



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE, PLANNING AND CONSTRUCTION

QUALIFICATION : BACHELOR OF TOWN AND REGIONAL PLANNING	
QUALIFICATION CODE: 07BTAR	LEVEL: 5
COURSE CODE: EVP510S	COURSE NAME: ENVIRONMENTAL PLANNING
DATE: JUNE 2024	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS:
1. Answer ALL the questions.
2. Read all the questions carefully before answering.
3. Number the answers clearly and legibly.

THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)

Question 1

- (a) Nature is created to sustain itself. Describe the four principles of sustainability in your own words. (8)
- (b) A critical aspect of solutions to environmental challenges is to effect changes to shift towards sustainable practices. Indicate the sustainability emphasis for each respective current emphasis indicated in the table below: (7)

Current Emphasis	Sustainability Emphasis
Waste Disposal	
Protecting Species	
Environmental Degradation	
Pollution Clean-Up	
Increasing Resource Use	
Population Growth	
Depleting Natural Capital	

[15]

Question 2

- (a) Sketch (draw) a basic population pyramid for the urban population of Namibia and explain its characteristics. (5)

In the recent publication by Development Workshop Namibia (Informal settlements in Namibia: their nature and growth), it is recommended to focus on the provision of land, not housing.

- (b) Elaborate this recommendation as discussed by Weber and Mendelsohn, 2017. (5)

[10]

Question 3

- (a) A system is a set of components that function or interact in a regular way in the form of inputs, throughputs and outputs. Identify the respective inputs and outputs in a conventional economic or industrial system. (6)
- (b) Namibia has recently discovered rich oil deposits. Illustrate six benefits of conventional oil as an energy resource. (6)
- (c) A solution in making a transition to a more sustainable energy future may include improving energy efficiency. Recall specific methods to implement this solution. (3)

[15]

Question 4

When there is scientific evidence of significant/irreversible harm to humans or the environment, we should take precautionary measures to prevent/reduce such harm (risk).

- (a) Briefly describe the steps in evaluating risks. (6)
- (b) As advisor of a local authority, recommend four strategies towards preventing stationary air pollution. (4)

Input/prevention approaches to waste reduction include reusing, recycling or composting of waste.

- (c) Argue what we can do to reuse waste material. (5)

[15]

Question 5

- (a) Summarise the role of Government in respect of interventions required to address private market failures. (5)

Gunter Pauli's **Blue Economy** aims to shift society from scarcity to abundance with what is locally available and tackling issues that cause environmental and related problems in new ways.

- (b) Explain five innovative principles as solutions of a blue economy type. (6)
- (c) List the factors limiting the effectiveness of environmental law. (4)

[15]

Question 6

Wheeler, in his book: *Planning for Sustainability*, identified unsustainable development trends.

- (a) Discuss these issues under the category of *misguided urbanisation & housing*. (5)

Urban sprawl is characterised by low-density growth on urban edges, eliminating surrounding agricultural/wild lands and loosely connected land uses.

- (b) Identify the major factors contributing to urban sprawl. (5)

Sustainable transportation includes reducing use of the private car and promoting alternative mobility modes like cycling, walking and mass transit (bus and rail).

- (c) Argue the benefits of mass transit to convince the city council to promote it. (5)

[15]

Question 7

- (a) The principles of environmental management must be followed by government institutions and private persons. Identify these respective principles. (10)
- (b) Indicate the steps to follow for obtaining an environmental clearance certificate if an assessment is required. (5)

[15]

TOTAL: [100]