



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT OF LAND AND SPATIAL SCIENCES

QUALIFICATION: BACHELOR OF GEOINFORMATION TECHNOLOGY	
QUALIFICATION CODE: 07BGEI	QUALIFICATION LEVEL: 7
COURSE CODE: GDG621S	COURSE NAME: GEODEMOGRAPHICS
SESSION: JUNE 2025	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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THIS QUESTION PAPER CONSISTS OF (3) PAGES
(Excluding this front page)

INSTRUCTIONS

1. Write clearly and neatly
2. **Answer ALL the questions.**
3. Number the answers clearly.

PERMISSIBLE MATERIALS

1. Examination paper.
2. Examination script.
3. Calculator, ruler, pencils, eraser

Question 1

- 1.1. What is Geodemographics? Explain its importance in decision-making. (2)
- 1.2. Name two sources of data used in Geodemographics and provide one example for each. (2)
- 1.3. How can census data be used for neighbourhood classification? (2)
- 1.4. Identify two limitations of relying solely on census data in African geodemographic classification. (2)
- 1.5. What are geodemographic classifications, and how does spatial autocorrelation support their creation? (6)

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Question 2

- 2.1. Name and describe four types of thematic maps. (8)
- 2.2. Describe three key limitations of thematic mapping. (6)
- 2.3. What is catchment profiling? Describe any two methods used to delineate catchment areas for a retail store. (6)
- 2.4. Describe two ways in which remote sensing and aerial imagery can enhance geodemographic analysis. (4)

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Question 3

3.1. Describe the difference between probability and non-probability sampling. (4)

3.2. Match each type of sampling method with its correct description. (5)

Sampling Method	Description	Answers
A. Simple Random Sampling	1. Divides the population into subgroups and samples proportionally.	A -
B. Stratified Sampling	2. Selects every nth individual from a list.	B -
C. Systematic Sampling	3. Participants are selected based on availability and accessibility.	C -
D. Cluster Sampling	4. Population is divided into groups, and some groups are randomly selected.	D -
E. Convenience Sampling	5. Everyone has an equal chance of being chosen.	E -

3.3. What are the key preparatory steps in designing a questionnaire for fieldwork? (5)

3.4. **Scenario:**

The Namibian Ministry of Health and Social Services (MoHSS) is partnering with a private telecommunications company to promote a mobile health (mHealth) platform that enables users to book appointments, access health tips, and receive medication reminders. Despite its potential, the uptake of the service is low in certain areas. The Ministry wants to use geodemographic analysis to guide where to focus awareness campaigns and improve healthcare infrastructure.

Question:

Using the scenario above, explain the concept of geodemographics and describe how it can be applied to both market analysis (by the telecom company) and social service planning (by the Ministry of Health and Social Services). Support your explanation with relevant examples. (20)

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Question 4

- 4.1. Define poverty and deprivation. How are they different? Provide one example of each. (6)
- 4.2. Explain HDI and MDI. Provide two key differences. (6)
- 4.3. How is inequality measured using Gini and Lorenz Curve? (6)
- 4.4. Discuss the purpose and application of the Huff Model. Include the formula and explain its main variables. (10)
- [28]**
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