explicitly underwrite and support ecological rehabilitation or restoration, or that strongly imply a role for restoration in promoting sustainable utilisation of natural resources.

QUESTION 3:**[10 MARKS]**

List 5 of the national strategies to address land degradation in Namibia, and briefly explain what each entail, emphasising its link to restoration.

QUESTION 4:**[5 MARKS]**

Fill in the missing words in this list of steps that pertain to the seven key steps in the definition of a monitoring programme. [5]

1. Clearly define _____ and _____,
2. Compile existing _____,
3. Develop _____ models and associated _____ questions,
4. Prioritizing indicators,
5. Defining the _____ scope and developing an overall sampling design,
6. Develop monitoring _____,
7. Establish data management, _____ and _____ procedures

SECTION B: SHORT ESSAY QUESTIONS**[20 MARKS]****QUESTION 5:****[10 MARKS]**

Explain how you would use the National Drought Policy and Strategy in planning for restoration.

QUESTION 6:**[10 MARKS]**

Discuss the role and place of monitoring in an ecological restoration plan, emphasising the critical aspects that are required to implement a monitoring plan.

SECTION C: LONG QUESTIONS**[30 MARKS]****QUESTION 7:****[30 MARKS]**

You are working for an NGO that is active in the development space. Your speciality is the ecological restoration of any kind of degraded land, you are given the following task: Draft a restoration plan for a funder that wants to restore productivity to a degraded arid communal rangeland. In this context, answer the questions below:

- i. Define the concept of landscape rehydration, providing examples from your target affected area, and explain how this concept can be used to achieve the client's overall project goal of improved productivity. Include two risk factors that might affect the likely outcome. [10]
- ii. Explain how you would define the ecological goal in the context of the ten steps of restoration planning and provide a draft ecological goal or goals. [10]
- iii. With reference to the restoration planning process flow, explain how you would determine the most feasible ecological tools to use in restoration. [10]