University of Colombo
Faculty of Arts
Bachelor of Arts Degree Examination - First Year
Semester End Examination- Semester 1 - 2023/2024
DMG 1101: Introduction to Demography

Answer three (03) questions only.

Calculators can be used.   Time: Two (02) hours

This paper contains five (05) questions and two (02) pages.

1. a) Define the concepts 'elements of population' and 'demographic components', and briefly explain the difference between these two.

(06 Marks)

   b) Select three (03) subjects that can be studied for your degree and discuss the interrelationship between Demography and those subjects.

(14 Marks)

2. a) Briefly state how the mortality and fertility transition occur as explained in the stages of the Classical Demographic Transition Theory.

(06 Marks)

   b) Population data related to country 'X' for selected years is given below.

Mid-year population (2021)	23,478,202
Mid-year population (2011)	21,571,304
Male live births (2021)	181,021
Female live births (2021)	173,080
Female deaths (2021)	99,065
Male deaths (2021)	164,200
Deaths to population under age 1	799
Females aged 15-49 years	5,366,800
Males aged 0-1 years	180,911
Net migration (between 2011-2021)	(-) 435,800

Using data from above, calculate the following for country 'X'.
   I.   Crude Birth Rate -2021
   II.   Crude Death Rate -2021
   III. Total live births - 2021
   IV.   Infant Mortality Rate -2021
   V.   Sex Ratio at Birth -2021
   VI.   General Fertility Rate -2021
   VII. Natural Increase - 2011-2021

(14 Marks)

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3. a) Explain the 'child dependency ratio', 'old age dependency ratio' and the 'total dependency ratio'.

(06 Marks)

b) Discuss four (04) reasons as to why it is important to identify the age composition of a population.

(14 Marks)

4. a) Note the questions used in the 2012 Population and Housing Census of Sri Lanka to capture internal migration and indicate one (01) disadvantage of these questions.

(06 Marks)

b) The data given in the table below for year 2021 is for country 'Y' which has only five districts (A, B, C, D, E).

District of birth	District of usual residence				
	A	B	C	D	E
A	1,799,345	11,907	3,501	3,303	502
B	83,102	1,235,687	36,404	12,101	804
C	17,305	54,222	2,844,352	8,509	122
D	69,534	25,657	40,400	3,900,102	1,202
E	31,304	1,308	15,012	8,851	1,240,574

Using the above data, provide answers to the questions given below.

    I.   How many people have been born in district A?
    II.   How many people reside in district D?
    III.   What is the net-migration in district C?
    IV.   How many lifetime non-migrants in the country?
    V.   What is the largest in-migration district?
    VI.   What district is the least attractive for migrants?
    VII.   What is the most populated district?

(14 Marks)

5. Explain the difference between the following concepts.

    I.   Mean age of a population and median age of a population
    II.   Sex ratio at birth and overall sex ratio
    III.   Infertility and sterility
    IV.   Maternal mortality ratio and maternal mortality rate
    V.   Immigration and emigration

(04 x 5 Marks = 20)