



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE, PLANNING AND CONSTRUCTION

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| QUALIFICATION: BACHELOR OF TOWN AND REGIONAL PLANNING | |
| QUALIFICATION CODE: 07BTAR | NQF LEVEL: 5 |
| COURSE CODE: EVP510S | COURSE NAME: ENVIRONMENTAL PLANNING |
| DATE: JUNE 2023 | PAPER: THEORY |
| DURATION: 3 HOURS | MARKS: 100 |

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| FIRST OPPORTUNITY EXAMINATION QUESTION PAPER | |
| EXAMINER(S) | Pieter Genis |
| MODERATOR | Geraldine van Rooi |

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| INSTRUCTIONS | |
| <ol style="list-style-type: none">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 | |
| <ol style="list-style-type: none">1. Examination paper & script2. Pen, ruler, pencil, eraser | |

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

Question 1**[10]**

(a) True or False. Answer each question by writing True or False next to each respective statement (1 mark each for respective statements, numbered 1 to 5). [5]

1. The tragedy of the commons threatens long term economic & environmental sustainability.
2. Economic development is the annual market value of all goods and services produced in a country.
3. Population decline is a result of the large numbers moving into the reproductive category.
4. Sustainable societies meet current & future basic needs in a just & equitable manner.
5. Urban growth is the percentage of the population of a country living in an urban area.

(b) Explain natural capital as critical component of sustainability, with reference to relevant examples. [5]

Question 2**[15]**

(a) The average life expectancy in Namibia is evident from these figures: 1991 (61 years), 2001 (54 years), 2011 (63 years). The deviance in 2001 is ascribed to a sharp population decrease due to the HIV/AIDS pandemic. Recall the harmful effects of a rapid decline in the young adult population experienced. [5]

(b) 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. Illustrate this recommendation as discussed by Weber and Mendelsohn, 2017. [5]

(c) The problems and challenges of urbanisation and urban growth are exposed by looking at several trends. Identify the trends related to informality. [5]

Question 3**[15]**

(a) It is important to understand the processes and interactions in the matter-cycles of ecosystems in order to reduce negative impacts on them. Demonstrate any five processes affected by humans in the nitrogen-cycle. [5]

(b) Outline five benefits in evaluating the trade-offs to convince government on the use of wind power. [5]

(c) Namibia has received an application to dispose nuclear waste in the Namib desert. Argue the key issues in your report to advise the government on this request. [5]

Question 4 [15]

- (a) Define risk and summarise the key risk evaluation & reduction principles. [5]
- (b) As advisor to the local chamber of commerce and industry on strategies to reduce solid waste, recommend five strategies towards this aim. [5]
- (c) A considered challenge of this century is climate change –the atmosphere is warming rapidly due to human activities. Demonstrate strategies that countries can implement to prepare for the projected harmful effects of essentially irreversible climate change. [5]
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Question 5 [15]

- (a) One of the major causes of environmental problems is poverty, defined as the inability to meet basic economic needs. Differentiate how we can reduce poverty through changes in public & private policies/strategies. [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 how we can change economies towards this type with reference to the key principles and relevant examples. [5]
- (c) Define environmental policy and list the stages of the policy life cycle. [5]
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Question 6 [15]

- (a) Urban sprawl is described as low density growth on urban edges, eliminating surrounding agricultural and wild lands and segregate land uses. Display the undesirable impacts of urban sprawl in respect of economic effects, land and biodiversity. [5]
- (b) Global movements towards sustainable and liveable urban areas are amongst others New Urbanism, Smart Growth and Eco Cities. Examine five elements of New Urbanism. [5]
- (c) Critical aspects to achieve sustainable urban areas are the role of spatial planning (land use planning) and zoning regulation. Clarify this statement. [5]
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Question 7 [15]

- (a) The Minister of Environment and Tourism, the Sustainable Advisory Development Council and the Environmental Commissioner has designated functions as provided for in sections 4 and 17 respectively of the Environmental Management Act (Act 7 of 2007). Briefly describe any five functions of the Environmental Commissioner. [5]

(b) The Minister of Environment and Tourism listed activities, which may not be undertaken without an environmental clearance certificate, in the Government Gazette. Give the criteria of crimes related to environmental clearance certificates as well as the penalty for these crimes as stipulated in the Act (Act 7 of 2007). [5]

(a) ENVIRONMENTAL IMPACT ASSESSMENT (EIA) is the process on the mitigation of impacts of proposed activities in reaction of development proposals and assessment of the effect on the environment. The first three stages are defining the project proposal, screening and scoping. Identify any other five key characteristics (stages) of EIA. [5]

TOTAL

[100]

THE END