ΠAMIBIA UΠIVERSITY
OF SCIEΠCE AΠD TECHΠOLOGY

FACULTY OF ENGINEERING AND SPATIAL SCIENCES

DEPARTMENT OF ARCHITECTURE AND SPATIAL SCIENCES

QUALIFICATION: BACHELOR OF TOWN AND REGIONAL PLANNING	
QUALIFICATION CODE: 07BTAR	LEVEL: 6 CREDITS: 10
COURSE CODE: DPS610S	COURSE NAME: DEMOGRAPHY AND POPULATION STUDIES
DATE: JUNE 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Laudika Kandjinga, 061 207 2672, lkandjinga@nust.na Pieter Genis, 061 207 2640, pgenis@nust.na Jacques Korrubel, 061 207 2683, jkorrubel@nust.na
MODERATOR:	Jane Gold, 061 207 2894, jgold@nust.na

INSTRUCTIONS
1. Answer ALL the questions in any sequence
2. Write clearly and neatly.
3. Number the answers clearly.
4. Use sketches to improve your answers.

PERMISSIBLE MATERIALS

1. Calculator, ruler, pen, pencil, and eraser

THIS QUESTION PAPER CONSISTS OF 6 PAGES (Including this front page)

Question 1

(a) Outline two ways of studying fertility.   (2)

(b) Explain two downsides (disadvantages) of using Crude Birth Rate CBR) for measuring fertility of a specific place.   (5)

(c) Briefly describe why the General Fertility Rate (GFR) is superior to the CBR.   (2)

                                                                          [9]

Question 2

Study the table below (Table 01) and answer the following questions. Please ensure that you show the formulas, all the calculations, and round off your answers to the nearest whole number:

Table 1: shows the information on the fertility of a particular place

Age group	Women in age group (midyear population)	Live births to women in the age group
15-19	300,031	21,510
20-24	300,025	28,500
25-29	295,000	80,000
30-34	285,011	70,005
35-39	290,331	79,999
40-44	305,055	10,009
45-49	400,021	5,200
Total	2,175,474	295,223

(a) Calculate the General Fertility Rate (GFR).   (5)

(b) Calculate the Age-Specific Fertility Rate (for the 25-29 group).   (6)

                                                                          [11]

Question 3

Urban and Regional Planning is perceived to be one of the factors affecting mortality. Explain five possible ways in which town planning can contribute to mortality.

                                                                          [10]

Question 4

Internal or international migration can impact destination areas (counties, regions, or towns). With this understanding, discuss in detail at least three advantages of migration in the destination areas.

[10]

Question 5

a.   Which of the following characteristics are not part of *census contents*?   (1)
   i.   social
   ii.   psychological
   iii.   financial
   iv.   economic

b.   Vital/Civil Registration Systems are administrative systems used by governments to record vital events or vital statistics of citizens/residents. Choose the statistical indicator below not classified as vital.   (1)
   i.   migration
   ii.   birth
   iii.   marriage
   iv.   none of the above

c.   Population projection aims to describe what is likely to happen in future under certain clear assumptions related to the immediate past. Objective population projections are best described by: (1)
   i.   collecting data & applying a quantitative method
   ii.   rely, to some extent, on subjective elements
   iii.   all of the above
   iv.   none of the above

d.   We often use definitions of projections, forecasts, and estimates, interchangeably, without knowing the implications. Indicate the most suitable statement applicable to *estimates*.   (1)
   i.   refers exclusively to past or present statistics
   ii.   choose one set of parameters that will lead to the most likely result based on a believe
   iii.   need to specify first all parameters to be used in calculations
   iv.   all of the above

e.   The CSIR guidelines for provision of social facilities in urban areas use the following provision criteria: (1)
   i.   basic essential services
   ii.   non-essential provision based on needs, distance, or other factors
   iii.   valuable services that are un-funded
   iv.   all of the above

[5]

Question 6

A way of looking at changes in population composition is through population pyramids (demographic profiles). Identify and describe the population pyramid depicted in figure 1 below:
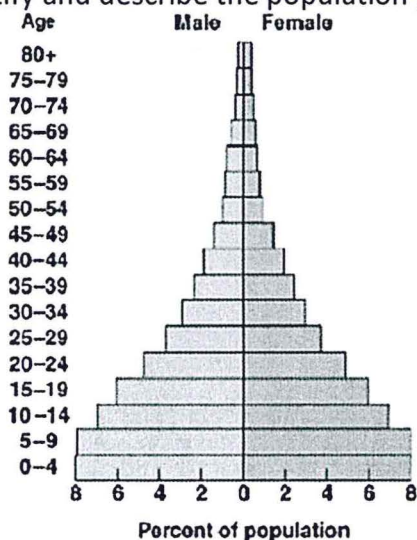

figure 1

[5]

Question 7

Two common sources of demographic data are censuses and surveys. Discuss a census with reference to its characteristics.

[5]

Question 8

An urban planner needs to project the population of a town for the next decade. Outline five factors that can affect the urban planner's choice of population projection methods.

[5]

Question 9

a) Trend extrapolation methods are powerful straightforward tools for projecting populations. Identify the population projection extrapolation method and associated formula, represented by Line B in Figure 2 below. (4)
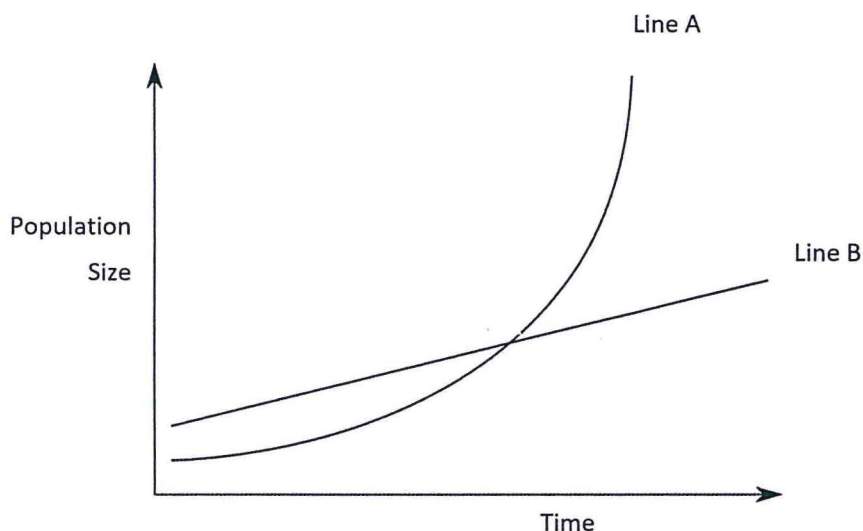
Line A

Population
Size

Line B

Time

Figure 2

b) Population projections can be classified into objective and subjective projections. Distinguish between these two projection types by offering three facts about each respective projection.

(6)

[10]

Question 10

a) Planners often use population information to provide social facilities in urban settlements. Three of these provision criteria are named compulsory, discretionary and recommended. Distinguish between discretionary and recommended criteria. (5)

b) You are the chief urban planner of Ongwediva, Oshana Region. The population size is 50'000 and the capital of the region is 20 km away. The mayor wishes to provide social facilities in Ongwediva. Write a brief recommendation to indicate the amount/size of facilities to be provided as specified in the table below: (5)

Social facility	Average threshold	Criteria	Acceptable distance
Health clinic	25 000 - 70 000	C	90% within 5 km
Police station	60 000 - 100 000	C	Up to 24 km
Cemetery	10 ha/50 000	D	15 km
School Including sports field	12500	C	5 km
Sports field	15000	C	5 km

[10]

Question 11

a) Provide a comprehensive description or definition of population policies as used by decisions makers globally   (4)

b) In terms of broad categories, implementations formats, and tools of population policies highlighted in the course material, motivate how the Namibian Government is aligning its population policies with its economic and social development priorities.   (6)
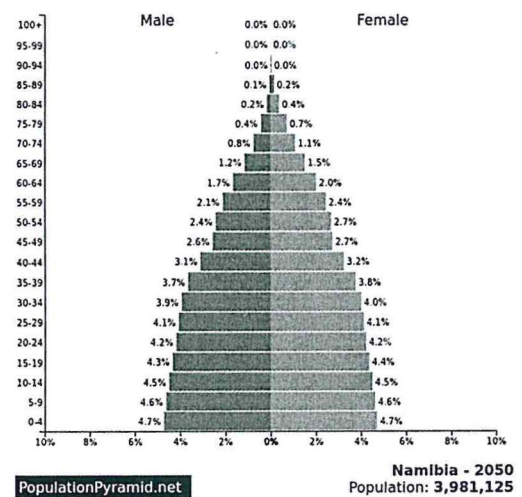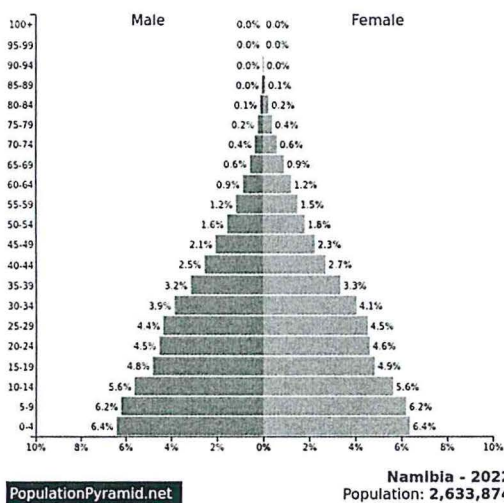
[10]

Question 12

Population growth and development can be described via 2x basic growth patterns namely Exponential growth and Logistical / Sigmoidal growth. Provide a visual description of an exponential growth pattern by providing a sketch of a typical graph of a population growing exponentially.

[5]

Question 13

Namibia - 2022
Population: 2,633,874

Namibia - 2050
Population: 3,981,125

Some academics argue that the above population pyramids (2022 versus 2050) highlight a potential demographical dividend or a demographic disaster for Namibia. Motivate the above scenario as a demographical dividend scenario for Namibia

[5]

END   **TOTAL   [100]**