



**NAMIBIA UNIVERSITY  
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT**

**DEPARTMENT OF ARCHITECTURE, PLANNING AND CONSTRUCTION**

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

<b>SECOND OPPORTUNITY / SUPPLEMENTARY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	Mr. P Genis
<b>MODERATOR:</b>	Ms. G B van Rooi

<b>INSTRUCTIONS:</b>
<ol style="list-style-type: none"><li>1. Answer <b>ALL</b> the questions.</li><li>2. Read all the questions carefully before answering.</li><li>3. Number the answers clearly and legibly.</li></ol>

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

**Question 1**

Life depends on energy from the sun and on natural resources and natural services provided by the earth.

- (a) Describe the four components of sustainability in your own words. (8)

A critical aspect of solutions to environmental challenges is to follow a process of environmental decision making.

- (b) Indicate the important steps in this process. (7)

**[15]**

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**Question 2**

- (a) Sketch (draw) a basic population pyramid for the rural 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 turn rapid urbanisation and the creation of new townships into economic opportunities.

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

**[10]**

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**Question 3**

- (a) Define an ecosystem in your own words and describe its characteristics. (6)

- (b) Namibia has recently discovered rich oil deposits. Illustrate six disadvantages of conventional oil as an energy resource. (6)

- (c) A solution in making a transition to a more sustainable energy future may include more renewable energy. Recall specific methods to implement this solution. (3)

**(15)**

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**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 highlight the difficulties with risk evaluation (risk perception factors). (6)
- (b) As advisor to a local authority recommend four strategies to prevent mobile (motor vehicle) air pollution. (4)

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

- (c) Argue the benefits (advantages) to recycle waste material. (5)

[15]

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**Question 5**

- (a) Summarise the role of Government in respect of policy transformation to more sustainable environments. (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 how we can change economies to do better than global or green economies. (6)
- (c) List the stages of the policy life cycle. (4)

[15]

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**Question 6**

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

- (a) Discuss these issues under the category of mobility & transportation. (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 undesirable impacts of urban sprawl in respect of land, biodiversity, and water. (5)

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

- a) Argue the benefits of cycling to convince the city council to promote it. (5)  
[15]
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### **Question 7**

The Minister of Environment and Tourism published a list of activities in the Government Gazette that may not be undertaken without an environmental clearance certificate.

- (a) Identify the respective categories of these listed activities. (10)
- (b) Indicate the steps of environmental assessment in the project cycle. (5)
- [15]
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**TOTAL: [100]**