



**NAMIIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF ENGINEERING AND SPATIAL SCIENCES

DEPARTMENT OF ARCHITECTURE AND SPATIAL SCIENCES

QUALIFICATION: BACHELOR OF TOWN AND REGIONAL PLANNING	
QUALIFICATION CODE: 07BTAR	LEVEL: 5
COURSE: ENVIRONMENTAL PLANNING	COURSE CODE: EVP510S
DATE: JUNE 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS

1. Answer **all questions**.
2. Read all the questions carefully before answering.
3. Marks for each question are indicated at the end of each question.
4. Please ensure that your writing is legible, neat and presentable.

PERMISSIBLE MATERIALS

1. Examination paper & script
2. Pen, ruler, pencil, eraser

THIS EXAMINATION PAPER CONSISTS OF 3 PAGES (Including this front page)

Question 1 [10]

- (a) Environmental problems like deforestation, declining water tables and species extinction are caused by poverty, population growth and unsustainable resource use amongst others. Identify five key steps in making environmental decisions to solve any environmental problem. [5]
- (b) Pollution is defined as anything in the environment that is harmful to the health, survival or activities of humans or other organisms. Describe the unwanted effects of pollution (3 marks) and the two ways of pollution control (two marks). [5]
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Question 2 [15]

- (a) Urbanisation is measured by the percentage of population living in urban areas. The main reasons for urbanization is classified as “push” factors from rural areas and “pull” factors to urban areas. Select the push factors from rural areas. [5]
- (b) 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. Illustrate this recommendation as discussed by Weber and Mendelsohn, 2017. [5]
- (c) Show five factors affecting birth/fertility rates. [5]
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Question 3 [15]

- (a) Ecosystems recycle materials and provide living organisms with essential natural services and natural resources. Discuss the meaning and characteristics of an ecosystem. [5]
- (b) Outline five disadvantages in evaluating the trade-offs to convince government on the use of solar electricity. [5]
- (c) Namibia is providing uranium to the global market for nuclear energy needs. The government is trying to add value and produce conventional nuclear power. Argue the benefits in your report to advise the Minister. [5]
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Question 4 [15]

- (a) Defend five key principles required for a sustainable low-waste society. [5]
- (b) In advising the mayor on sewerage treatment strategies, examine non-conventional treatment (2 marks) and sustainable ways to prevent/reduce water pollution (3 marks). [5]
- (c) A considered challenge of this century is climate change –the atmosphere is warming rapidly due to human activities. Demonstrate the effects of a warmer atmosphere. [5]
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Question 5**[15]**

- (a) The public sector plays an important role towards a new vision for environmental economic reform to affect economic transformation, especially when private markets fail to provide goods and services sustainably. Distinguish government intervention areas towards establishing an environmentally sustainable economy. [5]
- (b) 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. Show five innovative principles as solutions of this economy type. [5]
- (c) Politics is concerned with who has power over resource distribution. Point out the role of governments to ensure resources are used sustainably. [5]
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Question 6**[15]**

- (a) Van Biljon (2014) identified sustainability characteristics (indicators) for the influence spheres of *economy, nature, society and space* towards sustainability in urban and regional planning. Write down the sustainability indicators for the sphere of *space*. [5]
- (b) Wheeler, 2013 identified four categories of unsustainable development trends. Rewrite in your own words the trend of *misguided urbanisation & housing*. [5]
- (c) The *ecocity and woonerf* concepts are more environmentally sustainable urban concepts built around the scientific principles of sustainability. Explain the principles of the *woonerf* concept. [5]
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Question 7**[15]**

- (a) The Environmental Management Act (Act 7 of 2007) stipulates that the principles of environmental assessment serve as guidelines for any decision in terms of any law relating to the protection of the environment. Briefly describe any five of these principles. [5]
- (b) The Minister of Environment and Tourism will publish a list of activities, which may not be undertaken without an environmental clearance certificate, in the Government Gazette. The Minister can include any activity with potential environmental consequences in the list. Identify the categories or areas in respect of the listed activities provided in the Act (Act 7 of 2007). [5]
- (c) STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) is the process of anticipating and addressing potential environmental consequences of proposed initiatives at higher-level decision-making with the aim to integrate environmental considerations into the earliest development phases. Interpret the goals of SEA as identified by Wiseman in your own words. [5]

TOTAL**[100]****THE END**