



**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: O7BTAR	LEVEL: 7
COURSE CODE: SSP720S	COURSE NAME: SUSTAINABLE SETTLEMENT PLANNING
SESSION: JANUARY 2023	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

SECOND OPPORTUNITY / SUPPLEMENTARY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Ms. J. M. Kohima
MODERATOR:	Ms. H. Kevanhu

INSTRUCTIONS	
<ul style="list-style-type: none">• Read the entire question paper before answering the questions• Ensure you, number your answers correctly• Please write clearly and legibly• You must answer all questions• Make sure your Student Number is on the Examination Book(s)	

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

QUESTION 1

Figure. 1

Discuss the urban spatial change that the growth as illustrated in Figure. 1, could bring about. (5)
[5]

QUESTION 2

- (a) Discuss the concept of a Transit Oriented Development (TOD) node. (5)
- (b) Drawing on the theoretical work on TOD, please list at least nine benefits to be enjoyed in a TOD neighbourhood. (10)
[15]

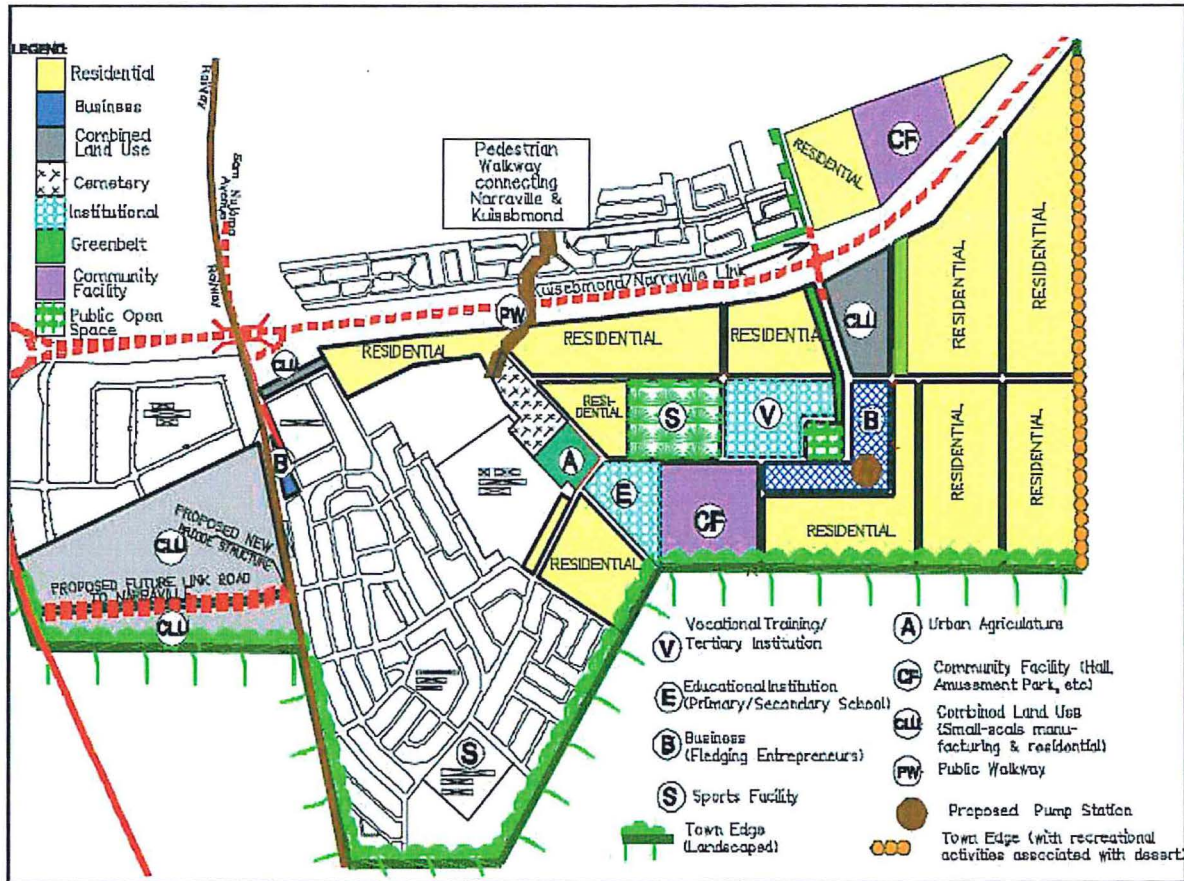
QUESTION 3

- (a) Provide the UN-Habitat definition of an 'Informal Settlement.' (5)
- (b) Describe the role a town and regional planner must play in transforming informal settlements into sustainable living spaces. (5)

Please provide a concise description for the following:

- (c) Socio-spatial exclusion: (5)
- (d) The informal economy: (5)
[20]

QUESTION 4



Referring to the extract of the Walvis Bay Structure Plan above, describe five (5) aspects/elements indicated in this plan that will help the local authority achieve a sustainable spatial outcome. (10)

[10]

QUESTION 5

The objectives of the Namibian Urban and Regional Planning Act, Act No. 5 of 2018 inter alia states that (planning) ought to pursue sustainable and efficient use of land. Pursuant to this, and in line with what Urban Theorists believe; Namibian planners thus ought to plan compact cities.

(a) What are the characteristics of a compact city? (5)

Compact City development is generally coupled with Mixed Land Use and Social Diversity as a number of theorists are of the opinion that these concepts are indivisible.

(b) Discuss the concept of Mixed Land Use and Social Diversity. (5)

[10]

QUESTION 6

The United Nations Inter-Governmental Panel on Climate Change assessment report for 2022 confirmed that the gradual warming of the earth over the last three decades is projected at 2 degrees Celsius, leading to serious implications for southern African countries. The report singled out Namibia and Botswana, as two countries that will face severe water stress as a result of this impact.

- (a) Provide an explanation of what Climate Change is. (5)
- (b) The City of Windhoek has formulated an Integrated Climate Change Strategy and Action Plan to address climate change. Provide a brief recollection of aspects that is covered in the strategy and action plan. (5)
- (c) Should you take a position as an urban planner at the City of Windhoek, what would be your role to help address climate change? (5)

Climate change is exacerbating biodiversity loss which result in compromised delivery of ecosystem services.

- (d) Discuss the above statement. (5)
- [20]**

QUESTION 7

Melbourne, Australia is one the world's most liveable cities. However, the city is faced by the risk of extreme heat; water shortages and flash floods because of climate change. The city has also adopted effective measures to respond to these threats by adopting the Green Infrastructure Approach and Urban Forest Strategy.

- (a) Discuss the concept of 'urban forests' which the city adopted to address the threat of extreme heat and a host of other environmental concerns. (5)

The 'extreme heat' large cities face could be attributed to the urban heat island effect.

- (b) Discuss urban heat island concept in brief. (5)
- [10]**

QUESTION 8

Portion 13 of the Farm Augeigas No 34. within the Windhoek Municipal area will be subjected to a township development. Such would have an environmental impact which can be likened to an environmental footprint.

- (a) Briefly discuss the "Ecological Footprint" concept as applied to the envisaged township development. (5)
 - (b) Discuss in brief the main components of the green infrastructure planning approach. (5)
- [10]**

TOTAL = 100

