



**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> JANUARY 2025	<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 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 aerial images (photos) for town planning and layout design purposes.

[5]

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**Question 2**

Describe the measures and guidelines that can be implemented in considering the impact of flood lines on urban development as identified in the CSIR Guidelines for Human Settlement Planning & Design, 2000.

[6]

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**Question 3**

Cadastral analysis is critical to obtain information when analysing planning a site earmarked for development. Identify the important information required for planning purposes found in small scale erf/farm diagrams.

[4]

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**Question 4**

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

- a) Discuss the aspects to consider for the "site" (land area and boundary) in your own words. (5)
- b) List any four physical data types you should obtain in your site analysis. (5)

[10]

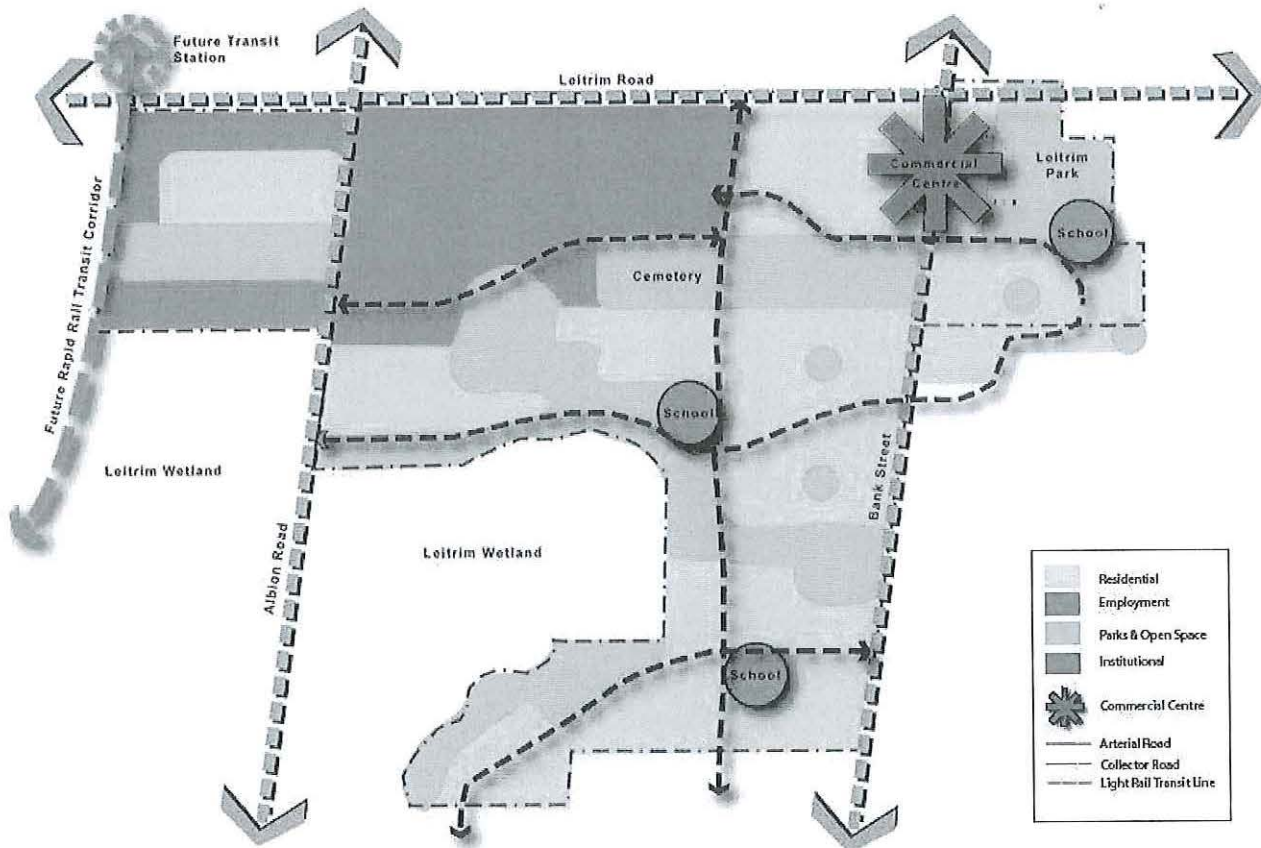
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**Question 5**

Describe in detail all the spatial design principles that are essential for proper settlement making.

[14]

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**Question 6**

(a) Identify the structural design principle illustrated above in terms of the placement of high order, specialised commercial and public facilities (1)

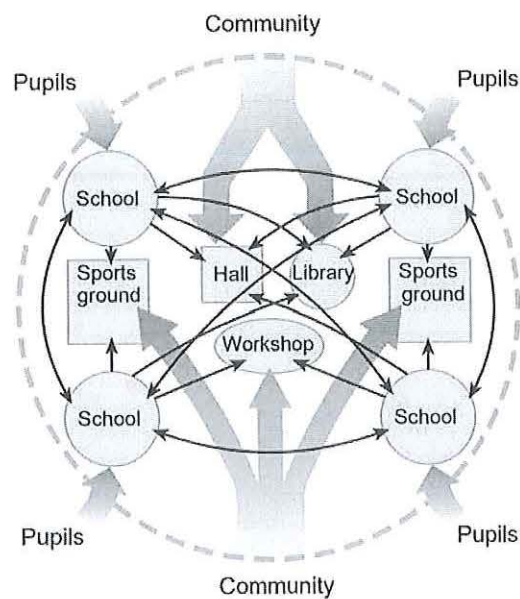
(b) Describe the fundamental purpose of this structural design principle (4)

[5]

**Question 7**

Make a distinction between the various elements which forms the movement networks in Namibian urban settlements.

[11]

**Question 8**

Complex and intricate patterns and relationships exist between various public facilities. An example of relationships and interrelationships between various public facilities is given in the figure above.

- (a) Describe the degrees of compatibility that exists between public facilities (6)
- (b) The multipurpose facility cluster concept provides for a flexible grouping of facilities at an accessible location. Describe the advantages derived from providing the multipurpose public facility clusters within a mixed, integrated urban area. (7)

**[13]**

**Question 9**

Human society functions in a landscape that consists of the original natural landscape, as well as rural and urban landscapes. To achieve an orderly structure and framework in human settlement the structural principle of continuity is vital in the design of settlement. In your own words:

- (a) Motivate the necessity for the continuity of green spaces in a human settlement (6)
- (b) Motivate the necessity for the continuity of movement with a human settlement (6)
- (c) Explain in which circumstances the structural principle of "Discontinuity of Movement" would be desirable in the design of settlements. (4)

**[16]**



**Question 10**

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) In what way would you design a settlement to improve the "Quality of Place", as being another performance quality? (6)
- (b) Provide a checklist of the physical characteristics a human settlement would display if its designer incorporated all of the performance qualities in their design. (5)

[11]

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**Question 11**

In Gabe Klein's video "the car almost killed our cities" he argues that planners should create urban areas where there is a mix of movement options where the private motor vehicle does not dominate the street and public spaces to enhance health and create social and economic opportunities.

- (a) Which of the generic street block designs, do you feel, is the best to create a mix of movement options? (1)
  - (b) Motivate your answer in (a) (4)
- [5]

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END

TOTAL [100]