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: NOVEMBER 2024	
DURATION: 3 HOURS	MARKS: 75

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

INSTRUCTIONS
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]
List the first four steps in the 10-step approach to restoration (you may phrase these in the form of questions or statements) and explain the purpose and content of each step, giving examples.

QUESTION 2: [2 MARKS]
Name two of the three Rio Conventions that most closely underpin various motivations for restoration.

QUESTION 3: [10 MARKS]
Explain what you understand under the following terms:
1. Ecological rehabilitation
2. Ecological restoration
3. Revegetation
4. Reclamation
5. Restoration ecology

QUESTION 4: [5 MARKS]
i. Name the three Articles of the Constitution of the Republic of Namibia that are most relevant as motivation for restoration. [3]
ii. Explain the basic motivational principle for restoration that the Constitution provides. [2]

SECTION B: SHORT ESSAY QUESTIONS [20 MARKS]

QUESTION 5: [10 MARKS]
Explain how you would use the National Rangeland Management Policy and Strategy in planning for restoration.

QUESTION 6: [10 MARKS]
Discuss the role and place of research in an ecological restoration plan, providing some examples.

SECTION C: LONG QUESTIONS [30 MARKS]

QUESTION 7: [30 MARKS]
As an international consultant specialised in ecological restoration of any kind of degraded land, you are given the following task: Draft a restoration plan for the foreign owner of a highly degraded commercial small stock farm in an arid region whose main poorly defined goal is the restoration of biodiversity (not grazing) through the introduction of mammals and planting of trees.
i.   Define the concept of landscape literacy, providing examples from your target affected area, and explain how this concept can be used to achieve the client's overall project goal of net positive biodiversity impact. [10]
ii. Draw a diagram showing the process flow of a restoration planning effort. [10]
iii. 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]