



**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>NQF LEVEL:</b> 6
<b>COURSE CODE:</b> PLP621S	<b>COURSE NAME:</b> PRINCIPLES AND GUIDELINES FOR LAYOUT PLANNING
<b>DATE:</b> NOVEMBER 2024	<b>PAPER:</b> THEORY
<b>DURATION:</b> 3 HOURS	<b>MARKS:</b> 100

<b>FIRST OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	Mr Jacques Korrubel and Pieter Genis
<b>MODERATOR</b>	Ms Geraldine van Rooi

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Answer ALL the questions.</li><li>2. Questions can be answered in any sequence.</li><li>3. Read all the questions carefully before answering.</li><li>4. Number the answers clearly.</li></ol>

**PERMISSIBLE MATERIALS**

Pen, ruler, pencil and eraser

**THIS QUESTION PAPER CONSISTS OF 5 PAGES** (Including this front page)

**Question 1**

Argue the value of topographical maps for town planning and layout design with reference to its features and characteristics.

[5]

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**Question 2**

Describe the aspects that should characterise suitable terrain in respect of settlement establishment as identified in the CSIR Guidelines for Human Settlement Planning & Design, 2000.

[6]

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**Question 3**

One aspect of site analysis is to explore the regulatory information related to the development area. Identify the aspects of title deeds important for site analysis during the planning process.

[4]

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**Question 4**

You compiled and used a site analysis checklist during your site analysis investigation during the semester.

- a) Discuss the aspects to consider for the “urban envelope” (surrounding and wider context) in your own words. (5)
- b) List any four cultural data types you should obtain in your site analysis. (5)

[10]

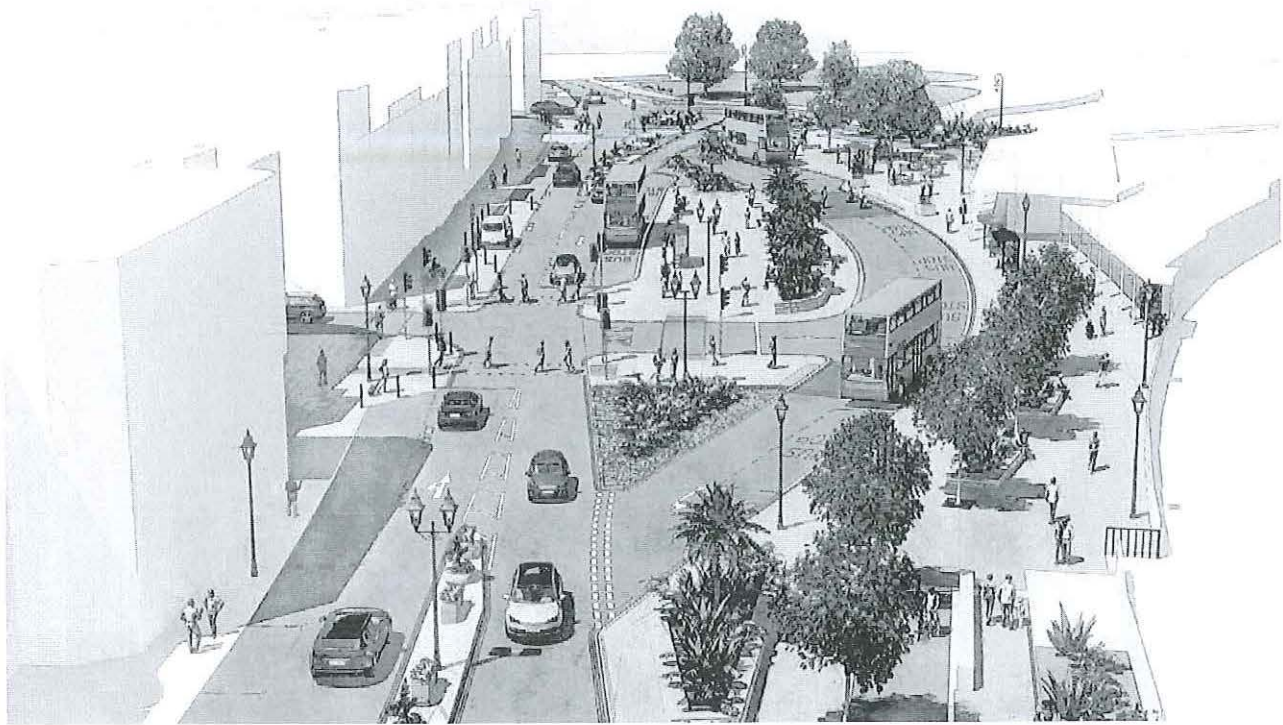
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**Question 5**

The installation of a water reticulation network in a settlement will have layout implications on the planning and design of the settlement. Describe these layout implications in detail.

[10]

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**Question 6**

The drawing above depicts the proposed urban transport interchange on the Island of Wright, England, where pedestrian, private and public transport movement options meet.

The locality of such a transport interchange is guided by a certain structural principle of settlement design.

- (a) Identify the specific structural principle. (1)
- (b) Provide a sketch, inclusive of a proper legend, illustrating this structural principle. (6)
- (c) Explain the theory / methodology behind this structural principle to achieve structure and order within human settlements. (8)

[15]



**Question 7**

The integrated approach, on which the framework for settlement-making is based, makes it possible to identify certain performance qualities our urban settlements must strive for.

- (a) Based on your studies, please explain how “Opportunity Generation” can be classified as being one of the performance qualities. (6)
- (b) In what way would you design a settlement to improve the “Sensory Qualities”, as being another performance quality? (4)
- (c) Provide a checklist of the physical characteristics a human settlement will display if it's designer incorporated all of the performance qualities in their design. (5)

[15]

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**Question 8**

Hard open spaces provide certain spatial and structural functions within a settlement on condition that they are properly designed and planned.

- (a) Describe the generic purposes of all hard open spaces. (4)
- (b) Describe the movement functions of hard open spaces. (4)
- (c) Describe the political or symbolic functions of hard open spaces. (3)
- (d) List the specific requirements street traders / vendors might have for the design of hard open spaces. (4)

[15]

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**Question 9**

What would you recognise as being the 3 central design starting points for achieving positively performing urban settlements?

[9]

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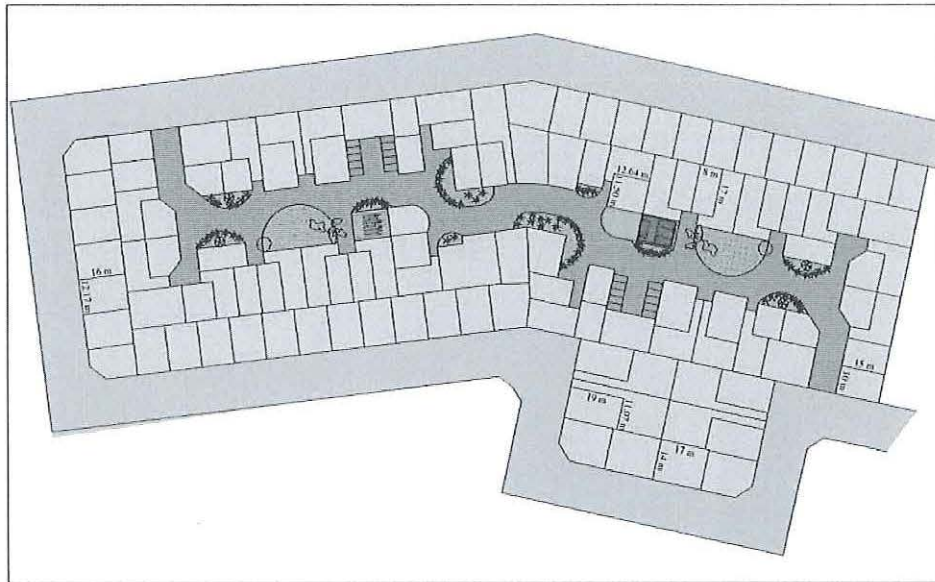
**Question 10**

The figure below illustrates the generic block layout design format called the “Woon-erf” design.

(a) Describe the positive aspects of the “Woon-erf” design format (4)

(b) Describe the negative aspects of the “Woon-erf” design format (2)

[6]

**Question 11**

Soft open spaces have the role to protect the needs of human beings as well as the ecological needs of the fauna and flora within a settlement.

Provide a sketch illustrating the impact of this above mentioned role soft open spaces plays to achieve multi-functionally, ecological protection and continued linkages between open spaces.

[5]

END

TOTAL [100]