# ПAMIBIA UПIVERSITY
## OF SCIEПCE AПD TECHПOLOGY

## 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:** JUNE 2019 | **PAPER:** 1st OPPORTUNITY |
| **DURATION:** 3 HOURS | **MARKS:** 100 |

| FIRST OPPORTUNITY EXAMINATION QUESTION PAPER | |
|---|---|
| **EXAMINER(S)** | Mr. Miguel Vallejo Orti |
| **MODERATOR:** | Ms. Celeste Espach |

| INSTRUCTIONS |
|---|
| 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 in the field of Geodemographics:

1.1     Fuzzy Logic                                                              (3)

1.2     Ecological fallacy                                                       (3)

1.3     Administrative Register                                                  (3)

1.4     Geocoding                                                                (2)

1.5     Deprivation                                                              (2)

                                                                                [13]

## Question 2

2.1     List the three factors which contributed to the development and growth of     (3)
        geodemographics.

2.2     Why is Geodemographics an important discipline nowadays? Mention three     (3)
        reasons.

                                                                                [6]

## Question 3

3.1   Define the concept of neighbourhood in the context of geodemographics.          (3)

3.2   There are two main categories of elements that need to be considered when          (8)
      identifying a neighbourhood unit. List and describe each of them.

                                                                                    **[11]**

## Question 4

4.1   Define Census.                                                                    (4)

4.2   List and briefly describe three typical limitations of census data for its use in   (6)
      geodemographics.

4.3   List and briefly describe the typical phases of a traditional census in Africa.    (4)

                                                                                    **[14]**

## Question 5

5.1   Provide a complete definition of Psychographics.                                  (4)

5.2   List at least five ways in which the marketing process can be helped by           (5)
      Psychographics.

                                                                                     **[9]**

## Question 6

Answer the following questions regarding catchment profiling methods:

6.1   Define catchment profiling.                                                    (3)

6.2   Define catchment area.                                                         (2)

6.3   There are three different ways of devising a catchment around a particular     (3)
      store or outlet. List and briefly explain each of them.

6.4   You want to estimate the catchment area of a store according to the maximum    (6)
      permitted drive time to the store. Identify by their Row-Column (E.g. A-3)
      codes, those pixels belonging to the catcment area of the central store
      assuming:

      - that each pixel represents 20 km x 20 km,
      - the average velocity for all the roads is 40 km/h, and
      - the maximum allowed travel time from any location to the store is 1 h.

      Justify your answer with calculations.
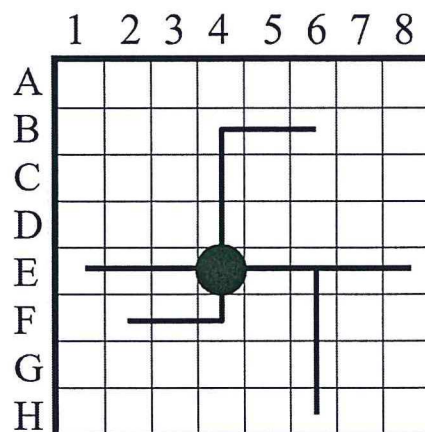


                                                                                     [14]

**Question 7**

7.1   List and briefly describe the different approaches to measure Poverty, Wealth     (8)
      and Deprivation as covered during the Geodemographics course. Write down
      the abbreviations of these approaches and what these abbreviations stand for.

7.2   What is the Gini coeffecient? Define it in detail and explain what does it     (4)
      measure.

7.3   What is the approximated value of the Gini coefficient in Namibia? How do you     (2)
      interpret this result?

                                                                              [14]
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**Question 8**

8.1   List the ten topics that were covered by the Namibian 2011 Census.     (10)

8.2   Define Dwelling Frame within the context of the Namibian Census.     (4)

8.3   Which are the main purposes for the development of a Dwelling Frame?.     (2)
      Mention at least two.

8.4   Cite three technologies which were used to create the dwelling frame in     (3)
      Namibia

                                                                              [19]
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