



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY
FACULTY OF NATURAL RESOURCES AND SPATIAL SCIENCES
DEPARTMENT OF GEO-SPATIAL SCIENCES AND TECHNOLOGY

QUALIFICATION: BACHELOR OF GEOINFORMATION TECHNOLOGY	
QUALIFICATION CODE: 07GITB	LEVEL: 7
COURSE CODE: GDG621S	COURSE NAME: GEODEMOGRAPHICS
SESSION: JULY 2019	PAPER: 2nd OPPORTUNITY
DURATION: 3 HOURS	MARKS: 100

SUPPLEMENTARY/SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Mr. Miguel Vallejo Orti
MODERATOR:	Ms. Celeste Espach

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Number the answers clearly.

PERMISSIBLE MATERIALS

Calculator, ruler, pencil and eraser.

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

Question 1

Please explain the meaning of the following terms/concepts in the field of Geodemographics:

- 1.1 Charles Booth's Descriptive map (3)
- 1.2 Poverty (3)
- 1.3 Body Mass Index (3)
- 1.4 Stratified sampling (2)
- 1.5 Enumeration areas (2)

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Question 2

- 2.1 Explain in your own words the statement 'Birds of a feather flock together'. (2)
- 2.2 What is Spatial autocorrelation and what does it measures? (3)
- 2.3 How do you interpret a result of $MI = 0.7$ in Moran Index and a result of $MI = -0.8$? (2)

[7]

Question 3

- 3.1 Define thematic maps. (4)
- 3.2 List and briefly describe the different types of thematic maps. (8)
- 3.3 List the three main limitations to the use of thematic GIS maps for neighbourhood classification. (6)

[18]

Question 4

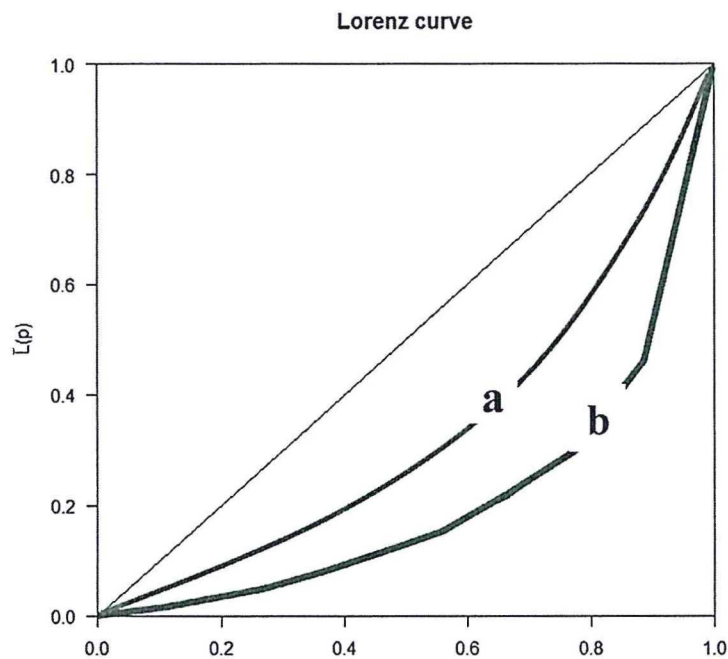
- 4.1 Explain what a sample is and why we need sampling methods in geodemographics. (3)
- 4.2 List and briefly explain 5 sampling methods used in geodemographics. (10)
- 4.3 Explain what trade area analysis is. (3)
- 4.4 Explain the foundation of Gravity Models as a tool for trade area analysis. (2)
- 4.5 What does the Huff Model estimate and which variables are involved in the model? (4)

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Question 5

5.1 Explain what a Lorenz Curve is and the information it displays. (3)

5.2 In the figure below you can visualise two Lorenz curves (a and b). Which curve represents a more unequal society in terms of maximum monthly expenditure? Justify your answer. (4)



5.3 Which percentage of the population accumulates the 50% of maximum monthly expenditure in curve b? (2)

5.4 How much of the maximum monthly expenditure accumulates 90% of the population in curve a? (2)

[11]

Question 6

- 6.1 Define Multiple Deprivation Index (MDI) and list the different domains (7) involved in its calculations.
- 6.2 List the different numerators used to calculate the material deprivation (4) domain and education deprivation domain of the MDI respectively.
- 6.3 Calculate the BMI of a person with a body mass of 60 kg and a height of 1.6 m. (3)

[14]

Question 7

- 7.1 List the different phases to develop and collect data by using questionnaires. (5)
- 7.2 What are the two type of questions that can be included in a questionnaire? (4)
List and briefly explain each of them.
- 7.3 List three aspects which can bias the result of a questionnaire, providing one (6)
example of each.

[15]
