

FACULTY	AGRICULTURE, ENGINEERING & NATURAL SCIENCES
SCHOOL	SCIENCE
DEPARTMENT	ENVIRONMENTAL SCIENCE
SUBJECT	INTEGRATED NATURAL RESOURCES MANAGEMENT II
SUBJECT CODE	EBL 3852
DATE	NOVEMBER 2021
DURATION	3 hours
MARKS	120

REGULAR EXAMINATION

Examiners: Prof I. Mapaure (University of Namibia)

Dr C. Hay (University of Namibia)

Moderator: Prof C.T. Downs (University of KwaZulu-Natal)

This examination paper consists of 3 pages (including the front page)

Instructions

- Answer all questions from Section A (Total of 60 marks)
- Answer only 2 questions from Section B. (Total of 60 Marks)
- The use of scientific calculators is allowed

SECTION A

Answer **ALL** questions from Section A.

Question 1 [30 marks]

- 1.1. Section 22 of the Namibia Forest Amendment Act 13 of 2005 deals with the allowable harvest from forest reserves and community forests. It states: Subject to a relevant management plan, the Director shall determine the quantity of forest produce for which a licence may be issued in any a forest reserve or a community forest and the maximum quantity of forest produce which may be harvested under section 24 (3). Mr Mlambo wants to harvest trees for fencing poles, and he applies for a permit. Outline what the Director must consider when determining the allowable quantity of poles for Mr Mlambo to harvest. (8)
- 1.2. Explain how the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) seeks to achieve conservation of biodiversity. (7)
- 1.3. Briefly discuss the advantages and disadvantages of a Command Economy. (10)
- 1.4. Explain how human economics and ecology are inextricably linked and why it is important to understand the link. (5)

Question 2 [30 marks]

- 2.1. Explain how energy and water are interconnected. (5)
- 2.2. Develop a long-term goal for Integrated Water Resource Management for Namibia. (4)
- 2.3. Elaborate on the principles linking fishing effort and yield. (7)
- 2.4. Clarify the catch per unit effort concept by citing the formula and explaining each parameter. (7)
- 2.5. Expand on the process you would follow to launch an Environmental Management System (EMS) for a newly established company. (7)

Sub-total marks (Section A) = 60

SECTION B

Answer any **TWO** questions from Section B.

Question 1 [30 marks]

Discuss the advantages and disadvantages of co-management of forests. (30)

Question 2 [30 marks]

2.1. Develop a protocol for the Operating Procedures of an Environmental Management System. (20)

2.2. Discuss the Water Demand Management strategies of Namibia? (10)

Question 3 [30 marks]

Discuss the concept of integrated coastal zone management. (30)

Sub-total marks (Section B) = 60

Grand Total Marks =120

*****END OF QUESTION PAPER *****